Technology, Ecology and Spirituality: neopaganism and hybrid ontologies in technoculture

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Bachelor of Arts (Hons)
This thesis is presented for the degree of Doctor of Philosophy of Murdoch University
2008
I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any tertiary education institution.

                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
                        
P signature

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Abstract

This thesis considers three convergent issues pertinent to investigations of identity and agency in contemporary society: the proliferation of digital, network technologies, the rise of interest in secular — ‘new edge’ — spiritualities, and our growing awareness of impending ecological crises. I argue that these three issues necessitate a critical reconsideration of human agency, one that embodies a more sustainable and responsible ‘being-in-the-world’. With this goal in mind, I apply the insights of ecofeminism, feminist approaches to technology and science, and the philosophy of technology, to provide a critical analysis of the human-technology relation in the broader contexts of gender, ecology and spirituality. In particular, I highlight the strengths of ecofeminism, and then employ several alternative theories in order to attend to limitations I identify within ecofeminism; in particular, its uncompromising stance towards modern technology as wholly patriarchal and damaging to both nature and women. Against this position, I argue that technology is fully embedded in and central to our being-in-the-world, and thus must be accounted for in any consideration of contemporary agency. I then attend to both technophobic and technophilic approaches to technology and technoscience in feminism more generally, suggesting how these oppositional tensions are embodied in the figures of the ‘cyborg’ and the ‘goddess’. In search of more complex, hybridised ways to understand the human-technology relation, I then turn to three key theorists – Don Ihde, Donna Haraway and Bruno Latour. Synergising their approaches with the neopagan worldview, I propose a metaphorical and material identity which properly attends to and incorporates the treble issues of ecology, technology and spirituality into its worldview: the technopagan. At once nature-worshipper and digital dweller, the technopagan is a dynamic, multi-faceted and adaptable agent that can effectively challenge traditional humanist binaries between nature and technology, science and religion, and human and nonhuman.
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Acknowledgements

My thanks go first and foremost to my supervisor, Dr. Ingrid Richardson, for her constant support, advice and feedback throughout the process of writing this dissertation. She has offered me overwhelming guidance in shaping and directing my topic, and I wish to offer her my strongest gratitude for being such a wonderful advisor and mentor. I particularly wish to thank her for the immense amount of time she invested during the final stages of completion.

I owe thanks to my parents Kathy and John for never wavering in their support of my academic pursuits. Their love, respect and enthusiasm for my work is truly appreciated.

I also want to express my gratitude to my best friend Rebecca Bennett, who began her PhD along with me, and to have my oldest high school friend along for the ride has made this journey so much more pleasurable, and has strengthened our friendship forever.

Thanks also go to my office buddy Megan Jaceglav, who has been a port of sanity amidst a sea of postgrad madness at times. We started the PhD as strangers, and end as friends.

Finally, and most importantly, I extend thanks to my partner Peter (Pedro) Sawyer for being so supportive of this process, and for sustaining me with so much love throughout this PhD. You have reminded me daily of why I love you so much.
O sweet spontaneous
earth how often have
the
doting

    fingers of
prurient philosophers pinched
and
poked

thee
, has the naughty thumb
of science prodded
thy

    beauty    . how
often have religions taken
thee upon their scraggy knees
squeezing and

buffeting thee that thou mightest conceive
gods
    (but
true

to the incomparable
couch of death thy
rhythmic
lover

    thou answerest

them only with

    spring)

by ee cummings (1969, 3)
Part I

Introduction
Introduction

If my nightmare is a culture inhabited by posthumans who regard their bodies as fashion accessories rather than the ground of being, my dream is a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity, one on which we depend for our continued survival.

N. Katherine Hayles (1999, 5)

This thesis confronts the subject of agency at the nexus of a threefold issue concerning firstly, the growth of digital, networked technologies; secondly, the rise in secular, earth-based spiritualities; and finally, the dire need to tackle environmental degradation. The convergence of these three issues presents a series of significant challenges to our perceptions of identity and agency in the early twenty-first century. How does the human perception of identity shift for example, when we find ourselves increasingly occupying social spaces which exist in a virtual environment? How do we care for the natural world when our social worlds appear to be steadily moving further and further away from these natural contexts? What role does gender play with respect to technology, ecology and spirituality, given the influence of patriarchy historically and conceptually over these issues? How do notions of identity and agency change when spiritual methods are employed which reinforce connections to natural dependence and finitude? This thesis offers a model of agency — the technopagan — as a way of being which adequately addresses agency at the nexus of this tripartite issue in contemporary Western culture.

In this thesis I argue that the treble factors of digital growth, secular spiritualities and ecological crises require critical exploration. Firstly, I suggest that as network
technologies develop, including Web 2.0, there has been a dramatic shift in forms of
social networking and communication in virtual environments. These new technologies
enable user-generated content, wherein web users can both download and upload
information, allowing for more egalitarian and dispersed forms of information
exchange. In these new web services, all knowledge becomes data, to be moved,
transported, downloaded, and altered by any other user. Web 2.0 technology is the
second generation of web interaction which allows for broad contribution and transfer
of information between and among users, and includes technologies such as wikis and
social networking web sites like Facebook and Second Life. For example, in the United
States of America, Hillary Clinton’s campaign for Democratic presidential candidate for
the 2008 election took up residence in the virtual world of Second Life, in recognition of
its ability to reach a vast audience, and in particular, an audience who may not be
reached through traditional channels of communication. Such dramatic shifts in how we
act and interact, point to the way in which media and network technologies partially
dictate and shape the dynamics of the world we occupy.

Concurrently, an explosion in secular spiritualities has emerged in the new millennium,
turning away from the dogma of traditional religions, while simultaneously celebrating
re-imagined ontological engagements with our world. These forms of spirituality range
from ‘new age’ spiritualities to the resurgence in neopagan spiritualities which draw
from pre-Christian traditions with alternative worldviews. Finally, mainstream
productions like Al Gore’s An Inconvenient Truth have managed to bring climate
change and associated environmental issues to the forefront of public awareness,
signalling a potential shift toward a long sought-after ecological consciousness.
Together, these intertwined phenomena present challenges to the areas of environmental
philosophy and sustainability, virtual reality and cyberculture, and techno-materialist considerations of subjectivity. The centrality of the human-technology relation is paramount to this discussion, implicit in debates concerning the nature of the human subject at the beginning of the twenty-first century. In these contexts I propose a figure called the technopagan as a way to explore such issues and the nature and importance of their intersections. The technopagan is a hybrid figure emerging from neopaganism, ecologically reverent spirituality and cybercultural technohumanity.

In the introduction to this thesis I will investigate contemporary theories as they relate to the threefold issue to which this study attends. In particular, the social context of contemporary culture is charted to produce a picture of the relevance of these issues. In what follows I will establish the forms these issues take within our lifeworld, and subsequently articulate the goals and methods of this project. I then attend to some key terminology which occurs throughout this dissertation which is worth clarifying and elaborating on at this early stage. I then briefly introduce a figure central to this argument: the material-semiotic actor. A theoretical insight of Donna Haraway, the material-semiotic actor is of key significance to understanding the technopagan. Finally, I present a chapter outline of the dissertation as a whole, mapping the content of each chapter and its role in contributing to this meditation on identity and agency in contemporary culture.

**Technology, Ecology and Spirituality**

The digital revolution has most recently been marked by the rise of user-generated content on the World Wide Web, effecting a dramatic shift in the ways that knowledge is produced and disseminated. Web 2.0 in particular, facilitates the growth of social
networking on sites like Facebook, MySpace, Twitter, Flickr and LiveJournal, and has proliferated in ways which could never have been anticipated. Twitter for example, is a social networking site that offers ‘micro-blogging’ where users upload brief messages — ‘tweets’ — via mobile phone and other networked devices. Facebook, which operates alongside Twitter to upload and transfer ‘tweets’, is a social networking site enabling people to communicate, post photographs, share quizzes and games and to meet new friends and reconnect with old ones. The resultant phenomena has allowed people to connect with each other locally, nationally and globally through these mediums, reshaping the internet into yet another space for unprecedented modes of connection. The Prime Minister of Australia Kevin Rudd and the former Prime Minister John Howard each had their own pages in both MySpace and Facebook which they used throughout their election campaigns. These moves illustrate their awareness of the enormous power these social networking spaces wield as they approached the federal election in 2007. Prior to winning the election, the leader of the opposition party, Kevin Rudd, had to make an application to Facebook to have his friends limit increased, having reached the site limit. Yet these spaces are largely populated by ‘ordinary’ people, from high school students, to emerging rock bands, to activist groups formed around common interests and campaigns. Actions like these show that the functions of Web 2.0 are not merely frivolous, but in fact socially and politically noteworthy, and signal a significant change in the way we communicate and connect, and construct a particular agency in the world.

Within these new social contexts, questions surface relating to how the notion of identity shifts when social relationships and communities are formed in virtual environments. When so much social communication becomes mediated through a
materially inanimate yet digitally lively piece of technology, such as the personal computer, it is reasonable to expect that notions of agency will shift. Additionally, when the very notion of a virtual self becomes increasingly presented as a costume which can be both ‘put on’ or ‘taken off’, traditional assumptions about ‘self’ and ‘identity’ are necessarily altered when the cues of physical embodiment and context are removed. Finally, within these novel spaces new forms of knowledge construction deliver to us a message that knowledge is manipulable, individually constructed and debatable. For example, wikis, which are a type of software which allow for content to be added, removed and edited by any user, allow for easy user-interface and editing of web content. Wikis also store the changes made to web pages, so that the user-generated content can be tracked. The authority of knowledge dissemination thus is redistributed, placing the ‘power’ of information into the hands of a dispersed set of agents.

Concurrently, as the digital world flourishes into a myriad of seemingly endless possibilities, we find ourselves faced with a material world which is reaching its resource limits. Human impact on the nonhuman world has significantly compromised the stability of the ecosystem that constitutes our planet. The continued expansion of industrialisation and its associated resource depletion in particular, pose critical problems which humans are in dire need of addressing. These issues can be framed through Martin Heidegger’s concept of the standing reserve (Bestand) (1977). This notion, expanded upon in Chapter Three, considers the way that contemporary Western technocultures frame nature as a ‘resource-well’ made up only of elements deemed valuable through and within human use. In this view, nature has no agency or value intrinsically, but is instead assigned value through the human lens of use-value. Within this framework humans too become commodified as tools or resources measured by
their utility. My home state of Western Australia is in the midst of a resources boom, prompted by the rapid expansion and industrialisation of China and India. Aside from the social pitfalls of such a boom — which have included decreased housing affordability and growing vacancies in other job fields such as policing and nursing — the environmental consequences of these resource-based industries are potentially catastrophic. Open-cut mines, cyanide filtering systems and pollutants produced as a result of mineral processing have a devastating effect on the natural environment, including the plant and animal populations which dwell within it. In the north of Western Australia permission was recently given to proceed with the development of a gas project in the Burrup Peninsula which involves the partial relocation of petroglyphs over 10,000 years old. These decisions indicate the triumph of the market over all other forms of value, making arguments for the inherent cultural, historical and ecological worth of sites like those in the Burrup of marginal concern.

What prevails is a particular mode of relating to nature and to the future, one which sees the nonhuman world as a resource whose value is purely utilitarian. When human-centred rationalism and the market triumph as the preferred model for human direction and decision-making, we enact a value system which places a particular form of human identity at the centre of ‘what matters’. Being-in-the-world within this construction is always and only human, and remains faithful to John Stuart Mill’s concept of *Homo Economicus*, wherein humans are always self-interested and motivated by economic gain. Other forms of value, such as spiritual value, heritage values, or the intrinsic value of natural systems and animal species are minimised within this model. The reconsideration of identity and agency that I offer in this thesis attempts to undermine this model of utility and rationalism, instead suggesting that nonhuman agency must be
seen as intrinsically valuable if we wish to live in a just and sustainable world. Finally, rationalist and utilitarian models fail to properly acknowledge human reliance on nonhumans and natural systems to survive, and in so doing present a flawed model of sustainability, as demonstrated by the looming effects of environmental degradation on human life.

The agency of nonhumans and the agentic interests of people who do not seek economic gain from these pursuits are marginalised within the model of the free market society. However, recent shifts in public attitudes towards environmental issues such as global warming have generated a complex tension wherein these anti-free market considerations are gaining ground. So how can these enormous challenges which face us at the beginning of the twenty-first century be overcome? As these complexities grow and contemporary culture steadily comes to heed the importance of environmental integrity, shifts occur with regard to what counts as agency in the world. What are needed are constructive technohuman interactions which positively generate the sustainable solutions we seek and need. Moreover, the environmental crisis prompts an examination of the construction of the self and its focus on ego. The human-centred approach to selfhood and the capitalistic encouragement of greed need to be redefined towards an ecological self, a self which properly recognises its place within a connected system of interdependence, rather than isolated from its environment.

The call from environmental groups to make such fundamental change is only now gradually being heeded in the broader community. A factor contributing to the lack of reception to environmental messages thus far is that they too often suggest solutions involving the abandonment of so much of the ‘modern’ world with which we are so
familiar. Green messages about reducing consumption, the rejection of greed, or treading more lightly on the earth are often couched in romanticised or regressive terms because they are predicated on the idea that human impact on the environment was better in the past than it is today. In this process, technological development is designated as one of the core factors which facilitate the poor human-earth relationship which accounts for environmental crises. Specifically, environmentalism has identified developments in industry and production as key elements driving environmental degradation. In search for resolutions to environmental damage, methods looking to the past for simpler approaches to living in ecologically sensitive ways are common. In so doing, environmental appeals risk being written off as too wishful, too backward-looking in the search for solutions, and for failing to properly recognise the depth to which technology is embedded not only within our daily lives, but more broadly within the very experience of what it means to be human.

I suggest more fruitful outcomes can be achieved when we explore ways in which the issues raised by environmental philosophy can be addressed within the context of a technologised world, without reference to a romanticised past which is ‘free’ of the burdens of technology. I illustrate the ways in which environmental sensibilities can be carried in the digital age with strength and ingenuity. Instead of looking to the past to formulate a vision of the world which is equitable, sustainable and responsible in its consumption of resources, network technologies can present glimpses of a future which may more fruitfully suggest answers to the environmental crises we face.

Moreover, I suggest that the digital age is in many ways conducive to an improved environmental ethic. The users of digital technologies can be socially conscious and
eager to ‘switch on’ to social issues. The proliferation of web logs (blogs) which act as platforms for the voicing of these issues is a testament to this trend. Further, the kernels of the birth of the internet sprouted from counter-cultural and environmental movements in the 1960s, and as a result was driven by desires to shape a more connected, socially conscious world whose aim was global justice. The internet itself can be seen as an appropriate representation of the connections which exist between modes of knowledge, people, places and interests. Taken in this way, the very structure of the internet acts as a kind of living metaphor for networked ways of knowing, seeing, and understanding the world, incorporating a matrix of interconnectivity as a way of understanding the world based on interdependence.

In this thesis I suggest a new formation of agency, embodied in the figure of the technopagan. I find this model capable of respecting the interests of agents without exclusive reference to economic gain, and able to carefully consider the geological history and technological future of the planet which stretches before us and behind us. As I will suggest, the technopagan subverts the sole importance of economic gain and instead seeks to embrace a more complex view of life; one in which technology, culture and ecology can be seen as mutually constitutive. This view addresses both the digital and material elements of technology, as equally vital components of sustainable being. The technopagan is able to embody these elements, and as I will now discuss, it can also consider the spiritual alongside the technological and the ecological.

As we inhabit the planet in this age of limits, it seems that despite a decline in certain sectors of traditional religion, there has been a steady rise in interest toward what might be described as secular, earth-based spiritualities. Secular spiritualities pertain to a
particular kind of engagement with the world, without deferral to traditional religious structures. Where religious traditions’ adherence to doctrine and dogma can result in prejudice and intolerance, secular ontologies are non-determinist models of existence and being, and do not contain sacred texts (such as the Bible) which are largely prescriptive about what constitutes the world and how we should ‘rightly’ live in it. Recent publications have even passionately argued for the discarding of notions of God. For example, Richard Dawkins’ *The God Delusion* (2006) makes a passionate plea for the pursuit of science as an ontological framework and our release from the ‘cult’ of traditional religion. At a time when the United States of America has seen the opening of ‘creation museums’ — institutions which provide a history of the natural world based on the theory of creationism, in which the world is 6,000 years old — these impassioned atheist pleas to reject religious doctrine have become especially pertinent. Yet many argue that spiritual belief is a crucial aspect of human life, a foundation for responsible and creative practice. Thus I will suggest that neopagan worldviews offer a way of traversing these issues.

A significant form of secular spirituality, neopaganism is well-known for its animistic understanding of the natural environment. Neopagans, described in depth in Chapter Four, can be most simply understood to be a large group of individuals who identify with a revived version of ancient pagan, pre-Christian, polytheistic traditions often found in early Europe, Great Britain, Germanic and Norse countries. In their modern incarnations, neopagans follow an earth-based form of worship, choosing to use the cycles of seasons as their reverential calendar. Neopaganism is relevant to the considerations raised here because it is ecologically conscious, and it offers a useful form of agency to consider within a philosophical context. Neopagans see the world to
be deeply alive, wherein agency is dispersed across the human and the nonhuman. Instead, they recognise the agency of every living thing, as well as respecting even inanimate objects as agentic, such as rocks or mountains. Yet neopaganism can be technophobic, so I trace here a shift from the distinctly ‘natural’ identifications of neopagans to the hybridised ‘techno’ incorporations which bring us to the technopagan. A technopagan describes an agency that draws upon neopagan practices and adapts and transforms them for the digital culture, enacting a form of being-in-the-world which brings together the technological and the natural within a spiritual framework. To more fully understand the theoretical landscape in which this study takes place, in the following section I outline the conceptual pathways and methods which underpin my proposition of technopagan agency.

**Key Theories and Concepts**

The goal of this thesis is to consider agency — or ways of being and doing in the world — in ways which properly address issues relevant to the treble issue I have raised. Specifically, I argue for agency which appropriately attends to the human-technology relation, while simultaneously addressing the agency of nonhumans. Further, this agency must be mindful of the relations between gender and environmental issues, and the importance of embodiment as a primary and material condition of existence. Finally, it offers spiritual ontologies which are subversive, hybridised, political, sustainable and technologically connected. The agency I suggest here is embedded in the concept of responsibility, which I position as a central element in this thesis. Responsibility as it is used throughout this study refers to ways of being in the world which are politically accountable, and acknowledge a nonhuman network of agencies. This responsibility materialises in views of ecologically sustainable futures, digital creativity and
alternative ontologies. Technopagans are responsible, yet playful agents, who understand being in the world to constitute connection, dependence and interdependence.

The embedded role of technology in human life draws attention to the fact that designating technological phenomena as primarily culpable in environmental crises is too simplistic and fails to account for broader issues concerning human ontologies and hierarchies. These positions are technologically determinist and too readily assume social shaping occurs solely and primarily through technological means. Through a consideration of a prominent form of environmental philosophy, ecofeminism, I address the array of complex and intertwining factors which contribute to the ecological predicament in which we find ourselves. Ecofeminism is often technophobic but offers some valuable insights, particularly concerning the relation between gender, the environment and technology.

This thesis is also influenced by feminist and postmodern debates concerning agency and identity. Specifically, contentions for the deconstruction of the self, argued through appeals to anti-essentialist, anti-materialist arguments are of particular interest. Drawing on these influences and aware of the diversity of ‘women’s experiences’ I employ these insights to guide my own feminist inquiry into agency in a technologised, environmentally compromised, yet potential-filled world. I pursue these critical precursors to develop and build on the notion of hybridised identities and agencies, as presented by Donna Haraway (1991) with the aim of uncovering viable and inspiring forms of being-in-the-world, which remain politically relevant and socially active.
Whilst these poststructuralist insights offer valuable elements to debates of the kind addressed in this thesis, I argue that alone they are not enough. Postmodern and poststructuralist debates propel our considerations of identity into an abyss of relativism which prevents definitive statements being made about the nature of agency and existence. To circumvent this relativity, I argue for the need to draw these considerations back to questions that are ontological in nature. Therefore, the importance of the human-technology relation and forms of agency in that relation are of central importance. This relation will be explored through the work of three theorists — Don Ihde, Bruno Latour and Donna Haraway.

This thesis is explicitly theoretical in nature, despite drawing on real-life events in its investigation. I focus on several events, primarily the Burning Man festival, as an outsider in an event defined by participation. Drawing on work by other theorists, and my own online investigations which richly document this event, I deploy these events as tools for my theoretical study. Whilst aiming to blur the line between the theoretical and the experiential, I primarily enter into a theory-based discussion in which these events act as markers and 'prompts' for ideological explorations. I consider my methodology to fall in line with that used by Haraway, wherein a strict theoretical focus is deployed as a way to think through complex issues facing conditions of being in contemporary culture. In the same way that the cyborg in Harway's work has material, or 'real' compositions, it is however most importantly deployed as a metaphorical figure, as an exemplification of modes of thought and being in the world. The scope of this thesis is not to describe particular events as a participant, but rather to explain them sufficiently in order to conduct a discussion of the philosophical significance of these events. This thesis is an ontological and philosophical study, not an ethnographic investigation.
Where writers like Graham St John (2004) have charted happenings including Burning Man and other such rave-like Post-modern events infused with neopagan sentiment as participant, my goal is to chart the ways in which these occurrences can exemplify and clarify the theoretical issues I explore. In so doing, I do not claim a methodology of Participant Observation, rather I hold up these events as a means by which the esoteric and deeply theoretical issues of this thesis can be conducted and exemplified.

Whilst new terms are introduced throughout the thesis, some terms form the foundations of the theoretical framework, and must be considered at the outset. These key terms, pertinent to this introductory chapter and the thesis as a whole are: ontology, nonhumans, the material-semiotic actor, the human-technology relation, and metaphor. I also outline the terminology of gender, environment, ecology, and embodiment.

Ontology is a vital element of this discussion because theories of being and existence are considered to be ontological in nature and relate to discussions concerning spirituality and agency in the world, specifically, in deliberations on what can exist. Where ontology within poststructuralism and postmodernism has been subsumed by semiotic considerations of existence, in this dissertation I employ an interpretation of ontology as used in contemporary theory. For theorists such as Bruno Latour and Donna Haraway, ontology is intimately and irreducibly connected to ways of knowing or epistemologies. These theories of ontology counter the primacy of semiotics by asserting that the material is equally important to knowing and being in the world and in particular, the corporeal conditions of existence must also be considered in tandem with the semiotic. Yet corporeality and ontology have been critiqued as being essentialist, construing universal, determinist and fixed interpretations of being. In Chapter One and
throughout this thesis I will show how ‘strategic essentialisms’ operate to locate the material as critical to existence, without resorting to the determinism of a universalising, essentialist approach which has troubled feminism and ecofeminism in particular. Related terms I use to similarly indicate ontological concerns include beliefs, worldviews and ways of being, and being-in-the-world (Heidegger 1962).

I further draw theoretical influence from the work of Donna Haraway, whose critical theory aligns with the work of Bruno Latour and Actor-Network Theory (ANT). In particular, I appropriate Haraway’s notion the material-semiotic actor, to develop feminist theory which builds networks of agency which breach the boundaries of human constructions of the self and identity. Material-semiotic actors are hybrid figures which exemplify the network of exchange between materiality and semiosis which occurs in the production of knowledge. A central figure in this thesis, Haraway’s material-semiotic actor thus presents ontological challenges to questions relating to existence, and brings ways of knowing and being together, accounting for nonhuman agency, which is critical to my proposal of the technopagan as such an actor.

I present a particular kind of agency — the technopagan — which properly integrates concerns about ecology, technological development, feminism and ontology within a particular context, that is, the late-modern, posthuman context of the digital age. The technopagan incorporates these concerns by embracing neopaganism, and thereby seeking to acknowledge our role in an interdependent organic system, and by constructing an ontology which is anti-humanist, anti-sexist and anti-religious doctrine. The technopagan embraces technology, thereby acknowledging the ‘naturalness’ of technology and its complicity in the human experience. The technopagan embraces
ecofeminism, recognising the various links constructed between women and nature and both the positive and the detrimental impacts of such links; the interconnection of forms of oppression, and the need to account for ‘naturism’. I discuss the technopagan explicitly as a form of agency because agency is critical to this thesis. In a project to recognise the dispersed agency which exists in the world, I employ agency as more flexible than identity or subjectivity, which are humanist terms. Instead, agency implies the apprehension of nonhumans into these considerations of agency.

Environmental philosophy and ecofeminism illuminate the equality of human animals with nonhuman animals and organisms in order to reconfigure nonhuman organisms as worthy of moral consideration. Yet along with Latour, Haraway and Ihde, I will carry this ascription of agency further to include all ‘objects’, be they organic or inorganic, supposedly inanimate things in the world. Thus I will show how agency resides with animals, plants, rocks, or material objects of knowledge like computers, avatars, lines of code or Non-Player Character’s in a Role-Playing Game.

Questions of ontology have been raised by theorists such as Bruno Latour especially as they pertain to knowledge construction in the disciplinary field of science. I draw from areas of Sociology of Scientific Knowledge (SSK) as a field capable of producing fruitful analyses of the social influences on scientific practice and knowledge-making. In particular I confront the issue of agency in scientific processes by looking at Science and Technology Studies (STS) and its appraisal of the tendency within SSK to be too human-centred. Instead, I investigate the assertion with STS and Actor-Network Theory that all forms of agency need to be considered within technoscientific frameworks. The ANT emphasis on the relations between the material and the semiotic is of particular
interest, and Latour’s supposition of the proliferation of hybrids in ‘modern’ culture is particularly relevant to investigations of hybridised agents.

Considerations of the nonhuman are closely linked to concerns relating to the human-technology relation as many of the ‘objects of knowledge’ reside within technoscience. Philosopher of technology Don Ihde plays a pivotal role in fleshing out these considerations and posing important questions regarding the human-technology relation. Do humans ‘own’ technology by virtue of their creation and mastery of it, or is the human relationship to technology one of affinity, co-existence and collaboration wherein we are shaped by technology as much as we give shape to it? Can we maintain a distinction between human and technology, given our lives are so deeply tied to and reliant on technology not only to survive, but to fundamentally frame and interpret the world for us? Is technology the medium through which we understand, order, and indeed greet the world? Varied approaches to these questions are considered throughout this thesis and are employed to argue for appropriate modes of understanding the role of technology in human life. For Ihde, the human-technology relation foregrounds all relations, and as such both human and technology do not exist as separate entities prior to this relation.

The term metaphor is used recurrently throughout this thesis. In a traditional literary sense metaphor is defined as a way of communicating the meaning of a thing by likening it to something else. However I employ the term as it is used by Haraway, that is, the sense in which metaphor can both effect and describe a state of being. In discussions concerning identity and agency, the perception that existence can be metaphoric is significant. This is particularly the case when the constitution of the world
so dramatically shifts to include virtual identity and digital existence. In so doing, we come to occupy metaphorical identities which convey the complexity of our shifting being-in-the-world. However in Haraway’s model, metaphor operates on a far more fundamental level than this; for Haraway, metaphor makes reality. Metaphor is more than a simile or a linguistic operation to convey meaning. Instead metaphor creates meaning, a mode of thought and understanding through which we understand the world. These metaphors cannot be extracted from their context, because it is the metaphors themselves which define and therefore deliver the world to us in a particular fashion. It is metaphor which defines boundaries, in both constructive and restrictive ways. For example, the concept of the ‘virtual’ in cyberspace communicates a sense of a space which is ‘not quite real’, as ‘almost’ reality. This metaphor will be argued against in this thesis as I suggest that the virtual is not a poor reproduction of the ‘real’ world, but a legitimate space in its own right. At these fundamental levels, metaphor forms a cornerstone of our ontological understandings.

Some simpler concepts which are regularly employed require brief outlining here. As a project anchored in feminist theory, gender is of central importance to this discussion. Feminist theory has successfully demonstrated that sex and gender are mutually constructed aspects of agency. Indeed, feminist theory is inherently ‘responsible’ — in the significant way I have defined it — and is important to this thesis because it alerts us to the role of gender and sexuality in the construction of agency. Critiquing gender also reveals ways to critique agency, which is critical to this study. Further, gender traits tend to be weighted in terms of value, so that traditionally ‘masculine’ traits, such as reason or the domain of culture, are prioritised over their ‘feminine’ opposites of intuition, the body or nature. Illuminating the degree of value attached to these traits tell
us important things about how we view men and women, and what we find valuable in these constructions of identity. Finally, in deconstructing gender ties to ‘biological’ sex, we must remain alert to the ways in which we deconstruct them. Specifically, in highlighting the falsity of tying these cultural traits to the biological state of sex — a state revealed to be itself constructed rather than innate — care must be taken to avoid devaluing these traits. Feminist theory enables us to consider gendered agency as situational, collective and located in particular histories and knowledges.

Environment is a term used with great frequency in this thesis, and refers to both the ‘natural’ and built or technological setting, and more specifically issues relating to ecology and ecological sustainability. Environment can simply refer to the setting in which one finds oneself, however, in the context of a discussion anchored in considerations of ecological destruction and bio-system sustainability, I refer most often to environment as a complex array of interdependent components of a system of both biological and non-biological elements, living in a shared system of mutual dependence. I will show how a failing of ecological philosophy and ecofeminism in particular has been to exclude elements of the ‘built environment’ as part of what constitutes the environment. To portray the environment as purely organic, and to ignore emergent properties like the internet, or cities, constructs a flawed concept of our surroundings, and this hinders meditations on the sustainability of that environment.

In this thesis I deploy the term ecology to capture a concern for the natural environment. However, as the focus on hybrid constructions will show, emphasis on 'pure nature' will be proven an impossible focus. The network emphasis of this thesis highlights that articulating ecology as a space removed from non-natural, human spaces is an illusion,
and that ecologies can be expanded out to encompass spaces of far broader definition than 'the natural'. However in articulating ecology as critical to the focus of this dissertation, I aim to emphasise that the nonhuman world of biological systems are fundamental to human survival and flourishing. The responsible recognition of ecological issues and the finite nature of the earth are crucial factors to acknowledge within contemporary culture. In articulating ecology throughout this thesis, I am speaking to these finite systems of the biosphere, through an established canon of environmental philosophy, and specifically via ecofeminist philosophy, and also to the broader sense in which ecology implicates spaces which are dwelt in, whether 'natural' or 'constructed'. Ecofeminism is underpinned by the philosophical tradition of environmental philosophy, and is enhanced by its own critiques of this established tradition. In offering this position as the core ecological influence of this thesis, I present ecological concern as critical and vital elements in the flourishing and responsible sustainability of global ecosystems.

Finally, embodiment is a term which garners common use here. I use this term partly in reference to feminist considerations of the relations between sex and gender, but also in the context of our material and physical conditions of being-in-the-world. That is, whilst feminism seeks to ensure that women are not defined or confined by their biological state as ‘woman’, it also indicates that embodiment forms a fundamental element of the experience of being: our experience of the world is mediated through our bodies. The colour, shape, abilities and functions of our bodies within the context of inequitable social worlds significantly shapes our experience of the world and the world’s encounters with us. Considerations of embodiment become particularly relevant within discussions of an increasingly digitised, virtual world, in which it seems that the cues
and ties of embodiment may be circumvented or dissolved. Feminist debate ranges broadly regarding this issue, and is dealt with in depth in several chapters of this thesis. I further consider embodiment in relation to neopagan views, which are typically embedded within material connections to the body and the world.

**Chapter Overview**

This thesis is structured in two main parts. Part I contains the introduction and three chapters which discuss the main theoretical issues which shape the thesis, raising key strengths and limitations of each. At the end of the three chapters, what emerges is a consideration of agency that revolves around a number of agents which are pertinent to this thesis, including material-semiotic actors, hybrids, cyborgs, and goddesses. In the Interlude, which marks the passage from Part I to Part II, I describe these actors and my project to implant them in both their contradictions and affinities into a technopagan framework. In Part II I outline neopaganism as a worldview, as a prelude to fully understanding the technopagan which lies at the conceptual heart of this dissertation. A full discussion of the technopagan is presented in the fifth and final chapter of the thesis, followed by a brief conclusion to the thesis.

The theoretical starting point for this thesis is formed partially through ecofeminist theory. Ecofeminism, critically discussed in Chapter One, provides the framework for an analysis which sufficiently addresses the complexity of power relations and oppression, namely the critical analysis of the interconnection of varying forms of oppression, and in particular, links between the oppression of women and the exploitation of nature. Woman-nature connections lie at the heart of the ecofeminist analysis, and I deploy the work of Karen Warren to flesh out the breadth of these
connections and their impact on attitudes toward both women and nature. Woman-nature connections are based in a dualistic structure, and the hierarchical dynamics of dualism are explored through Val Plumwood, who teases out the ways in which dualistic thought facilitates and justifies relationships of domination and subordination. As a reaction to negative woman-nature connections, many ecofeminists have been inspired to find constructive ways to rethink them; in so doing, they find in models of earth-based spiritualities some empowering avenues for subverting the oppressive elements of dualistic frameworks.

However, the celebration of the seemingly implicit link between nature and female embodiment has led many ecofeminists to critique these approaches as essentialist. I attend to essentialist critiques via theorists such as Janet Biehl, Chris Cuomo and Val Plumwood. These critiques present valid warnings regarding elements of what might be called a maternalist or spiritualist ecofeminism. Some of these arguments however, have been overly critical in their approach and I respond to the weaknesses in anti-essentialist critiques through the work of Douglas Buege, Mary Mellor and Teresa DeLauretis. I then conclude the chapter by exploring the limitations of ecofeminist appeals to a ‘special’ relationship between women and nature, and their tendency towards technophobia in analysing human-technology relations. Mindful of the limitations of ecofeminism, and inspired by its strengths, I move forward to investigate ways to rework an ecofeminist model. Ecofeminism offers valuable contributions to the issues in this dissertation. The emphasis upon the agency of nonhumans, and the need to recognise the interdependence which exists between different ‘actors’ in the world has been a key contribution of ecofeminist theory. I expand this analysis towards an
identification of agency which considers elements of the ‘built environment’ and the internet as critical elements in considerations of identity and agency.

The troubled relationship with technology is not limited to ecofeminism alone, and in Chapter Two I explore various feminist approaches to technology. Beginning with perhaps the ground for technological inquiry, the field of scientific investigation, I present an analysis of feminist critiques of technoscience. Feminist critiques of supposedly neutral scientific practice expose a network of relations, influences and vested interests in a world dominated by notions of ‘truth’ and ‘objectivity’. Feminist approaches to technology more generally are then explored, attending specifically to cyberfeminisms, technofeminism and forms of ‘feminist technophobia’ such as those found in ecofeminism and cultural feminisms. A key element in the feminist and cyberfeminist engagements with technology involve the emergence of the cyborg in popular culture, medical and scientific developments and Haraway’s critical theory. I chart the rise of the cyborg in feminism and its ‘adversary’ the goddess — often cast as the cyborgs’ inadequate ‘other’. To develop this dynamic between goddess and cyborg I briefly return to ecofeminist spiritualities to show the role of the goddess and its impact on feminist notions of female identity. In conclusion I demonstrate problems with aspects of the pro-technology stance within cyberfeminisms, for their at times apolitical approach, and for their outright rejection of goddess figures found in other forms of feminism. This chapter reveals the complexity of feminist approaches to digital culture and technological development, wherein the optimism of cyberfeminist visions of the digital future are contrasted against the more pessimistic approaches of anti-technology feminisms. I demonstrate the valuable contribution of each while arguing along with Haraway that the either/or split between the two approaches needs to be collapsed in
order to create increasingly viable theory and to develop more sustainable and responsible ways of being. As I will argue the technopagan provides a means through which to collapse the binary of cyborg and goddess.

Having considered the landscape of feminist approaches to technology, in Chapter Three I deepen investigations into the human-technology relation through theorists Don Ihde, Bruno Latour and Donna Haraway. I explore the philosophy of technology, beginning with Don Ihde’s three criteria by which we can compose an analysis of what constitutes a technology, and his questioning of the distinction between ‘high’ and ‘low’ technology. In order to better come to grips with these fundamental questions concerning technology, I consider the relationship between science and technology and in particular Ihde’s critique of Martin Heidegger and the question of the historical and ontological priority of technology over science. Ihde’s concept of instrumental realism is presented as demonstrative of the participatory relationship between humans and tools, and of the ways in which the world is revealed to us in partnership with technological devices. This complicity between humans and technology is complexified by Ihde’s detailing of various kinds of human-technology relations. In considering identity in the technological age, these analyses of technological mediation and influence offer much to my positioning of the technopagan as an appropriate embodiment of human-technology relations, particularly through its engagement with nonhumans and technological spaces like the internet. Moreover, within Ihde’s framework a shift can occur in which assumptions about ‘primitive’ or ‘ancient’ societies can be problematised to reflect pre-modern cultures. Specifically I use examples of the technological innovation of sites such as Stone Henge as exemplars of early pagan technologies.
Ihde’s discussion of the human-technology relation however, still maintains a distinction between the concept of ‘human’ and ‘technology’. To explore an alternative perspective, I turn to Bruno Latour for an approach which denies, at an ontological level, the very notion of such a distinction. For Latour, the division between ‘technology’ and ‘human’ is insignificant in comparison to the role of agents in the construction of knowledge, particularly in technoscience. Actor-Network Theory, the primary vehicle for Latour’s theory of agency, considers the convergence of actors at work in the laboratory, or in any other number of networks which build and constitute knowledge and worlds. Difficult to define and in fact resistant to definition, Actor-Network Theory (ANT) is useful to my thesis in particular regarding the expansion of the concept of agency outside of the boundary of the human. Moreover, the technopagan as a hybrid agency is largely apprehended through Latour’s exposition of the proliferation of hybrids in the current era. In the ‘Modern’ era, dominant bodies of knowledge separate things and ideas into discrete categories in which they can be neatly ordered and attended to, and their compartmentalised boundaries maintained. According to Latour, it is also the maintenance of these (heuristic) categories which enables hybrids to proliferate. In denying the existence of hybrids, the modern era brings about what Latour calls the Great Divide which ensures their existence and production. In contrast, the pre-modern era consisted of what Latour calls an Anthropological Matrix, a convergent culture in which interests, objects and agents overlap and intersect. The way that this matrix is configured offers a more suitable background against which to consider technopagan agency.
In finalising my exploration of approaches to technology in Chapter Three, I conclude with an analysis of Donna Haraway’s theories of technology, science and gender. Beginning with the question of science and claims to objectivity I show the usefulness of Haraway’s interpretation of ‘situated knowledges’. In my exploration of agency and its significance in technopagan manifestations, I engage with Haraway’s critical analysis of objects and agents, and the effects of the scientific gaze on the construction of knowledge and identity. I then deploy Haraway’s material-semiotic actor, and its resonance with the technopagan. Finally, the cyborg, a figure so heavily shaped by Haraway’s 1985 *A Cyborg Manifesto: Science, Technology and Socialist-Feminist in the Late Twentieth Century*, is considered as kin to the technopagan, and explored for its relevance to technoscientific debate, appraisals of embodiment in feminism, and questions circulating around essentialism.

These discussions mark the completion of Part I of this study. I present a brief ‘Interlude’ in which I explain the community of actors which emerged in Part I — cyborgs, goddesses, material-semiotic actors and hybrids — as central to the dissertation. I carry these actors into Part II, and following an exposition of the neopagan as a way to speak to the issues raised in Part I, I finally reconcile these actors via the technopagan worldview.

To establish the technopagan ontology and its material-semiotic constitution, I attend in Chapter Four to a discussion of neopaganism. I begin with an etymological exploration of key terms related to neopagan belief and practice, followed by a typology of the *kinds* of neopagan identities which exist, and offer a brief overview of the history of paganism and neopaganism. I then complexify and broaden this understanding through a
discussion of what might constitute an ontology of neopaganism. Perhaps most importantly, I discuss a fundamental aspect of neopaganism’s (and indeed technopaganism’s) dynamic ontology, of the role of practice or praxis.

In Chapter Five, the final chapter of this study, I draw together the preceding debates through a critical understanding of agencies which can be considered technopagan. I begin by exploring the way in which the internet and network online spaces are embedded in technopagan praxis. Manifestations of technopaganism are then considered including technopagan events, such as Burning Man. Technopaganism can usefully be interpreted as constituting of two agentic categories: those individuals who engage with the internet as a tool, and those for whom the internet is manifested as sacred space or a technopagan domain in itself, what I call the ‘internet as ontological affinity’. Finally I proffer the technopagan as a material-semiotic actor akin to the cyborg. Through this process I show that this formation of agency is capable of embracing the strengths and circumventing the limitations of the various perspectives presented throughout this thesis. These discussions deepen our understanding of technopagan agency and demonstrate its flexibility as a sustainable and responsible figure in contemporary culture. I illustrate the ways in which technopagan communities in cyberspace foster constructions of agency which attend to the questions raised through environmental philosophy, feminism and theories concerning the human-technology relation.

In this thesis I suggest that the threefold issue I have positioned as central can be responsibly realised through the figure of the technopagan. The environmental crisis of our planet, the rise of digital, networked societies, and the potential of secular spiritualities requires a notion of agency that avoids totalising claims to a universal
essence, and which is capable of building constructive and non-humanist configurations
of agency. Instead I suggest the most fruitful considerations of the human relationship
to nature and technology must embrace the hybridity of agency, in ways which collapse
the boundaries and hierarchies between the natural and cultural, the technological and
the human, and the logical and emotional.

Technopaganism thus becomes a model/vehicle for considering these central issues. The
technopagan is not an answer or solution to the problems presented, but rather a
material and semiotic figure for examining and exploring the issues of concern. The
technopagan is employed in a similar way to Donna Haraway’s cyborg (1991) or the
posthuman of Katherine Hayles’ (1999) work. It operates as a metaphor for conveying a
state of being; as a material instance of individuals who live their lives through a
particular ontology; and as a philosophical construct. In so doing, I explore identity and
agency through the technopagan, as a way to open up and better understand the issues
which circulate around inquiries into subjectivity and agency.
Chapter One
Feminism, Ecology and Spirit: ecofeminism as a theoretical framework

Civilized Man says: I am Self, I am Master, all the rest is Other — outside, below, underneath, subservient. I own, I use, I explore, I exploit, I control. What I do is what matters. What I want is what matter is for. I am that I am, and the rest is women and the wilderness, to be used as I see fit.

Ursula K. LeGuin (1989, 45)

Over the last 30 years it has become increasingly clear that we inhabit a world that is becoming overwhelmingly compromised by human impact and actions. Our swelling population, hunger for natural resources and the dynamics of human understandings of our relationship to the “more-than-human world” (Abram 1997) illicit a staggering impact on the integrity of the biosphere. As Mark Wallace who writes on ecology and religion points out, in the Western world in particular, the consumer-driven, market-liberalism of “‘grow or die’ — will continue to result in the degradation of clean water and air, animal well-being, and human flourishing” (Wallace 1997, 292). A great flaw of the ideology of liberalism is the assumption that “the pursuit of enlightened self-interest somehow guarantees that all members of the body politic will achieve a reasonable standard of living in relatively healthy home and work environments” (Wallace 1997, 292). It is this second point which draws the most concern: the notion that each of us can achieve heightened levels of affluence, liberty and freedom simply by deciding to strive for it. Any basic study of socio-economics and global economies shows us that this is simply not possible. The wealth, power and privilege of the few are attained ‘off the backs’ of the many. Whose ‘backs’ are we talking about? People in developing countries, people of various ethnic minorities, people of working classes and, of course, women. Constructing a philosophical analysis of these dynamics, ecofeminist theory asserts that nature is a feminist issue. The argument that power and
privilege are achieved through the domination and exploitation of subjugated groups, and that one of these ‘groups’ is in fact the nonhuman world, forms the basis of ecofeminist theory.

Ecofeminism, as I present it through key theorists including Karen Warren and Val Plumwood, presents a philosophical analysis of power structures and global inequity. It pays particular attention to oppression as it relates to gender and nonhumans, though the core argument rests on the premise that all forms of oppression are linked, and function under the same ‘logical’ structure. Its powerful analysis, acknowledged within feminist and environmental circles, ultimately resists the ‘prioritisation’ of forms of oppression, instead focussing on the concept of oppression more broadly.

Ecofeminism identifies ‘woman-nature connections’, links which occur historically, linguistically, and symbolically between the categories of woman and nature. In identifying these connections, ecofeminists have noted the myriad ways in which women and nature have, often negatively, been tied together. The worldview espoused by René Descartes through the mind-body split forms the foundational view that all ‘things’ form half of a binary pair, in which one side of the pair is naturally superior to its inferior opposite. However, in exposing these connections, and their entrenchment in Cartesian dualism, ecofeminism has been accused of perpetuating an essentialist picture of women, and of further cementing this essentialism through the endorsement of earth-based spiritualities which ‘hold up’ the female, particularly in the form of the goddess figure.
Moreover, in its analysis as an environmental philosophy, ecofeminism has been labelled technophobic in its identification of technological development as centrally culpable in the oppressions it seeks to redress. Vital ecofeminist texts such as Carolyn Merchant’s *The Death of Nature* (1980) have demonstrated the ways in which the scientific and industrial revolutions have, partly through their dependence on technological development, enabled so much of the environmental destruction with which we are faced. Within the discourse, suggestions as to how to address these issues are varied, with certain ecofeminists, sometimes called cultural1 ecofeminists, such as Charlene Spretnak (1989) and Paula Gunn Allen (1990), supporting the embrace of traditionally devalued aspects of the self, typically designated as ‘feminine’ in nature. In so doing, these forms of ecofeminism promote goddess worship and the embrace of the ‘feminine’ as a way to empower women and to challenge patriarchy. Other ecofeminists, who sometimes call themselves ecological feminists, including Chris Cuomo (1998) and Val Plumwood (1993) support a rigorous critical deconstruction of the very concepts designated to gender, in order to reconstruct a version of humanity freed of gender constraints. In this chapter I suggest that ecofeminism’s inability to conduct dialogue constructively across these two groups has resulted in a ‘stalemate’ which hinders progress towards further development of this promising theory. My position in this thesis emerges from within ecofeminist philosophy, strongly motivated by the desire to retain some of the core tenets of the movement. I show how we can support figures like goddesses with the same passion we do for feminist cyborgs, without essentialising women, and without being crippled by technophobia.

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1 Cultural feminism promotes the ideology that a female ‘essence’ as distinct from male identity, associated with ‘feminine’ qualities of caring, nurturing and embodiment should be (re)valued after its patriarchal history of domination. For a detailed discussion of cultural feminism, see Alcoff, L. (1988). "Cultural Feminism versus Post-Structuralism: The Identity Crisis in Feminist Theory." *Signs: Journal of Women in Culture and Society* 13(3): 405-436.
In this chapter I consider ecofeminist theory as a powerful feminist and environmental philosophy, arguing that ecofeminism offers an insightful analysis of the links between women and nature and the ways in which these connections operate to justify and maintain the oppression of both. I explore woman-nature connections through prominent ecofeminist philosopher Karen Warren. These connections highlight the ways in which women and nature, through a variety of practical and theoretical methods, are associated with one another as linked and alike. I explore several theorists key to the development of the critical framework of ecofeminist analysis, and uncover the radical underpinnings of ecofeminist theory. I reflect on a unique element of ecofeminism — its wing of earth-based spiritualities. Offering an alternative pathway for reconceptualising the more-than-human-world — what Wallace calls sustainable spiritualities (Wallace 1997, 293) — I attend to their potential and the controversy and debates which surround these appeals to spiritual pathways. I argue that critiques of ecofeminist methods, especially those associated with celebrations of ‘femininity’ and the embrace of earth-based spiritualities, are often problematic in their approach. I re-frame these critiques in order to build a stronger ecofeminism which is still mindful of the strength of spiritual pursuits in philosophical and political praxis. I begin this discussion with an introduction to ecofeminism and its theoretical analysis.

**Ecofeminism: an introduction**

Ecofeminism can be identified as arising primarily out of the feminist movement, though simultaneously as a reaction/response to traditional (read: masculinist) environmentalism. Ecofeminism has demonstrated promise in its identification of the ways in which forms of oppression are interlinked — identifying structures of
domination that cut across gender, race, class and most significantly, the divide between humans and nonhumans. Ecofeminism draws strength from its diversity — described by ecofeminist philosopher Karen Warren as the quilt of ecofeminism (Warren 2000) — inviting us to be comfortable with difference, change and inconsistency. The ecofeminist project avoids the search for unified, coherent theory, rather seeking to embrace diversity to bring together a complex picture of the scope of ‘women’ and ‘women’s experiences’.

Amidst the diversity and breadth which constitutes this quilt of ecofeminism, some shared values and beliefs exist amongst the field. Ecofeminists agree on two things: that there are important connections between the domination of women and the domination of nature, and that understanding these connections is vital to any adequate feminism or environmentalism (Warren 1993b, 255). It is the nature of these connections which are a point of contention both within and without ecofeminist circles. For many theorists these connections are conceptual, historical, and linguistic and are ultimately assigned connections. For others, these connections reside within an essence, are innate, and are specifically bodily. Such considerations are ontological in nature to the extent that they are concerned with the ‘construction’ of identity versus an ‘essence’ of the self.

Ontological questions, questions of existence and being, consider what elements constitute being-in-the-world. Within poststructuralist and postmodern feminisms, being has typically been considered in semiotic terms, where more recent theories such as corporeal feminisms have emphasised the importance of materiality and embodiment as key elements of existence. These contentions, and the potentials and dangers associated with them are dealt with at a later stage in this chapter.
Ecofeminism emphasises that analyses of oppression and subordination should focus on the structure and logic of oppressive frameworks rather than individual elements of oppression, such as racism or sexism. This suggests the need to recognise the ways in which forms of oppression are connected, and uncovers the way oppressive structures operate across various types of oppression. Secondly, ecofeminism highlights the complexity of these connections, by demonstrating that “human costs of environmental destruction accrue differently across sexes, races, classes, ethnicities, and geographies” (Seager 2003, 962). Therefore, it is not merely the case that women are oppressed by men, but that ‘women of colour’ for example, experience greater oppression than white women, and so on. This demonstrates the complexity of subordination, and reveals the category ‘woman’ to be heavily stratified, necessitating a more nuanced and complex approach to dismantling oppressive structures.

The significance of ecofeminist theory is wide-reaching. Primarily, its strengths are its allegiance to a set of distinctly feminist values: its recognition of and concern for the integrity of the state of the natural world (both due to our dependence on natural systems to survive and due to their intrinsic value in their own right); the complex analysis of interlinking and overlapping forms of oppression and the way conceptual frameworks function to sanction the subordination of Others by particular groups, and; its openness to more radical forms of engagement. For example, questioning the structure of traditional philosophical reasoning, alongside a willingness to consider alternative strategies, including the deployment of earth-based spiritualities, are areas of strength and possibility. All of these elements render ecofeminism a relevant and significant movement today.
The goals of ecofeminism are to challenge and ultimately break down oppressive conceptual frameworks of dualistic thought — such as the mind/body dualism, and the culture/nature dualism — that so radically separate us from ourselves (our bodies), others (Others) and our surroundings (nature). In this way ecofeminists seek a relationality with their environment that abandons the abstract individuality that is so prevalent in current belief systems in late modernity. Relationality is an important concept within ecofeminism. Relationality redesigns human interaction from hierarchical, dominant modes of practice, to those which acknowledge our constitution as connected in complex webs of interaction with other people, other beings, and other objects. I will take this concept of relationality, a key insight of ecofeminist theory, to a deeper level in this thesis as I draw technology into that relational structure.

Ecofeminists challenge Western patriarchal oppressive conceptual frameworks and knowledge-making and they seek to bring alternative ways of knowing, seeing and being-in-the-world. This is a key point for this dissertation, as it highlights the importance of epistemological and ontological perspectives which re-imagine worldly relations. When we engage new ways of being-in-the-world, we begin to see that we can no longer stand apart, outside or above the natural world; we are an intrinsic part of the earth, participating in its stories despite our culture’s alienation from planetary cycles and seasons. Within such epistemological and ontological refigurations, more sustainable and balanced relations are sought between humans, and between humans and nonhumans.

Whilst this thesis does not attempt a detailed timeline of ecofeminism as a body of philosophy and praxis, it is worthwhile to briefly trace the movement historically. Coined by French feminist Francoise d’Eaubonne who identified that the environmental
crisis was about human survival, ecofeminism is “a new humanism born with the irreversible end of the male society, and which by definition must work through the ecological problem (or rather the extreme ecological peril)” (d'Eaubonne 1994, 175). In the 1970s and 1980s ecofeminism occupied a growing place in the sphere of feminist inquiry. Early ecofeminists like Rosemary Ruether (1975) placed women at the forefront of ecological battles. Poetic-style texts like Susan Griffin’s Woman and Nature: The Roaring Inside Her (1978) presented alternative forms of narrative which drew connections between women and nature, and their shared destruction at the hands of ‘man’. Instigated and motivated by a series of environmental disasters, these events sparked the sense in which a movement of women was organising to effect environmental change through protest and awareness campaigns. The spectre of the nuclear threat and its related disasters, such as the potential of toxic leaks from nuclear facilities, began to emerge through woman-earth groups. The explosion of woman-centred action groups, particularly in the West and especially in Australia, is charted by Ariel Salleh in Ecofeminism as Politics (1997). One such example is the release of Carolyn Merchant’s ground-breaking text The Death of Nature (1980) in which she traced the systematic transition of the planet from living organism to dead mechanism throughout the scientific revolution as central to the ecological crisis.

The correlations drawn between this changing view of the planet and widespread views about the ‘nature’ of women formed a powerful polemic on the relationship between women and nature. Merchant’s argument seemed to fuel the already strengthening number of woman-centric groups formed for environmental purposes. Alert to the affects of pollution on their own bodies and those of their children, including the affects of living near toxic waste facilities and its affects on birth defects and nutrition, these
women identified a resonance between their own bodily pollution and that of the body of the planet. Environmental disasters like the nuclear meltdowns at Chernobyl and Three Mile Island and the Bhopal chemical disaster are just a few examples of events which demonstrated the ways in which the environment was being compromised, putting human health at risk. Ecofeminism thrived in the next ten to fifteen years, gaining ground in both popular movements and academia with a series of texts published by Ynestra King (1981), Judith Plant (1989), Irene Diamond and Gloria Feman Orenstein (1990), Maria Mies and Vandana Shiva (1993), Val Plumwood (1993), Karen Warren and Barbara Wells-Howe (1994), and Charlene Spretnak (1999), and also in the popular media with two articles on Ecofeminism being published in the Australian edition of *Elle* magazine (Westbury 1991a; 1991b).

**Woman and Nature: ties that bind?**

Historically, Western patriarchal ideologies have regarded women and nature in equally disdainful ways, as articulated in Francis Bacon’s desire to “put nature on the rack and torture her” (cited in Hallen 1988a, 104). Ecofeminists identify woman-nature connections as links between constructed notions of what constitutes the category ‘woman’ and the category ‘nature’ and as such, how those links fundamentally bind these categories to each other. Woman and nature come to be understood as ‘closer’ to one another than man and nature, or nature and culture. Through the assigning of common traits, woman and nature are conceptually tied together. These woman-nature connections can be summarised into several categories. Karen Warren, one of the most prominent ecofeminist philosophers, outlines eight central areas/forms of connections which I chart here and expand where appropriate. These eight connections in brief are:

The first set of connections, historical connections, are often causal, and heavily influence our understandings/constructions of both woman and nature. Investigating these connections might include an inquiry into patterns of domination throughout history, in the search for what events mark the turn towards societies of domination. Theorists’ examples of possible advents of domination (Warren 1993b, 255-256) include the invasion of Indo-European societies by tribes from Eurasia around 4500 B.C. (Eisler 1987), the Greek philosophical tradition of rationalism (Plumwood 1993), or the impact of the scientific revolution on conceptualisations of nature and women (Merchant 1980).

One of the most powerful and pervasive aspects of patterns of domination and the woman-nature connection constitute the second category, conceptual connections. Warren (1993b, 256) offers three central conceptual links: firstly, value dualisms/value hierarchies; secondly, oppressive conceptual frameworks and thirdly, sex-gender differences. In a brief digression from the eight woman-nature connections, I expand on these three links here.

Grounded in a critique of dualism, ecofeminism draws attention to the ways that dualistic thought processes serve not only to divide qualities, traits, values, and individuals into inferior and superior couplings, but simultaneously, they link together those qualities identified as superior, and those qualities identified as inferior. The result is a set of mutually reinforcing oppressive ideologies. For example, these ideologies at
once oppress ‘people of colour’ on the basis that they are ‘not white’, and also on the basis that they share the qualities of all other groups, qualities, values and traits that are also oppressed. As a result, people of colour are subordinated because they are ‘primitive’, of ‘the body’, ‘irrational’ and thereby ‘feminine’. Val Plumwood (1993) and Karen Warren explore the various dynamics involved in constructing hierarchical dualistic thinking and the ways they operate to justify these systems of domination and subordination.

Dualistic categories that order particular beings or qualities as superior and inferior have been revealed to be deeply entrenched within dominant modes of thought, yet as Merchant argues, are not inherent or essential characteristics (Merchant 1980). Key dualisms, particularly within Western thought, are culture/nature, masculine/feminine, reason/emotion and self/other (Plumwood 1993). Dualistic thinking splits the world in two, according to seemingly ‘natural’ processes or forces, and maintains and justifies these splits through the logic of domination (Warren 1993b) and oppressive conceptual frameworks, both of which are explored further in this section.

The dynamics of dualistic thought are such that the domination of one category — such as ‘woman’ — is reinforced through the subjugation of another — such as ‘nature’. When we dominate nature, we rationalise and naturalise the domination of women and vice versa. This dynamic is explained by Karen Warren when she notes that:

Animalising or naturalising women in a (patriarchal) culture where animals are seen as inferior to humans (men) thereby reinforces and authorises women’s inferior status. Similarly, language that feminises nature in a (patriarchal) culture where women are viewed as subordinate and inferior reinforces and authorises the domination of nature. ‘Mother Nature’ is raped, mastered, conquered, mined; her secrets are ‘penetrated’ and her ‘womb’ is to be put into service of the ‘man of science’ (Warren 1993a, 127)
Ecofeminism provides a valuable insight into dualistic hierarchies and the way in which they sanction oppression. The importance of critiquing dualism is vital in this thesis due to its proposal of a hybrid agency, which is inherently anti-dualistic. I propose the technopagan operates as a figure capable of overcoming these oppressive binaries because it synthesises dualistic opposites within a singular identity.

The second conceptual link is Oppressive Conceptual Frameworks. Warren states that:

A conceptual framework is the set of basic beliefs, values, attitudes and assumptions that shape and reflect how one views oneself and one’s world…a conceptual framework is oppressive when it explains, justifies and maintains relationships of domination and subordination (1993a, 122)

Feminist philosophers and environmental philosophers would agree that many of the most damaging elements that drive relationships of domination and subordination are conceptual ones. Conceptual elements act as the drivers for our most fundamental understandings of what it is to be human, and what that meaning licenses us to believe, enact and relate. Conceptual considerations also take into account the role and importance of metaphor as a key contributor to the construction of meaning, a theme reiterated throughout this thesis. Through this identification of the power and centrality of the conceptual in influencing drivers behind oppression of women or of the nonhuman world, an analysis of oppressive conceptual frameworks becomes central to ecofeminism. Warren (1993b, 256) outlines three central features of an oppressive conceptual framework: the first feature is value-hierarchical thinking — that is, thinking embedded in dualistic thought which places value on that which is ‘up’ over that which is ‘down’. The second feature is value-dualisms — where binary pairs are seen as ‘disjunctive’ or oppositional as opposed to complementary, and which places a weight on each binary pair, privileging one half of the pair over the other. Third and
possibly most importantly, is the logic of domination — which is an argumentative structure of reason and logic which sanctions, justifies and maintains these value laden and hierarchical processes.

The logic of domination is a framework of ‘rationality’ that functions to justify and naturalise systems of domination and subordination. The logic of domination is a set of reasoned, logical steps which account for what beings, qualities or objects should be awarded moral consideration or value, and in turn, what beings, qualities or objects can be justifiably dominated or subordinated. This pattern of reasoning is an Enlightenment trait\(^2\) — embedded in distinctly human forms of value. A human-centred form of reasoning which would understand that humans can reason or exercise free will in a way that rocks and plants cannot, therefore justifies the domination of rocks and plants on that same basis. In this human framework of rationality, difference is read as part of a moral hierarchy.

The logic of domination is the fragmented, partial view of the world we are so familiar with — the hierarchical ordering of things, beings and qualities on the basis of value dualisms. Ecofeminism identifies oppressive conceptual frameworks as the structures upon which the logic of domination rests (Warren 1993b). Within the oppressive conceptual framework not only are particular qualities, objects or beings dominated — through a seemingly logical process of reasoning — but each framework is mutually reinforcing. When subordinated beings, qualities or objects are linked together as sharing some similar trait(s) which justify their common domination, each time one

\(^2\) The Enlightenment broadly refers to the 18\(^{th}\) century movement which promoted the application of reason and logic toward the ending of conflict and injustice through tolerance.
group, quality or object is dominated, in turn, each quality or value attached/linked to it is simultaneously subjugated and the rationality/justification for this domination is cemented. In other words, in order to justify the domination of a group, women for example, traits associated with other dominated groups, ‘people of colour’ for example, are often drawn upon in order to rationalise that dominating practice. In so doing, both the category ‘woman’ and the category ‘people of colour’ are further justified. Through the figure of the technopagan I use this analysis to put forward a hybrid figure which challenges these frameworks of oppression. Relationality, a core concept in ecofeminism, is antithetical to hierarchical dualisms and totalising categories, and as such forms a key element of technopagan agency. The technopagan confounds linear hierarchies and resists fragmentation. In its relational state of being, the technopagan recognises both continuity and difference as powerful defining features of identity. Through these modes of being, the technopagan moves outside of the boundaries of oppressive conceptual frameworks and the logic of domination.

Third and finally, some accounts consider the conceptual construction of sex-gender differences and their influence on personality and consciousness between men and women. This account looks not at biology pure and simple, but rather at female ‘bodily experiences’ (Warren 1993b) such as menstruation and childbearing and the way they influence the relative ‘ways of knowing’ for men and women respectively. Studies have shown (Kellert 1987) that men and women tend to have quite different understandings of and relationships to the natural world and these differences often to relate to social constructions of sex-gender differences. For other theorists, these sex-gender differences may be ‘essential’ in nature, while for others, particularly in postmodern traditions, biology too is a construction without essence. This variety of positions
reveals the instability of these categories of sex and gender, and heralds the need to consider alternative positions.

To return to Warren’s eight categories of woman-nature connections, the third set of links is empirical and experiential. They might also be called ‘practical’ or ‘lived’ connections, though the composition of the connections here is far more contested, as they risk moving toward the essentialism that so often plagues ecofeminism. Ecofeminist theory must remain alert to the endorsement of connections which declare some fixed or essential ‘female nature’ which is shared by all women, because such assertions make inaccurate statements about the sheer diversity of experiences that are contained within the category ‘woman’. However, to briefly address some examples of empirical links, practical connections can take several forms. One such connection is the problematic ‘third world women’ category. The effects of environmental degradation tend to affect women — particularly in developing countries — ‘first and worst’ (Sobha 2007, 122). The effects of deforestation, for example, impact on women who need to collect firewood in order to prepare food, and purify water. Women living in poverty are far more likely to be affected by pollution, and their children are at a higher risk of birth defects, health problems and so on. As such, there is a tangible connection between the state of third world women’s local environment and their own (bodily) environmental health, and so throughout the 1980s a groundswell of women’s groups formed around the anti-nuclear movement, the peace movement and women’s and environmental health (Salleh 1997, 17-20). Examples of these kinds of connections have been referred to as ‘Environmental Racism’ (Warren 1997, 10) where for example, Native American women face particular health risks because of the proximity of uranium mines to their
reservations. Toxic waste facilities in the United States are also more likely to be located in poor areas, often with large numbers of African American citizens.

Another ‘practical’ connection, more contentious than the one just discussed, is that of biology. Many feminists and ecofeminists have recognised that there is a link between women and nature in terms of their reproductive capacities. The planet in a sense ‘gives birth’ to each living thing, and in a highly contested way, is the nurturer (read: mother) of us all. Women (read: mothers) are therefore intrinsically connected to the planet in a way that men are not. The ability to sustain life (breast feeding), care-take life (in the practice of nurturing), and our visible cyclical connection to these processes (through menstruation) act as some of these ‘practical’ connections between women and nature.

Of course, the multitude of problems with this level of analysis is clear, and it is at this level that ecofeminism has been problematised within feminist theory. These connections rely on generalised notions of what constitutes ‘woman’ and so excludes women who do not menstruate regularly, are infertile, have no desire for children, abuse their children, and so on. Further, these links draw on patriarchal constructions of mothering. If the earth is our mother, then we can make all the mess we like and she will always be there to clean up after us and under this paradigm, we are divested of environmental responsibility. A deeper analysis of the power and the problems with this level of analysis within ecofeminism will be dealt with later in this chapter. In short, the ‘problem’ of essence is overcome in this thesis through the hybridised figure of the technopagan. The technopagan operates as a challenge to essentialised notions of the self, in particular to the concepts of women, mothers and so on, whilst still maintaining
a fidelity to the material elements of being. This adherence to the material speaks to a variable ontology wherein essence is particular and mutable.

Symbolic/linguistic connections are the fourth kind of connection and include an exploration of the links between women and nature that may be found within spiritual traditions, art and literature. Through these analyses, ecofeminism is recognised as offering up alternative symbols of spirituality for women to engage with and explore. Other aspects of ecofeminism may focus on linguistic and symbolic connections between women and nature — notably the label of ‘mother earth’ is a particularly interesting one which can be read in both positive and negative ways. Other language feminises nature and naturises women: consider how we refer to women as animals — pussies, cows, dogs, bitches, chicks; or how we refer to our interactions with the natural world in ways that patriarchal society may talk about women — nature is raped, her womb is mined, we lay seed to virgin soil (Warren 1993b, 258) and so on. This language is rampant in military-industrial contexts where phallocentric language reinforces these connections. Some examples of this language include “a linguistic world of vertical erector launchers, thrust-to-weight ratios, soft laydowns, deep penetration, penetration aids” (Warren 1997, 12). It is interesting to note that this language is both historical — terms describing the rape of Mother Nature can be traced to Francis Bacon (1561-1626), who stated that nature must be “bound into service” and placed “in constraint” (cited in Merchant 1993, 169) — and yet can be traced to modern discourses — language in the military industrial complex is in contrast very recent. This indicates that symbolic and linguistic connections between women and nature are not outdated in popular use, and are thus deeply embedded in our knowledge.
The fifth set of woman-nature connections is epistemological. These entail the recognition of the interlaced historical, symbolic, conceptual connections and highlight the need for a re-imagining of epistemology — simply understood as ‘ways of knowing’ — in modes that might be described as ecofeminist. For example, gendered ways of knowing exist which frame women as emotional and men as rational. Analyses which point toward deep, fundamental assumptions and understandings about human ‘nature’ and the ‘nature of nature’ also highlight that epistemologically, women and nature are tied. One project of ecofeminism is to attend to and unravel epistemologies which link women and nature, and to seek out an ecofeminist epistemology which constructs ‘ways of knowing’ informed by the critique of rationalism, instrumentalism and hierarchy (Plumwood 1991).

Political/Praxis connections constitute the sixth set of links between women and nature. Ecofeminism has always been anchored in, and indeed may be seen at times to have been driven by political action and activism; in particular, the ‘trend’ of women to take on political, environmental and peace issues. Women have often been the driving force behind anti-war protests, the green movement and leftist political campaigns. A now famous example of this kind of connection was the ‘Chipko’ or ‘tree-hugging’ movement begun by women in Northern India in 1974. Twenty-seven women took action to stop the destructive felling of trees in their local area and succeeded by threatening to hug the trees if attempts were made to cut them down (Warren 1988). The grassroots connections to activism illustrate another significant aspect of women-nature connections. They illustrate ecofeminism’s desire to ‘take seriously’ grassroots activism as a legitimate and powerful political tool.
The seventh group of connections are ethical. Attempts are made within ecofeminism to foster ethical frameworks which avoid traditional (patriarchal) ethics and pose ethical considerations which take into account feminist and environmental issues. At the heart of these ethics is the recognition that traditional ethics and theory-making are heavily male-biased, human-centred, contribute to the domination of women and nature, and are therefore both anthropocentric and androcentric. Examples of ‘ecofeminist’ ethics might include ethics of care (Noddings 1984; Warren 1988). These ethics shift the focus of ethical considerations from principles of rights and responsibilities to more flexible frameworks of caring.

Theoretical connections form the eighth and final set of woman-nature connections. The sheer diversity of connections such as those outlined above has resulted in ecofeminists developing a variety of theoretical positions which attempt to explain woman-nature connections. Some ecofeminists may employ traditional consequentialist positions (which frame philosophical considerations on the basis of the consequences or outcomes of actions) to explain the distribution of rights and moral consideration, while others may deploy non-traditional approaches (such as feminism or Marxism). Traditional philosophical approaches such as the utilitarian position, for example, have typically functioned to tie together woman and nature in their argumentative structure regarding rights and moral consideration. Due to these woman-nature connections, the traditional approaches are unsatisfactory in accounting for alternative theoretical models. Given the recognition that these reformist positions are too deeply embedded within patriarchal systems to be salvageable, a movement away from traditional, status quo and reformist approaches and toward more radical models is the predominant trend within ecofeminism.
To strengthen and clarify the ecofeminist analysis of woman-nature connections, I now consider the intricacies of dualistic thought processes and the ways they operate to tie together and subordinate both women and nature. Having established the variety of ways in which women and nature come to be associated with one another, it is useful to investigate more closely how dualism operates to justify and maintain these connections. This is essential because understanding the form and function of dualistic hierarchies makes transparent their presence in our worlds, making them easier to identify and subvert. These analyses highlight that dualistic hierarchies impact on identity and agency, as seen in the treatment of the subject/object binary, where the subject possesses agency, but the object does not. This thesis seeks to formulate frameworks which account for broader applications of agency and as such, the technopagan constitutes a figure which does not recognise this subject/object divide. This thesis is concerned with developing a theoretical position in which agency is understood as non-hierarchical, and so understanding the nature of hierarchical structures assists in visioning forms of identity which do not fall into the binary trap.

Ecofeminist philosopher Val Plumwood provides an excellent and perceptive deliberation on the function of dualism and its impact on subordinated categories of woman, nature, Other and so on. Plumwood (1993) reminds us that as feminists committed to the eradication of sexism, we must also be committed to the ending of all ‘isms’ of domination. This is because the ecofeminist analysis identifies structures and frameworks of oppression which function to justify and maintain the domination of a variety of marginalised groups. Therefore, to seek the abolition of sexism, without considering its links to racism and classism for example, will be inadequate because it
fails to recognise the ways in which these forms of oppression are deeply intertwined. A set of dynamics are at work in a dualistic framework, and Plumwood names these the five dynamics of dualistic thought (1993, 48-55): backgrounding, radical exclusion, relational definition, instrumentalism and homogenisation.

The first dynamic, backgrounding, is also known as the denial of dependency. Here, Plumwood shows how the ‘master’, to use the example of the master/slave dualism, is in fact dependent on his subordinate other because of the services they provide to him. But, he must deny and ‘background’ this dependency in order to maintain his domination and authority. To use an example more relevant to this thesis, the technology/nature dualism, we can demonstrate how all technology is derived from nature, and yet this reliance on nature must be denied in order to maintain the power of technology as a superior entity to flawed nature. Processes such as genetic engineering seek to perfect and improve on ‘design’ in nature and in the human body. Such a masking of dependency is crucial to this move of backgrounding. Second, Plumwood identifies radical exclusion or hyper-separation as a key characteristic of dualism. Radical exclusion entails separation of dualistic pairs out to such an extreme degree that a person can embody one or the other side of a dualistic pair, but never both. In this way, particular beings or qualities cannot be their dualistic opposite. To employ the masculine/feminine dualism, from a radical position we can see that an individual can be categorised as masculine or feminine, but can never move through or between these categories to occupy a mutable identity, because these categories remain fixed and oppositional. To use the technology/nature dualism, technology is defined in popular understandings as the resolute triumph over nature, and nature is the polar opposite of our conceptualisations of technology. For example, something that is technological is
deemed not natural, not organic. Nature is ‘untouched’ by humans, and technology is solely the product of human work. Thirdly, relational definition or incorporation is characterised by a defining of beings or qualities through their ‘oppositional’ stance to their binary other: woman is defined as not-man, the slave is not-master, and nature is not-technology. In the technology/nature dualism, those qualities and aspects on the ‘down’ side of dualism (nature) are defined purely in terms of a lack, nature ‘lacks’ technology and can be ‘worked on’ and enhanced by technology. Nature is unguided, unformed, untouched: it is the absence of interference and manipulation and is without the order and direction of technology.

The fourth factor is instrumentalism. Here the lower side of a binary pair is valuable only insofar as its resources and services are useful to the higher side. Beings or qualities associated with the lower side of dualistic structures have no inherent value of their own. In the technology/nature dualism, nature’s only value resides in its ability to provide for the projects of technology and has no inherent value of its own. The fifth and final factor is homogenisation — a process whereby both sides of the dualism are stereotyped as ‘all the same’ to allow assumptions and generalisations about each side of dualism to be perpetuated and accepted as ‘natural’. Homogenisation therefore denies difference within the categories assigned to the duality. For example, the duality of technology/nature covers over all the differences amongst what is categorised as ‘nature’. Within this conceptual framework differences between a five hundred-year-old Jarrah tree in an old-growth forest, and a twenty year-old pine tree in a plantation are subsumed under the category ‘tree’ or ‘wood’.
Through the processes of the fivefold structure of dualistic thought and the logic of domination, we conceptually colonise the other of dualism, rendering the other as invisible, alien, antithetical, without inherent value, and stereotypical. Plumwood effectively demonstrates the complex and often invisible ways in which dualism successfully compartmentalises the world, making the hierarchies in dualism and the separations within dualism itself seem ‘natural’ and therefore beyond question or critique. These analyses illustrate the complex interlinked and powerful systems of domination and subordination which order the world and thereby oppress groups of people, values, species and traits through seemingly natural processes. Ecofeminist Chris Cuomo also presents a powerful critique of dualism, and the dangers of ‘unifying’ projects within feminist theory. This analysis highlights the dangers in the uncritical embrace of the ‘feminine’ and of maintaining generalised categories of ‘woman’.

Cuomo’s first critique of this approach is that dualisms are false dichotomies, and as such need to be critiqued for their embeddedness within power structures. Secondly, she points out that dualistic pairs are set up as binary oppositions, where each quality or attribute stands in direct contrast to its opposite — this function of dualism is not acceptable to feminist or ecofeminist analysis. Thirdly, Cuomo critiques the embracing of notions and qualities associated with gender dualisms, given this assumes that gender norms are adequate representations of human experience and identity, regardless of their links to patriarchy. Endorsing gender binaries uncritically fails to consider feminist critiques regarding their lack of complexity in representing the depth and intricacies of human experiences and our environment:
Positing the reconciliation of the genders as they currently exist, or the blending of feminine and masculine values into a more balanced worldview as the key to environmental and social salvation entails not only an uncritical acceptance of gender but also an assumption that given models of reality and its functions are adequate (Cuomo 1998, 137)

Cuomo further highlights the danger in the goal of ‘unity’ espoused by some ecofeminist writers, particularly those writing about spirituality. For Cuomo, this goal makes universalist assumptions about women which risk the dissolution of diversity, and ignores differences amongst and between individuals, cultures and other cultural constructs such as class, ethnicity and physical ability.

Who, or what qualities, are reduced or eliminated when unity of being or mind is promoted as a political goal, or when a unified ontology is used as the basis for ethical and political practices?... In fact, there may be healthy reasons for some of us to seek out separation and…to revel in our multiplicity, in order to enable resistance and empowerment, to strategise, and to avoid enemies (Cuomo 1998, 135)

This is a crucial point and one of the most recent and critical lessons of feminism: that politically significant differences among us, which define and shape our experience of the world, are subsumed and dissolved under the category ‘woman’. In asserting our solidarity with each other as ‘sisters’, we simultaneously risk glossing over the distinctiveness between us — when we talk of sameness, we must also and always consider difference.

The value of these ecofeminist analyses is twofold: firstly, they recognise that rather than a project that seeks to end sexism, racism or classism as isolated issues, our task is to end oppression generally, as we recognise that forms of oppression are linked, and reinforce each other. Secondly, systems of oppression are complex, and cut across various groups in different ways: the category ‘woman’ is subordinate to the category ‘man’, and yet within that category, a white woman experiences far more privilege than a ‘non-white’ woman, for example.
I have established the case for placing the phenomenon of woman-nature connections at the heart of ecofeminist analysis. These connections reveal the intricate links which have been constructed between the concepts of woman and nature and show how these connections operate to maintain and justify their ongoing subordination in contemporary culture. This is important because it reveals the way that concepts of agency and identity are created and reinforced. However woman-nature connections are not the only reason ecofeminism has been a valid mode for investigating environmental ethics. Inserting feminism into environmental philosophy also operates to expose the androcentrism within established eco-philosophy. I now detail the contribution and critiques ecofeminism has directed at traditional environmental philosophy to reveal the inadequacies of traditional ecological philosophies to my project.

**Ecofeminism as environmental ethic**

As outlined in the opening of this chapter, ecofeminism can be seen partially as a response to traditional green movements, known in philosophical circles as environmental ethics. Groundbreaking texts by Peter Singer (1976) and Tom Regan (1983) tend to extend traditional and humanist models of ethical consideration out to certain nonhuman animal groups on the basis of their ‘sameness’ to humans, not in terms of their worthiness of ethical consideration in their own right. While ecofeminism shares many core values with the stream of environmental ethics, a feminist analysis of traditional environmental ethics finds many aspects of the philosophy wanting. In this section I show how feminist voices are critical to these philosophical debates, as they highlight the inherent sexism within established discourse. This critique is vital to this thesis’ appraisal of feminist contributions to environmental ethics, questioning the
masculine imprints on technology, and for constructing an identity which subverts these traditions of sexism and oppression generally.

In 1997 I was fortunate to attend the conference “Environmental Justice: Global Ethics for the 21st Century”. Held in Melbourne, Australia, the conference saw the attendance of some of the world’s leading environmental ethicists and philosophers including Karen Warren, Val Plumwood, Vandana Shiva, Chris Cuomo, Freya Matthews, Tom Regan and Peter Singer. During one session of the conference, a debate took place which perfectly illustrated ecofeminist unease with traditional environmental ethics. Val Plumwood took the stage along with Singer and a selection of other philosophers. Plumwood wanted to engage traditional environmental philosophers on the questions of sexism inherent in the movement and its failure to engage with feminist contributions to the field. Singer’s response was to state that his approach did not engage with feminism, full stop. Plumwood asked that given she was on the stage with him as a contemporary, would he answer her questions. He still refused, restating that he did not engage with feminism. Plumwood stated to the conference in frustration how after all of feminism’s battles, after fighting their way into academia, and on to the stage of world-class conferences such as this one, feminists were still being ignored by traditional environmental ethics. This incident acted as an apt example of the sexism that exists within these traditional models of ecological philosophy. As ecofeminists occupy an increasingly powerful place within academic circles, traditional (male) philosophers often simply choose to ignore them.

Some of the problems feminist environmentalists have with traditional models of environmental ethics are outlined here. Firstly, radical forms of environmental ethics
such as Deep Ecology tend to be androcentric as I will show through their focus on overpopulation, revealing in their philosophy a deep male-centred privilege. Ethical frameworks developed from such a bias will tend to be flawed due to their embeddedness within structures of patriarchal power and privilege. Singer’s endorsement of Utilitarian ethics for example, focuses on the minimisation of suffering, though suffering is measured along human analyses of what we believe nonhuman animals can feel. So for Singer, the possession of a central nervous system counts towards suffering, where its absence — in an oyster for example — essentially sanctions behaviours towards that organism which may cause suffering. This reliance on biological and scientific hierarchies does not question hierarchies of power at their core, and instead draws them outward to nonhumans deemed worthy of moral consideration typically given to humans. Secondly, particularly within Deep Ecology, there is a tendency to focus on overpopulation as a central factor in the environmental crisis. While the level of the human population is certainly alarmingly high, we know that it is not solely the high population which explains ecological degradation. Evidence which suggests that around 80% of the world’s resources are consumed by some 20% of the world’s population (Utley 1999), shows us that it is not numbers per se, but rather standards of living, levels of consumption and particular cultural values which account for the plundering of planetary resources. An ethical framework which identifies overpopulation as a central factor contributing to ecological devastation unfairly places the ‘blame’ on developing nations, and particularly on women. Some approaches have suggested mass sterilisations may be an answer to curbing the crisis — these analyses are anti-feminist and anti-women because they reduce women to their bodies and their reproductive status, and they are disempowering and paternalistic to the extent that they attempt to ‘take control’ of women’s bodies.
In identifying the sexism contained within traditional modes of environmental ethics, feminists have seen the value of deploying ‘feminism’ into environmental ethical frameworks. Despite the protestations of traditional eco-philosophers, this project highlights the importance of contextualising environmental ethics within positions which consider naturism alongside other forms of domination, particularly with regard to sexism. Ecofeminist analyses show that sexism is implicit in negative attitudes towards ‘nature’ and that only in addressing this sexism, can naturism — the discrimination of nature — be abolished. In relation to this thesis, this discussion highlights the relevance of feminist critique across a broad range of areas. Revealing the overlapping, intersecting dynamics of oppression makes clear the need for rigorous investigation into the assumptions which lie behind numerous ideologies and practices. The sexism and naturism in dominant narratives about technology for example, can be better understood through ecofeminist analyses, which demonstrate the insidious, pervasive nature of dominant, oppressive structures of subordination. These narratives expose male domination over women and technological domination over nature. The technopagan embodies these ecofeminist analyses by understanding nonhuman agency, and challenging dualism and hierarchy.

The fundamental ecofeminist challenge to reconceptualise our worldview on an ontological level plays a key role in this dissertation. Ecofeminism is distinctly feminist in its analysis of oppressive structures and their impact on women. It is also critically environmentalist, articulating the crucial need to recognise our dependence on the natural world to survive, and for the intrinsic right of the nonhuman world to flourish outside of its usefulness to humans. Ecofeminism offers a complex analysis of the way
that various forms of oppression overlap and are connected in their conceptualisation and implementation, demonstrating the need for a structural analysis over the prioritisation of individual elements of oppressive frameworks. Highlighting these oppressive structures as deeply entrenched in hierarchical dualism, ecofeminism seeks to dismantle these dualisms to reveal more sustainable, less binarised modes of being-in-the-world. These interdependent modes of being are conducive to a theorisation of hybridised agency. As I argue in this thesis, the technopagan embodies this way of being, constructed in relationality and able to reconcile seemingly oppositional parts such as nature and technology. Through the figure of the technopagan, I argue that radical change is what must be pursued in order to imagine a world in which oppressive structures are dismantled, and more sustainable and responsible relationships to the more-than-human-world can evolve.

In its approach to ecology and spirituality, the ecofeminist project also feeds into my figure of the technopagan as a formation of agency which is at once deeply natural, technological and spiritual. Spirituality, especially as it is framed within ecofeminism, forms a key theme in this thesis, and so deserves further investigation. I argue that spiritual concerns are deeply valid and vital considerations in the context of questions relating to identity and agency in a sustainable and digital world. Yet contentions that ecofeminism is essentialist largely derive from its relationships to ecofeminist spiritualities and the identification of spiritual pathways out of patriarchal, capitalist oppression. To more fully understand the ways in which these spiritualities have become targets for the essentialist critique and to support my argument for their validity as practical modes of being-in-the-world, I now consider the dynamics of ecofeminist
spiritualities and their relevance to agency and the threefold drivers of this thesis, digital growth, secular spiritualities, and environmental crises.

**Ecofeminism and Spirituality: Eve was framed**

The deployment of ‘earth-based’ or ‘woman-centred’ spiritualities is a significant and unique aspect of ecofeminism, which while contentious, deserves serious consideration for a number of reasons which are explored here. Embedded in the question of the affirmation of woman-nature connections has been the underlying sanctioning of these ecofeminist, earth-based spiritualities. That is, articulations of an ecological ontology which celebrate women’s ties to nature often lie at the centre of these spiritualities. Importantly in the context of this thesis, there are strong links between ecofeminist spiritualities and neopaganism. This thesis’ exploration into neopagan ontologies and their application in a technical, disembodied, environment warrants an investigation into the principles of these spiritualities in ecofeminism and the arguments for and against their application in feminism and environmentalism.

Over the last two decades there has been an explosion of literature, particularly within ecofeminism, which explores the significance of integrating spirituality within political and philosophical concerns, see for example Starhawk (1988) Judith Plant (1989) and Charlene Spretnak (1989). While many writers and theorists have advocated this as a positive move toward more fully integrated theory-building, others have argued that the move toward ecofeminist spiritualities risks reaffirming dangerous, essentialising stereotypes about women, and thus, that such a project should be abandoned.

The diversity of what might be named ecofeminist spiritualities are as broad and contested as any attempted definition of ecofeminism, or indeed feminism generally.
Examples of these spiritualties can include Gaia worship, pantheism and Native American beliefs in the earth as a ‘great mother’. In broad terms, ecofeminist spiritualities can be said to build and integrate political and spiritual interests into the same sphere of concern. Ecofeminist spiritualities are at once mystical and practical, providing sources of inspiration, sustenance and creativity. Ecofeminist spiritualities are generally earth-based, rejecting the notion of a sky-God or a form of divinity that is beyond our reach, above and outside the earth. Indeed, it is this traditional notion of God, and the accompanying narrative that only human beings we will be rewarded with ‘escape’ from the earth to ‘heaven’ at the end of our lives which is often identified as playing a vital role in informing our current destructive, irresponsible attitudes toward the nonhuman world today. However, this is not to suggest that Christian traditions are rejected wholesale by ecofeminism. Some ecofeminists work towards reconciling ecofeminist insights with traditional Christian values, and ‘healing’ the scarred legacy of Christianity’s relationship to nature (Ruether 1975; 1992). As suggested by the title of this section, ‘Eve was Framed’ — a bumper sticker seen regularly in the 1980s and 1990s — was an articulation of what was being felt by a great deal of women toward traditional Western (Judeo-Christian) religions. Many women regarded their own religious upbringings as offering them an impossible and unfair symbol of women in history, through the creation myth of Adam and Eve in the Garden of Eden. As the story goes, it was Eve who tempted Adam to eat from the tree of temptation, setting her up as the ultimate villain in the story of humanity’s fall from God’s grace. Rather than abandon their religious histories entirely, Christian adherents instead chose to humorously assert that ‘Eve was framed’.

3 The story of Adam and Eve is an Old Testament story, which would be regarded by many contemporary Christians today to be a myth or fable, not a ‘true’ story. However, it remains a defining tale in the Western tradition, and therefore is still relevant as a narrative of dominant culture and gender relations.
Ecofeminist spiritualities — such as Native American traditions, new age spiritualities and neopaganism — are often labelled woman-centred spiritualities, because they are explicitly and deliberately directed toward the empowerment of women and their bodies, and the undermining of patriarchal politics and spirituality. Ecofeminist writer Charlene Spretnak reminds us that “ecofeminists note that the dominant, patriarchal traditions of Western civilization are based on a spirituality that seeks, rather desperately, to transcend nature and the body — especially the female body” (Spretnak 1993, 261). Ecofeminist spiritualities seek out and honour those things that are central to ecofeminism, including practices which respect and value the female body, and which challenge patriarchal constructions of the female body. They further embrace notions of interconnectedness and relationality, which also resonate with ecofeminist principles. As Spretnak states: “[a]ll the land, the waters, the animals, the plants, our bodies, the moon and stars — everything in our life experience is kin to us, the results of a cosmic birth during which the gravitational power of the event held the newborn particles in a miraculously deft embrace” (1993, 262). It is important to note that spiritual sentiments such as these are not new — Buddhism for example contains some of these sentiments — however, within the Western context of late modernity in particular, these spiritual orientations and interpretations can be refreshing and inspiring for women who have not previously encountered these worldviews.

Ecofeminist spiritualities have the power to be life-affirming practices; tools for surviving in, and transcending, the dominant patriarchal mode of thinking. They are forces of empowerment both for the self and other, and can serve as tools of subversion for those of us living within contemporary society. Ecofeminist spiritualities are not
simply models for a utopian vision of the distant future — in fact, I would argue these utopian narratives are far less present in ecofeminist spiritualities than can be found in other spiritual traditions — but rather enact change in the present. Far from being merely idealist or utopian, ecofeminist spiritualities instead offer strategies which are immediately and practically useful within contemporary culture (Warren 1993a, 131). Warren reminds us of the political, subversive and contextual significance of the use of spiritual pathways: “the philosophical significance of all ecofeminist spiritualities is that they attempt to function to disrupt, challenge and replace patriarchal practices with ones that do not perpetuate sexism and naturism and in ways that empower individuals within patriarchy” (Warren 1993a, 130-131). The role of practice and strategies of change in neopaganism then, is significant for these reasons.

What role does spirituality fulfil within ecofeminist theory and to my own project? Karen Warren offers some compelling reasons as to why these spiritualities are worthwhile to ecofeminism, and I assert that these same reasons apply to the consideration of spiritualities in this thesis. In particular, they are feminist through their subversion of patriarchal practices, they respect the female body and female voices, they empower women, and are politically subversive. All of these elements are relevant to this dissertation and my argument for ways of being-in-the-world which are sustainable to the planet, to women, to embodiment and to the network of human and nonhuman agents who comprise the world. They also support my argument for subversive practices which at first may seem anti-theoretical, such as the embrace of spirituality, or the emergence of subcultures in digital worlds which offer alternative pathways to a more sustainable world. Academia is generally dismissive of philosophies which integrate spirituality into their framework. This division bespeaks yet another issue
ecofeminism seeks to tackle: the divides between theory and practice, politics and spirituality which so pervade academic discourse.

Highlighting the problems in dismissing spirituality as non-philosophical and non-academic, Warren suggests there are a number of significant contributions an ecofeminist spirituality can make to ecofeminist theory and practice (Warren 1993a). Firstly, ecofeminist spiritualities challenge patriarchy at its core, because they are opposed to, and work to subvert, male power and privilege and as such are intrinsically anti-patriarchal. Secondly, the practices of ecofeminist spiritualities acknowledge and respect women’s encounters with oppression, by providing them with safe spaces within which to explore their experience of living in a patriarchal world. Thirdly, spiritual strategies of the ecofeminist variety act to empower women, by respecting and hearing women’s many voices and perspectives in ways previously unavailable to them. Finally, spiritual movements — such as neopaganism — see the spiritual as political, as an action that challenges patriarchy at it core. In this way ecofeminist spiritualities have the power and potential to be political and politically motivating, in particular for those groups and individuals who have been most heavily disenfranchised by patriarchal domination. Ecofeminist spiritualities then, offer practical tools for sustenance and subversion in oppressive worlds because “[a]t the heart of ecofeminist spiritualities is a movement away from dysfunctional systems and behaviours and a movement toward healthy, functional, life-enhancing systems and behaviours” (Warren 1993a, 130). For Warren, and for myself, these arguments make a compelling case for the relevance of spiritual pursuits in a philosophical context and hence must be recognised as such. Warren states “[f]ailure to acknowledge the potential of ecofeminist spiritualities to provide a genuinely feminist, life-affirming, and empowering response to patriarchy
within patriarchy perpetuates the mistaken view that spirituality is or cannot be a legitimate feminist political concern” (Warren 1993a, 132).

A failure to accept forms of spirituality as feminist, empowered, contextual and multiplicitous responses to oppressive frameworks is to assume mistakenly that spirituality is not, and can never be, a legitimate and powerful tool for feminist theory and action. I argue that framing spirituality as a politically subversive tool provides rich possibilities for feminist futures. For my project in particular, seeing the spiritual as political and subversive is relevant to the technopagan. The technopagan identity draws the spiritual and the political together, seeing the two as mutually motivating and synergistic. Within this hybrid identity, there is no conflict between the seemingly oppositional spheres of spirituality and politics.

It is in this spirit that I consider neopagan worldviews, in the context of ecofeminist spiritualities in this thesis, in order to comprehend the natural and the technological as crucial elements of our lives. I argue for the need to take seriously ecofeminist spiritualities as vital and useful tools for agencies which properly embody a sustainable role in contemporary culture. However, my own project also addresses the problems contained within some of these spiritual approaches. While I will argue that the criticism of essentialism is often itself essentialising and reductionist, I also argue that we must be wary of any position which constructs an immutable, stable, and homogeneous category of ‘woman’. Claims that women have a ‘special’ relationship to nature which somehow excludes men is also an untenable position, because it maintains the binary that must be collapsed in order to end oppression. Finally, as I have indicated, the goal of this thesis is to argue for agencies which reside within a
hybridised state of the natural and the technological. I will critique theory which through the emphasis on ties between women and nature, concurrently severs ties between women and technology. To adequately address the concerns raised about these spiritualities, it is useful to consider the critiques brought against ecofeminist spiritualities and ecofeminism more broadly, so that more robust theory can be developed, mindful of these critiques.

**Women, Nature and Essences: Critiques of ecofeminism**

There has been broad debate about the value of making spirituality a defining feature of ecofeminism. Many theorists argue that ecofeminist spiritualities risk reaffirming essentialist constructions of ‘women’. Anti-essentialist critiques tend to be directed at ecofeminism generally, and ecofeminist spiritualities specifically. Critics of ecofeminism and ecofeminist spiritualities fall into two camps: those who employ their critique to advocate the ‘dumping’ of ecofeminism altogether, and those who undertake anti-essentialist critique in order to highlight concerns and limitations of certain approaches in ecofeminism in order to improve it as a body of theory. In this section I explore critiques of ecofeminism generally, as they operate to either dismiss or strengthen ecofeminism. I then attend to the essentialist charge specifically, charting the spectrum of arguments that circulate around ecofeminism and its purported essentialist threads. This is important to this thesis because firstly, I put forward ecofeminism as a powerful and legitimate theory, and secondly, because I similarly advocate spiritual pathways as valid means for engaging with critical theory and practice.

I look firstly at the work of two theorists who advocate the abandonment of ecofeminism as legitimate theory: Janet Biehl and Susan Prentice. In her book
Rethinking Ecofeminist Politics (1990) social ecologist Biehl offers a critique of ecofeminism as a whole, using her analysis to justify the wholesale abandonment of ecofeminism as a valid philosophical avenue. Biehl directs three specific critiques of spiritual ecofeminisms which employ images of a goddess culture. The goddess, which is discussed throughout this dissertation, is a common concept in earth-based spiritualities. The goddess is understood to be a female form of divinity which is immanent\textsuperscript{4} in the planet and/or the universe, and is variously perceived as a divine presence in a singular sense, or as the composition of elements of the world understood symbolically through the goddess metaphor. Biehl finds goddess worship to represent the height of irrationality because it ignores its own inherent power structure and forms itself around essentialist concepts of the feminine, thereby reinforcing universalist representations of what it is to be ‘woman’. She finds firstly the contemporary desire to embrace values tied to goddess worship to be borne out of a romanticised view of history, a history which is revisionist. She argues ecofeminists interpret historical events in ways that support images of a matrifocal culture that reified women and the ‘feminine’, and which were peaceful and egalitarian. For Biehl, these views are a result of ‘bad archaeology’ which resort to simplistic interpretations of female figures found in archaeological digs, ignoring what may have been highly practical, non-spiritual functions of such items. For example, the presence of female figurines can be interpreted to symbolise a society which respected women, or could simply be fertility symbols. She questions the lack of \textit{social} reasons given for the presence of such items, and challenges the somewhat arbitrary link between the presence of goddess figurines

\textsuperscript{4} Immanence is the concept that divinity exists in all things, as opposed to transcendence where divinity exists outside of the world.
and peaceful utopian societies, arguing there is evidence that such cultures were at times barbaric, practising child and animal sacrifice as part of their rituals.

Secondly, Biehl criticises ecofeminist spiritualities for their abundant use of metaphor, arguing the use of myth and metaphor has cast ecofeminism into a void of symbolism without meaning. While Biehl acknowledges that there is an important place for metaphor in theory, she qualifies this by stating that it must always be clear that these things are not real, that they act as symbols or representations of our lives, but not explanations of it. In a truly critical philosophy, Biehl finds metaphor irrelevant, such that its over-use and over-emphasis within ecofeminism has blurred the distinction between myth and reality, dream and action.

Thirdly, Biehl lays criticism not directly at ecofeminist spirituality, but at the movement more generally, when she identifies a severe lack of coherence among ecofeminists and their philosophical inquiry. She suggests that this is a result of a reluctance — indeed a refusal — on the part of ecofeminists to engage with, and critique each others’ work. For Biehl, this can only lead to a fragmented philosophical framework which recklessly embraces any viewpoint which employs the label ‘ecofeminism’. For this reason, ecofeminism for Biehl is nothing less than a philosophy ‘without ethics’; it can only lead to chaotic relativism. Biehl suggests we must find ethics grounded in ‘objectivity’ to establish a society which is ecologically ethical.

In addition to these three central critiques of ecofeminism and any accompanying spirituality, Biehl makes a broader criticism of ecofeminism, suggesting it displays a severe lack of embeddedness within a Western framework. As a part of what she deems
a romanticised project, she argues ecofeminists have abandoned any connection to or place within modern traditions, and that this approach is insufficient to speak to issues of oppression within today’s modern world. In this way, ecofeminists have rejected rationality and objectivity on the basis that these are the tools of patriarchal oppression, and have instead turned to embrace all that is associated with women and nature. For Biehl, this abandons all the valuable things that have been achieved in Western societies, and assumes that a patriarchal society is incapable of producing anything useful, and to indeed deny the fact that we (as Western feminists) are each products of that society.

To respond to these critiques, I present an argument which attends to each of Biehl’s attacks on ecofeminist theory, using Douglas Buege’s six point analysis (1994) of Biehl’s work as a guiding framework. The six key critiques address the claim ecofeminism has rejected the achievements of Western society, the ‘over-use’ of metaphor, biological determinism, the socialisation critique, the lack of coherence in ecofeminist theory and finally, the failure of ecofeminism to articulate a pure grounding ethic (Buege 1994).

Attending firstly to Biehl’s criticism that ecofeminism has rejected all the achievements of Western society — particularly the concept of rationality — Buege replies that in fact, many ecofeminist writers, such as Warren and Plumwood, are deeply embedded in, and mindful of, their location within a Western context. Writers I have presented in this thesis including Warren and Plumwood remain centrally committed to understanding and addressing imbalances and inequities within Western society, and regard that task as central to a feminist project. Moreover, I suggest the spiritual aspect of ecofeminism
is actually an explicit attempt to provide tools of subversion within the context of Western society, thereby acknowledging our location within it. In terms of neopaganism more specifically — which is discussed in detail in Chapter Four — this is a direct attempt to avoid the Western tendency in 'New Age spiritualities' to co-opt other cultural traditions and spiritualities. The Western interest in Native American spiritualities provides an example of this kind of cooptation. While these ‘alternative’ spiritualities offer pathways for Westerners to explore spirituality outside of traditional religion, their uptake in the Western world risks their commodification and a second wave of colonisation for the people from whom these spiritualities originated.

Neopaganism, on the other hand allows for spiritual exploration for individuals within Western society without raising the spectre of colonisation that has so often plagued our shared histories, because neopaganism draw from traditions tied to Western histories.

The second critique to attend to is Biehl’s criticism of the use/over-use of metaphor within ecofeminism. Biehl asserts that the use of metaphor is acceptable only when it is clearly highlighted that it is indeed a metaphor being employed. Buege contends that this critique is overly-simplistic and misleading. Biehl fails to recognise the importance that metaphor plays in theory — both in ecofeminism and more broadly — such as Warren’s ‘quilting’ metaphor. Buege highlights the inherent value of metaphor, especially when we are trying to develop new theories: “[m]etaphor is just one particularly apt vehicle for introducing new conceptions of theory, of the self, or of knowledge and the knower” (Buege 1994, 49).

In fact, a variety of theoretical perspectives have emerged which demonstrate not only the importance of metaphor, but its pivotal role in constructing reality. Donna Haraway
(1976; 1989; 1991a) contends that metaphor makes reality, asserting that the world is delivered to us through a series of similes and metaphors which describe the world to us. Haraway demonstrates how the sciences and fields such as primatology and biology in particular rely heavily on metaphor to understand and communicate ‘nature’ to its audiences, as demonstrated in Haraway’s book Crystals, fabrics, and fields: metaphors of organicism in twentieth-century developmental biology (1976). Haraway’s work has employed a variety of identity metaphors, such as cyborgs, coyotes, tricksters and vampires to demonstrate not only the strategic power of metaphor in conveying concepts and ideas, but importantly, to show how these metaphors occupy a material reality through their use and conceptualisation. Other theorists such as Lakoff & Johnson (1980) show how the shaping of language through metaphor defines the world around us and the ways we understand that world. To suggest that metaphor is only marginally useful, or that its use should always be signposted, is deeply problematic and fails to see the importance of its role in the way ‘reality’ is ‘made’.

A core criticism made of ecofeminism by many critics, including Biehl, centres on biological determinism. Biehl finds ecofeminists have claimed a ‘special’ relationship with nature by virtue of their biology as women. To enact this critique, Biehl has ignored the work of critical ecofeminists such as Plumwood and Warren, who staunchly object to an ecofeminism that bases itself within any essentialising theory. Further, as Buege argues, Biehl has overlooked a crucial weakness in her critique of biological determinism. Stating that women locate themselves closer to nature, in either negative or positive ways, assumes that the nature-culture dichotomy actually exists, a supposition ecofeminism rejects. In taking this position, Biehl is responsible for the very thing she criticises (Buege 1994).
Closely linked to the arguments surrounding biological determinism is the socialisation critique. Some ecofeminists have claimed a ‘closer’ relationship to nature because women have been conceptually tied to nature through hierarchical dualism. As with biological determinism, a viewpoint which asserts women’s ‘special’ connection to nature assumes and accepts some kind of essential ‘female nature’, and therefore limits the possibility of what women can do, and what they can be. Critics argue that such appeals to ‘essences’ construct a static identity which is constrained and immutable. While it is accurate to caution against approaches which advocate that women are closer to nature by virtue of their socialisation, it is also true that the category woman has been constructed as such. It is imperative, therefore, to recognise the way that the experience of being ‘woman’ is mediated by a social construction which links the ‘feminine’ to ‘nature’. I further argue that there is a sense in which ‘natures’ need not be fixed, and this forms a key element of my discussion in this thesis. Aware of the dangers in making claims to ‘natural’ ties between the ‘feminine’ and ‘nature’ I simultaneously argue that claims to what might be framed as ‘natural’ need not be essentialist in the negative way it is implied here. Therefore, I argue for a variable interpretation of essence in which the essential may be capricious, offering a dynamic picture of ‘natures in flux’ as opposed to the fixedness in which it is usually presented. My position here challenges not only appeals to purely ‘natural’ states, but also to the very construction of how ‘natural’ is understood and framed. This position links to a relational ontology in which the specificity and contextuality of essence is considered.

The fifth critique is Biehl’s assertion of the failure of ecofeminist theorists to present a coherent approach to their theory. Ecofeminists highlight that the diversity of
ecofeminist theory is one of its strong points. A developing theory that is attempting to put together the stories of women’s lives requires a diverse approach due to the diversity of women’s experiences, cross-culturally, and within the hierarchical structure of Western society, so that “[c]oherence thus becomes a by-product of ongoing dialogue, instead of a limiting condition on that dialogue” (Buege 1994, 54).

Additionally, Biehl’s requirement that ecofeminism must create coherent theory grounded in ‘objectivity’ is troubling. Feminist theory has presented a series of powerful critiques aimed at the very concept of objectivity, highlighting the inherent bias within this seemingly neutral concept. Explored more deeply in Chapter Two, objectivity in science in particular has been shown to be deeply subjective (Keller 1985; Harding 1991) and by extension, demonstrates the ways in which objectivity as a goal needs to be critiqued. Biehl’s disregard for this significant body of work renders her call for ethics grounded in objectivity problematic.

Finally, Biehl claims that another weakness of ecofeminism is its failure to articulate a clear, pure ethic at its core. Biehl suggests that there must be some kind of ‘truth’ articulated in theory, assuming that there can be an objective claim to ‘the way things are’. This position relies on traditional models of ethics, and ignores the ecofeminist critique of these ways of knowing (Buege 1994, 54). Biehl’s desire for ecofeminism to articulate a pure ethic is in contrast to the ecofeminist principle of diversity and difference.

Biehl’s critiques of ecofeminism are flawed to the extent that they are just as reductive and essentialist as the very theory she critiques. Biehl employs a reductionist and
universalist understanding of Goddess spiritualities for example, and uses this inadequate model to justify why all ecofeminist spiritualities are essentialist. In assessing the value of attempts to integrate a spiritual approach within contemporary politics and philosophy, Biehl’s response can be read as patriarchal — she dismisses praxis on the basis it is ‘irrational’ yet provides little justification for her claims.

Biehl attempts to debunk ecofeminist spiritualities by using archaeological evidence to prove pre-patriarchal cultures were not peace-loving egalitarian cultures. It is these cultures which neopagan traditions sometimes draw from in order to give form to their spiritual beliefs. The assumption here is that if the historical aspects of paganism can be destabilised, then pursuits of ecofeminist spiritualities become obsolete. Yet I would argue that ecofeminist spiritualities — especially as they are embedded in forms of neopaganism — are not rooted in, but are mindful of, history. That is, while neopaganism draws on historical spiritual traditions, the individual is free to adapt and alter these traditions to make them more relevant to the society we live in. Neopagans do not rely on a creation story, original text or doctrine which could be disproved, thus destabilising the movement. A neopagan is not bound up by the history of the tradition, but recognises some of the historical reasons for such traditions. Biehl’s approach also ignores the significant body of feminist theory which questions and criticises traditional methods of knowledge construction in disciplines such as archaeology and anthropology. Theorists including Donna Haraway (1978) and Henrietta Moore (1988) have demonstrated the ways in which these disciplines are problematic, especially for a feminist agenda, making their ‘truth claims’ less viable. Feminism generally has exposed the bias in these traditionally ‘masculine’ fields of knowledge production,
especially with regard to the processes of observation and interpretation employed in traditional anthropology.

Other feminists have similarly argued that ecofeminism has little to offer a social change movement. Sociologist Susan Prentice (1988) believes that ecofeminism reinforces gender divisions, and that this cannot and should not be a feminist project. She likens the movement to a maternal feminism that claims women have a special relationship with nature and politics and that it is women who will lead the way to social change. This assumption, for Prentice, sets up the idea that men ‘think wrong’, reinforcing notions that biology is destiny. These essentialist claims ‘wish away’ social problems, couching its analysis in idealist terms. For Prentice, this is politically regressive as it fails to properly engage with theoretical frameworks of inequity. Instead, Prentice argues social change requires a sophisticated understanding of current power structures, capitalism in particular, which ecofeminism lacks. Like Biehl, Prentice comes from the position that the ecofeminist project should be abandoned and ecofeminist theorists should redirect their energies toward other social and ecological movements.

The central problem with these analyses is that they leave out ecofeminist theorists who are not essentialist, and they reduce ecofeminism into one homogenous group, ignoring theories or writers who do not fit their critique of an essentialist ecofeminism. The result is that a very narrow picture of ecofeminists and ecofeminist theory is represented within these critical models.
I now consider some theorists who also highlight problems in ecofeminism, particularly as it engages with spirituality. However the goal for these theorists is to strengthen ecofeminist theory and speak to critiques of ecofeminism, rather than justifying the wholesale discarding of the movement. These discussions are key because they consider some of the limitations of dealing with spirituality within a theoretical framework. This is relevant to this thesis because I support spirituality as a legitimate element within critical theory and political action, and so am cognisant of the way its potential limitations, and how they might be overcome, is crucial. These arguments also reveal the complexity of ontological considerations in the context of views which try to incorporate diversity. As this dissertation argues for theories of existence which account for the corporeal, essentialism will always be necessary to consider. The positions presented here demonstrate that various kinds of essentialism exist, including what are described as ‘strategic essentialisms’, forms of essentialism which operate politically to place the body into theory. In these contexts, firstly I will look at the work of ecofeminist scholar Chris Cuomo who offers some telling criticisms of ecofeminist spirituality.

Cuomo (1998) understands that the greatest danger arising from some theorists within ecofeminism, especially those within spiritual ecofeminism, is the uncritical approach to dualistic hierarchy when theorising gender. This involves plucking strands from certain aspects of the dualistic framework and ‘raising them up’ without adequately deconstructing their ties to patriarchal thinking — a symptom of what Val Plumwood calls the feminism of “Uncritical Reversal” (Plumwood 1993, 31-34). For both Cuomo and Plumwood, the uncritical embracing of ‘devalued’ qualities, such as the ‘feminine’, mothering, emotion, or caring, is a simplistic approach which fails to go deeply into the
analysis of the dualism which produces these concepts and their embeddedness within patriarchal culture. Their analysis invites us to question the very nature of these terms being employed in such discussions. After all, if these notions are bound up in, and defined by, patriarchal processes, we need to critically engage with, and redefine the central terms of the discussion such as ‘woman’, ‘caring’ and ‘nurturing’, for example.

A critique is offered by Cuomo in response to the claim from some ecofeminists that it is not dualism per se which is problematic, but the hierarchy associated with it. These ecofeminists have argued that dualism can exist in a non-oppressive fashion, when both sides of the dualism, such as in the concept of yin and yang, are valued equally. As I will show some forms of spirituality, like neopagan Wicca for example, polarity and balance is emphasised, including the polarity of gender, which is seen to reside within each individual. Another aspect of this view to consider is that in an ontological sense, this dualist or polarised category resides within the one agency in these worldviews, thus collapsing the dualism Cuomo critiques.

However Cuomo does not merely draw attention to the potential pitfalls of essentialism in ecofeminism. While highlighting and critiquing theory that can be labelled essentialist, Cuomo remains mindful of the goals these theories are trying to achieve. As such, she is wary of criticism that is too quick to dismiss theory on the grounds that it may be essentialist. Cuomo argues against simplistic anti-essentialist rejections of ecofeminism, suggesting the need to be more thorough in anti-essentialist critiques which are too often reductionist accounts of essentialism. Yet, such reductionist accounts of essentialism and its problems still have a powerful impact on what gets thrown out as illegitimate ecofeminist theory. This points to something more than a
critical appraisal of ecofeminist theory driving many anti-essentialist critiques. I suggest that what may lie behind these critiques are remnants from masculinist traditions about what counts as relevant or worthwhile knowledge. Cuomo points out how generalisations are indeed made within many of the problematic texts concerned; but they need to be identified and corrected, not categorically dismissed, or used as an exemplar of why all ecofeminist theory should no longer be pursued.

Cuomo makes a particularly interesting observation regarding the selective nature of anti-essentialist criticism; that is, it has been the work of predominantly white women who have been accused of essentialist practices, while black women who have followed a similar vein, have received little or no criticism. For Cuomo, this omission has taken place for two reasons. One is that black women aren’t really seen as ‘serious theorists’; or secondly, this omission is a result of dualistic thinking that makes us more comfortable with the idea of a black woman asserting her relationship to nature, than we could be about a white woman affirming hers. This trend is a common one in ecofeminism. Indian ecofeminists like Vandana Shiva (1993, 169) have articulated the embrace of a ‘feminine principle’ (Prakriti in Sanskrit) in nature tied to Hindu spiritual concepts of nature, and yet receive relatively little criticism for their endorsement of this ‘feminine’ nature. This suggests the old dualist tricks are still in play as we stratify and binarise critiques of essentialism, even within the spheres which seek to dismantle them.

These critiques present an important insight into the notion of hybridity offered in this project. In particular, they highlight the importance of the critical deconstruction of

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Cuomo uses the work of Audre Lorde to show how ‘essentialist’ writing seems to be overlooked when it is the work of black women – such as Lorde – and is fiercely critiqued when white women employ similar ways of writing.
dualism, to the extent that dualism offers a deeply flawed picture of identity and the way in which dualisms relate to each other. Given the feminist and ecofeminist critique of the flaws in Western scientific knowledge-making and the processes of rationalism, any model of ecofeminism would be remiss to embrace the qualities of dualism uncritically. Like all other products of patriarchy, concepts such as gender difference must be thoroughly critiqued and reworked before they can be employed for feminist purposes, if they can be salvaged at all.

These critiques emerge most commonly as a response to ecofeminist spiritualities and their tendency to affirm notions of the ‘feminine’. Goddess worship, earth-based spiritualities and neopaganism — which form a cornerstone of this thesis — are appraised by Val Plumwood, who notes a number of limitations within these traditions. I attend to these both to highlight certain shortcomings I find in these appraisals, but also to note that limitations do exist within some of these early forms of ecofeminist spiritualities. Remaining aware of these limitations ensures they can be avoided through my own positioning of neopaganism in this thesis.

Ecofeminist spiritualities centred on neopagan models of earth-based worship, which will be explored in detail in Part II of this thesis, often involve goddess figures and myths. The goddess — understood variously by neopagans as the earth, as a female version of traditional notions of God, as a symbolic representation of elements of the self or the cosmos or as elements drawn from the pantheon of Ancient Greek or Rome — will be unravelled in Chapter Four. Offering a critique of what she calls Goddess Pantheism, Val Plumwood (1993, 126-128) identifies a danger in late-modern attempts to reclaim traditions of Goddess worship because of the way they tend to
anthropomorphise nature, thereby seeing all aspects of the natural world as a manifestation of the Goddess. This approach, for Plumwood, fails to escape dualistic thought processes, as it still sets up nature as ‘Other’, thereby reinforcing the centrality of the human. In her view these ecofeminist neopagans are unable to see or perceive value unless they can correlate the natural world through anthropomorphic identification with the Goddess.

The model of immanence, put forward by world-famous witch Starhawk (1988) is also questioned by Plumwood. Immanence is a neopagan concept, specifically from the witchcraft tradition, which understands divinity to exist within the world, the mind or the individual, in contrast to transcendent traditions. Plumwood suggests that danger lies in nonhuman entities being valued only because of the connection they represent to the Goddess, and not as valuable in their own right. Plumwood views this perspective as a perpetuation of hierarchical modes of thinking. She asks: if spirit is everywhere, and everything is sacred, then what is the point of a deity? For Plumwood, affirmation of an immanent Goddess, such as that espoused by Starhawk, while simultaneously trying to subvert a view of spirituality as ‘outside’ of the world, risks reducing and homogenising all nonhuman nature to one concept — the Goddess. Further, Plumwood (1993) asks: if everything is an aspect of the Goddess and all things in the world are divine, then how do we make moral choices about what is right and wrong and how can we not argue that a nuclear power plant is not simply another aspect of the Goddess?

Plumwood’s cautions here are thought-provoking and valid, although they tend to draw upon one strand of neopagan belief, and then apply the critique to the entire movement. Her argument regarding the concept that immanence uncritically makes everything
divine is problematic. She constructs a ‘straw person’ argument of neopagan belief here, suggesting a worldview which does not accurately reflect neopagan belief as it occurs in contemporary society. Despite these issues it is further noteworthy that Plumwood does not dismiss spiritual pursuits or their relevance to philosophy in entirety, detailing its potential in her later work. She has sought out ways to imagine spirituality which she articulates as a ‘materialist spirituality’. This spirituality makes connections and relations to the material world, a world made up of many different agents, an approach which recognises power in the infusion of nonhuman agency into the world through spirituality (Plumwood 1991). She proposes the importance of recognising the agency of all elements of the nonhuman world, and that spirituality can assist this awareness.

These positions and responses offer useful insights into some of the dangers and limitations of ecofeminist theory, especially in its spiritual manifestations and highlight the limitations of some of the critiques levelled at ecofeminism. Approaches within ecofeminism which ‘raise up’ traditionally ‘feminine’ traits in response to patriarchal devaluation have the potential to reinforce the very situation they seek to undermine. In contrast, deconstructionist projects emphasise the constructed and nonessential nature of various traits, values, qualities and beings. They argue that without construction nothing remains. A tension therefore emerges regarding whether to salvage the traits which have been associated with the feminine through dualism, or to instead discard them entirely as irreparably associated with oppressive histories and patterns of domination. I respond to these questions by presenting a series of arguments which speak to questions relating to embodiment which consider in more complex ways essences and the concept of

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‘woman’. These deliberations of embodiment consider more nuanced approaches which apply the materiality of technopagan agency as a suitable answer to questions of corporeality.

**Materiality and Metaphor: essentialism and embodiment**

If “Woman” is just an empty category, then why am I afraid to walk alone at night? (Downs 2005, 414)

In the above quote Laura Lee Downs is grappling with the conflict between identity feminisms and the insights of postmodern feminisms, highlighting the challenges for dealing with critiques of essentialism. Aware of the dangers of essentialism, and indeed its role in maintaining the domination of women historically, we are simultaneously faced with the material realities of patriarchal societies which could be said to frame essentialist statements as somewhat accurate. In order to consider the relevance of these anti-essentialist arguments I consider responses presented to these charges of essentialism in ecofeminism and feminist theory more broadly. A variety of responses are presented which tease out the complexity of essentialist debates, highlighting limitations in some claims of ecofeminist essentialism. The forthcoming critique is useful because it offers ways to get beyond essentialism. As the technopagan incorporates materiality, these are important considerations regarding embodiment and essentialism.

In what follows, I begin with a focus on embodiment, and employ the work of Mary Mellor to present a picture of the variety of feminist responses to the accusation of essentialism. Discussions around embodiment are significant because these considerations often raise the criticism of essentialism, and also because technopagans
are deeply material agents concerned with bodies, hence its relevance to this study. Mary Mellor’s defence of ecofeminist theory is helpful because she emphasises the importance of acknowledging our embodiment in a world of practice. To speak of the body is to invite the label essentialist. Mellor employs a variety of theorists to conduct a discussion about embodiment — an approach that acknowledges embodiment is necessary to ontology, while remaining aware of the potential dangers of this view. These issues are central to contemporary feminist theory with regards to how to talk about the body in contextual, particular ways.

An environmentalist, socialist and feminist, Mellor (1997) argues that it is time we began to think more critically about our embodiment. Iris Marion Young has argued that a ‘humanist’ feminism which does not wish to engage in a discussion regarding embodiment is a “revolt against femininity” (cited in Mellor 1997, 74); it fails to engage and challenge the assumptions of a patriarchal culture, instead choosing to ignore it. For Mellor feminists cannot ignore the question of embodiment because it might reaffirm women’s oppression; ignorance is destructive. While talking about embodiment is a delicate issue, we must not avoid it because of this delicacy (Mellor 1997, 74).

Elizabeth Spelman (1988) makes an assessment of essentialism which is useful, suggesting the problem of essentialism can be answered with an argument about embodiment. Within the immense debate regarding essentialism, feminists seem to have ignored the central essentialist action — the uncritical use of the term ‘woman’. For Spelman, it is the rejection of the body that allows for essentialist claims to be made: “[o]nce the concept of woman is divorced from the concept of woman’s body, conceptual room is made for the idea of a woman who is no particular historical woman
— she has no colour, no accent, no particular characteristics that require having a body” (Spelman 1988, 128). Indeed, she believes that to reject the body is to perpetuate the culture/embodiment split that has caused so many of the problems that we now work to overcome.

As Mellor identifies, biology is a theme of central importance to Diana Fuss (Mellor 1997), Fuss argues that we need to talk about biology, but this does not need to be essentialist talk: rather, we need to begin to re-theorise biology. Arguments for the refiguration of biology have been made by a number of theorists including Fox Keller and McClintock, and are also made through the recognition that biology has inscribed gender roles when describing biological processes (Martin 1991). Emily Martin demonstrates the way that science has constructed the processes of the egg and the sperm in the reproductive process in ways that reproduce gender dynamics in contemporary society. That is, sperm is characterised as active, while the egg is a passive receptacle for the sperm. Yet some biological investigations reveal the agency of the egg to be far more active than traditional representations convey. In particular, they show that the egg plays a significant role in ‘selecting’ which sperm fertilises it, and also contributes a large amount of the material which shapes and defines the growing embryo. These analyses reveal the gender coding which occurs in supposedly neutral investigations in science. They demonstrate that instead of science explaining the world, scientists are instead influenced by the world. Claims to scientific objectivity in this context then, are problematised. Not only have aspects of ‘women’s world’ been denigrated historically, they have also been misrepresented, and it is therefore reasonable that women may wish to ‘celebrate’ their biology against this history of denigration and misrepresentation. Spretnak (Mellor 1997, 103) “urges us to ‘embrace
the body”, and argues that patriarchy is a result of socialisation, not inherent masculine behaviour, so men can be re-socialised also. For Helene Cixous and Luce Irigaray (Mellor 1997, 99), on the other hand, because all culture is phallocentric, women’s embodiment offers their only true sense of self outside of patriarchy. Some of these statements may seem contentious, but they do highlight the fervent resistance encountered when discussing women’s embodiment, and to emphasise that despite the dangers in this discussion, there are just as many perils in avoiding it. These approaches reveal just how misguided critics of essentialism have been in dismissing theory that draws the body into critical analysis.

Theorists who successfully raise embodiment as a legitimate consideration within discourse are corporeal feminists such as Elizabeth Grosz (1994) and Vicki Kirby (1997). Corporeal feminists have been successful in finding avenues for bringing the body into the centre of discourse in ways which are not detrimental to feminist projects of liberation (Kirby 1997). Corporeal feminists argue that the body needs to be re-framed and reinterpreted as a complex material and cultural site of production, to see that “the body is not opposed to culture, a resistant throwback to a natural past; it is itself a cultural, the cultural, product” (Grosz 1994, 23). Included in this corporeal project is a search for new metaphors of the body which digress from the mechanistic and determinist ones which so dominate our readings of biology. Instead, what is sought are “metaphors and models that implicate the subject in the object, that render mastery and exteriority undesirable” (Grosz 1994, 23). Dissatisfied with the binary between the postmodern dismantling of the body contrasted against the deterministic approach to biology, corporeal feminists transgress this divide by reconceptualising embodiment. Instead, they seek to discuss the corporeal as a vital element in feminist discourse.
This variety of approaches and attitudes to embodiment in feminist theory exposes the futility and indeed the hazards of, ignoring the body. To render discussions about embodiment as essentialist, places us on a trajectory toward the maintenance of women’s oppression through embodiment. Feminism must recognise that ignoring the body and embodiment as primary aspects of being-in-the-world is a patriarchal trap. To critique constructions of (female) bodies calls into question the authority of science and its claims about and therefore control over (female) bodies. Therefore embodiment needs to be theorised in order to re-claim it from traditional discourses in science which have framed the body in limiting and determinist ways.

Understandings of identity, self and agency are limited by traditional scientific representations of the body, and feminist theory has alerted us to the inherent pitfalls of these inaccuracies. Feminist critiques of science have exposed its inadequacy in representing the world, let alone women’s lived experiences. Evelyn Fox Keller (cited in Mellor 1997, 119) argues that words, especially in scientific discourse — indeed our very language — “are far too limited a resource to permit a faithful representation of the cultural world of our own experience, let alone the hugely complex structure of the natural world” of which we know so little. Mellor contends that spiritual or other (body-based) embodied approaches may be more appropriate than formal scientific knowledge gathering in understanding human interrelationships with nature. The work of Fox Keller (1985) and contemporaries like Sandra Harding and Merrill B. Hintikka (Harding and Hintikka 1983; Harding 1986) have demonstrated the limitations of so-called objective science in delivering knowledge about identities and selves.
For feminist and semiotician Teresa De Lauretis (1990) anti-essentialist arguments are actually lesbian-bashing, considering many theories that have come under the essentialist accusation have been explicitly lesbian texts that advocate a reconnection with the body. In fact, both De Lauretis and Cuomo assert that this extreme feminist fear of essentialism is like a form of homophobia:

Feminist and ecofeminist discourses that typically become labelled essentialist tend to be lesbian, focused on women (especially women’s bodies), normative, and optimistic about potentials for change while pessimistic about so much current and historical cultural product (Cuomo 1998, 123)

Cuomo also outlines the merits of strategic essentialisms as serving an important political function to help to mobilise and solidify social movements:

Although universal ‘woman’ and ‘mother’ are myths, political rhetoric that addresses women and mothers by those names can effectively mobilise women who see themselves as having certain interests or qualities in common to gather together and create ways to fight for those interests and foster those qualities (Cuomo 1998, 124)

This point highlights the role that strategic essentialisms can play in feminist projects. Strategic essentialisms are crucial because they influence this thesis in its reconfiguration of ontology. Specifically, strategic essentialisms in an ontological sense understand essences to be strategies which can be assembled and deployed. In the context of a patriarchal culture there is subversive power to be found in the embrace of traditionally denigrated aspects of the category ‘woman’: “[g]lorification is only partially normative — it’s also an invitation for women to experience their bodies as beautiful, strong, natural and cultural and something other than ‘mother’” (Cuomo 1998, 124). Ecofeminist Noel Sturgeon demonstrates how “certain essentialist moments in ecofeminism, given particular historical conditions, are part of creating a shifting and strategic identification of the relation between ‘women’ and ‘nature’ that has political purposes” (Sturgeon 1997, 11) allowing for feminist critiques of environmentalism,
solidarity between different women, and unity across various forms of feminisms and alternative forms of participatory democracy and direct action (Sturgeon 1997, 11). Sturgeon also wisely notes that essentialism can heal itself, when its own unity allows for coalitions of women to come together for political action, serving “to destabilize essentialist ecofeminist formulations, even if those formulations enabled these structures in the first place” (1997, 11). 

While many anti-essentialist arguments are valid, it is also true that so-called essentialist projects do empower women. As Cuomo reminds us, the essentialist debate can be something of a political smokescreen, obscuring more relevant issues behind the spectre of essentialist critiques (Cuomo 1998). The challenge is to find ways to avoid the real dangers of essentialist theorising, without discarding the body, and without disregarding women’s experiences of empowerment through apparently essentialist avenues. For Sturgeon we need to remember the power of these experiences through essentialism by recognising that “[t]hese moments of essentialism, these ecofeminist natures, are historically contingent, contradictory and contested. They remain politically important even when they have particular political costs” (Sturgeon 1997, 111). We need also to distinguish between the flaws requiring attention within a theoretical framework, and the total dismissal of that theory on the basis that it exhibits essentialist elements.

* * *

The essentialist debate must be careful not to reinforce the order it seeks to dismantle. Couching material, body-based approaches as always essentialist or overly ‘feminine’ reinforces the binary dynamics of male versus female, mind versus body, nature versus
culture. My own interpretation of ecofeminism has always suggested a fusion, synergy, synthesis and ‘mixing up’ of categories: to embrace the qualities of emotion in tandem with reason, to recognise that it could not be otherwise; to see my mind and body as fully integrated; to be more fully human. Attitudes which suggest otherwise feed the sense of a world of absolutes — something is either resolutely good or bad, in or out, useful or dangerous — rather than sentiments which encourage building, crafting, opening up and welcoming. This thesis proposes, mindful of these debates, manifestations of identity which can navigate these difficulties and successfully question and muddy the dualistic divides which lie at the heart of these challenges. This model of ecofeminism instead embraces a hybrid identity, celebrating the convergence of experiences, traits, values and materiality while refusing arbitrary distinctions.

Ecofeminist debates around woman-nature connections often fall into two sides: whether to affirm or reject these connections. Ynestra King, one of the founders of U.S. ecofeminism, offers us an alternative: a ‘third direction’, which I suggest is more in keeping with an ecofeminist approach when she suggests we need to recognise:

although the nature-culture dualism is a product of culture, we can nonetheless, consciously choose not to sever the woman-nature connection by joining male culture. Rather, we can use it as a vantage point for creating a different kind of culture and politics that would integrate intuitive, spiritual, and rational forms of knowledge, embracing both science and magic insofar as they enable us to transform the nature-culture distinction itself and to envision a free, ecological society (King 1989, 23)

For King, ecofeminism offers this ‘third way’ through the dilemma of the affirmation or rejections of woman-nature connections. Ecofeminism’s strength for King, lies in its position of “neither severing the connection between woman and nature (as socialist feminists would have it) nor reinforcing it (as many cultural feminists did)” (Seager 2003, 946). Her position asserts that instead, “the liberation of women is to be found
neither in severing all connections that root us in nature nor in believing ourselves to be more natural than men” (King 1981, 15). The third direction posited by ecofeminism goes beyond dualism in similar ways to corporeal feminism. These positions suggest that we must remain aware of the potential dangers of essentialist approaches, and yet also remind us that embodiment and materiality should not be ignored in the pursuit of anti-essentialism.

*   *   *

In this chapter I have characterised ecofeminist philosophy as a challenging, thought-provoking and radical approach to understanding identity in the more-than-human-world. Charting the spectrum of woman-nature connections has uncovered the complex, varied, and multiple ways in which dualistic hierarchy ties women and nature together and regards them as ‘naturally’ connected. Drawing the category ‘nature’ and ecological challenges into feminist critique exposes a deeply interconnected world, in which the roots of our ecological crisis take seed in Western worldviews of binaries, separation and opposition.

Ecofeminism challenges traditional environmental ethics to awaken it to its inherent sexism, and demonstrates how androcentrism in environmental ethics renders it an inadequate solution to environmental crises. Ecofeminism offers a fundamental challenge to traditional Western worldviews, appealing for thorough and far-reaching resolutions to these problems.
The ecofeminist foray into spiritual pursuits as valid, practical and subversive tools for sustenance in contemporary culture presents a challenge to academic partitions between spirituality and politics. It especially challenges feminist projects which see the embrace of the spiritual as potentially damaging to feminist endeavours. Ecofeminist spiritualities like neopaganism challenge feminist deconstructions of ‘woman’ and the body, while functioning as empowering tools of sustenance for their adherents. The essentialist critiques of ecofeminist spiritualities, and ecofeminism by extension, remind us of the dangers and challenges embedded in the spiritual project. However, I have shown how these critiques are similarly essentialist, and must be tempered by the recognition of the role of embodiment in feminist politics, and the importance of spiritual pursuits in radical reconfigurations of world-views.

There is a final issue to be addressed to foreground the next chapter. Typical critiques of ecofeminism label it as regressive and romanticised; as favouring a return to ‘agrarian’ lifestyles in an attempt to find more sustainable and equitable ways of living. The ecofeminist critique of dualistic power structures and oppressive conceptual frameworks can easily lend itself to a wariness of technology given its traditional/historical construction in opposition to nature. Indeed, within oppressive conceptual frameworks of opposition and hierarchy, any position which embraces nature, could, by default, be seen to be anti-technology. This leads to a key element in this dissertation. Technophobia within ecofeminism constitutes one of the most significant shortcomings in my opinion, and it is this shortcoming which I go on to explore in the forthcoming chapters in this thesis, to explore more critical, but enabling approaches to technology. The ecofeminist framework presents a potent critique of power and oppression, but is
limited by its failure to engage technology in ways that do not reinforce the dualism between nature and technology.

Inspired by ecofeminist theory and its correlated spiritual endorsements, whilst mindful of the well-founded cautions targeted at these areas, I move forward in search of a solution. The technophobia in elements of ecofeminism and the need to reconcile the nature/technology split, make it necessary and worthwhile to explore the spectrum of feminist approaches to technology. In order to more fully explore the depth of issues relating to feminism and technology, and to develop the relevance of the technopagan identity to this dissertation, it is important to consider these issues in more detail. In the following chapter, I engage an in-depth analysis of technoscience and the spectrum of feminist approaches to technology.
Chapter Two
Feminism and Technology: Cyborgs and goddesses in cyberspace

In the previous chapter I detailed the potential of ecofeminist theory, however noting its labelling as a technophobic, regressive movement. Feminist critiques of malestream culture and the related honouring and privileging of notions of ‘progress’ form a part of this technological wariness. Ecofeminism in particular challenges claims of the potential of technological progress to save us from ourselves. Claims that technology can free us from the paper-laden office, create robots to carry out our domestic labour, find technological solutions to the ‘problems’ of development, industrialisation and pollution are common in discourse relating to technology. Critiquing these claims, ecofeminism can easily be seen to resist technological worship, wary of its patriarchal roots and assumptions about ‘progress’. Environmentalism too, through its critique of the Western world’s hunger for gadgets, efficiency and development, remains wary of the reification of technology so often displayed in Western cultures. It is little wonder then, that ecofeminism, the synergy of these two movements, would display traits of technophobia.

Feminism in general has also distanced itself from an approach which aligns itself with the uncritical embrace of technological progress. Technology, within a dualistic analysis, is a distinctly masculine space, set up in contrast to the organic, bodily presence of feminine spaces (Wajcman 1991). Technology is tied to patriarchal ideology, and is anti-body — especially with respect to women’s bodies — and has an unfortunate history as a tool to control women’s bodies. Technology — and modern technological spaces, such as the internet in particular — is constructed as male space,
as ‘of the mind’, and is often plagued by anti-women spaces, such as the proliferation of pornography on the internet, or the occurrence of cyber-rapes and online harassment (Dibbell 1994). The militaristic origins of the internet further compound feminist wariness of welcoming this form of technology into theoretical practice and process. All of these contentions are explored more fully here.

This thesis argues technology is embedded in our lives and must be considered. In this chapter I appraise the various feminist approaches to technology. Charting the extremes of feminist technophobia and technophilia, I establish the strengths and limitations of these appraisals of the role of technology and its relation to human identity. In this process I demonstrate that a hybridised incorporation of the technophobic and technophilic feminisms offer a balanced and sustainable ontology of technology.

**Feminist appraisals of technology: an overview**

The consequences of this future for women and for gender stereotyping are of central concern for feminist theorists. In particular, some of these issues include: women’s access to technologies and technological literacy; the implications for embodiment and its political significance in an increasingly virtual world; the proliferation of sexist practices facilitated by networked technologies, including pornography, the sex-slave trade and the male-centric imprints of the internet are just a few of the issues feminism addresses in considering gender and technology. For some feminists, like Sadie Plant (1997) the possibility of a ‘cyborg future’ in which women find empowerment and freedom from their oppression through embodiment envisions a future which is hopeful and egalitarian. For other feminists, like Susan Griffin (1978) and Patsy Hallen (1989) this embrace of technology in search of equality risks losing the very things about the
construction of femininity which are valuable, and rely too heavily on technological
determinism in order to find liberation. They further fear that the technological embrace
ignores our earthly dependence and turns away from a planet in need of our attention
(Spretnak 1999). Similarly, some feminists fear that to run headlong into a world
created by men, and for men, is to perpetuate patriarchy, veiled thinly beneath
superficial encapsulations of a modern, liberated, elite, ‘cyber-grrrl’ (Stabile 1997, 511).
Finally, feminist theorists like Carol Stabile critique the technophilic tendencies within
feminism as inviting similar questions to those which must be posed to the
technophobes. That is, what kinds of masked privileges and consequent partialities are
contained within these identities and to what extent do they assist in the maintenance of
multinational capitalism? (1997, 511)

Feminist theory has offered a divergent series of approaches to technology over the last
several decades. These approaches range from feminist neglect of technology as a topic
worthy of consideration due to its seeming irrelevance to women’s lives; to outright
suspicion of technology as a product of patriarchal capitalistic power and control;
through to a fetishised embrace of all things technologically advanced as the potential
key to women’s liberation. Feminist approaches to and appraisals of technology have
provided rich ground upon which to consider the role technology plays in human and
women’s lives, and in understanding ways to approach an age where technology is
presented as its defining feature.

The second wave feminist movements of the 1970s and early 1980s were distinctly anti-
technology in flavour. Feminism at this time, thriving on identity politics, considered
technology to be a ‘tool of the master’, an apparatus too tightly bound up with the
power structures of patriarchal control which feminists were fighting so hard to dismantle. Cultural feminisms and ecofeminism in particular approached technology as a domain controlled by patriarchy and capitalism. The ecofeminist analysis of the oppressive connections between the construction of women and nature implicated science and technology in this oppressive framework (Merchant 1980) and highlighted the fallacy “that modern science is objective, value-free, and context-free knowledge of the external world” (Merchant 1993, 277). Carolyn Merchant’s assertion that the new experimental science of the seventeenth century was accompanied by “a worldview that saw nature not as an organism but as a machine” (Merchant 1992, 45) incited feminists to see science and technology as part of the masculine, anti-nature realm, identified as part of the machinery which perpetuated the oppression of both women and nature. In promoting a political philosophical position which refocused on nature as a category worthy of respect and consideration, ecofeminism relegated technology to the masculinised realms of power to be treated with suspicion and viewed as potentially dangerous to women and feminist liberation projects.

Perhaps the sole exception to this perspective was Shulamith Firestone’s *The Dialectic of Sex* (1979). Firestone argued that through advancing developments in science and technology — most specifically in the field of reproductive technologies — women would find their liberation. Freed from the reproductive imperative which fell solely to them as a result of biology, Firestone saw the potential for a feminist utopia which lay within the application of technologies to the body, and in particular the female body.

Feminist theory has also made significant contributions to fields which consider the role of science and technology and its implications for social life, politics and definitions of
nature. Science as a field traditionally governed and controlled by men was perhaps the first field to come under the feminist critical gaze (Keller 1985; Harding 1986). Long considered a field for the production of truth, facts, and value-free hypothesising, feminist philosophies of science have revealed science as a disciplinary field manipulated, shaped and weighed down by the influence of its practitioners and participants and biases embedded in scientific knowledge. Where once science was seen as theory removed from society (as demonstrated in the laboratory environment) or as a process of abstract contemplation science today is understood as shaped simultaneously by scientific and social practice. The theoretical field of Science and Technology Studies (STS) has since become a thriving academic discipline for exploring the social relations of science and technology and in particular, for feminist explorations into the social and political effects of science (see for example Fausto-Sterling 1985; Longino 1990).

By the mid 1980s Donna Haraway had published her now famous article *A Cyborg Manifesto: Science, Technology, Socialist-Feminism in the Late Twentieth Century* (Haraway 1991b) which diverged from the familiar wariness toward technology expressed in then current feminist circles. Haraway’s manifesto was revolutionary in its critically optimistic approach to technological advancement, and sent shockwaves through academic communities. Rather than describing a unified, totalitarian approach to technology, Haraway suggested we embrace technology in spite of its ties to patriarchy and the military, not least because these kinds of alliances presented a tactical way to undermine the tradition. Her method endorsed a more complex, nuanced approach wherein she remains critical of technology, whilst refusing to reject it, suggesting instead feminist theorists needed to acquire expertise in the field of science.
She argued this was a time of unlikely alliances (Haraway 1991b, 169) and that the totalising approaches to technology — be they positive or negative — which feminism had previously offered up were too simplistic, and failed to recognise the social reality of technological embeddedness in the world.

Alongside Haraway’s manifesto, a series of ‘cyberfeminist’ literature surfaced — some distinctly inspired by her work — each seeking alternative approaches to technology. New fields of feminism emerged which sought to fully embrace optimistic visions of the possibilities of technology within a feminist future. Feminists such as Sadie Plant and the VNS Matrix, sometimes called cyborg feminists, sought to strongly critique their technophobic sisters for their failure to embrace techno-realities. The insufficiency of either a technophobic or technophilic feminist approach to technology has motivated feminists to instead consider more hybridised methods to understanding science and technology, and to realise the depth to which technoscience — science embodied through tools and instruments — is irrevocably embedded in our lives. Instead theorists of technoscience and feminist technoscience in particular seek to uncover the social shaping of technoscientific worlds, considering how these influences impact and define the lives of women, and the construction of gender and humanity. The passionate debate of the 1990s concerning cyberfeminism and techno-feminist futures has died down significantly in the 21st century. In its place have emerged more sophisticated considerations of technoscientific knowledge and engagement.

In what follows I detail the various feminist approaches to technology, beginning with an exploration of technoscience. I explore the traditional notions of technoscience and feminist critiques of technoscience, in particular Haraway’s contribution to highlighting
its androcentric limitations. Having discussed feminist critiques of technoscience, I look at the technophobia which has fuelled so much of the feminist need to reorient its approaches to and considerations of technology. Specifically I consider the ecofeminist and cultural feminisms whose analysis tied technology inextricably to patriarchal power and control. Despite the limitations of feminisms which seek to so simplistically reject technological engagement, there is also great potential in some of the political and philosophical challenges these approaches offer to an ontological consideration of technology. I then consider the utopian, technophilic feminist approach to technology particularly as it is articulated through technofeminism and cyberfeminism. I appraise the strengths and weaknesses of cyberfeminism, uncovering a field filled with potential, but also too often reductionist and uncritical in its embrace of all things technological. I then offer a detailed discussion of the cyborg — a ‘hybrid’ identity crucial to my project — in feminist politics, detailing its role in cyberfeminism, and its potential and limitations as a figure for feminist consideration. Through this discussion, further complexities in the gender-technology relation are revealed, exposing an intricate set of relations to cyberspace in particular.

Having established the cyborg as a central figure in feminist discussions concerning technology and network technologies in particular, I discuss the tension between ‘cyborgs and goddesses’ which exists within feminism. Seeking ways to consider these figures as kin rather than adversaries, I draw parallels between them, establishing the technopagan as a strategic agency for bridging the divide between cyborgs and goddesses. I conclude the chapter by setting out the limitations within elements of cyberfeminisms, arguing for a more balanced process which subverts technophilic and technophobic approaches, instead seeking a more hybridised approach to understanding
human-technology relations. This chapter speaks to the need to negotiate technological worlds in non-absolutist ways through the composition of the technopagan as a hybrid of cyborg and goddess. I demonstrate how critical perspectives of human-technology interactions, alongside convergent perspectives from ecofeminist and cyberfeminist politics construct a powerful conceptualisation of identity for a sustainable, responsible and digital future embodied in the technopagan.

**Science, Technology and Tools: Technoscience and Feminism**

Feminist theory has clearly made significant contributions to the questioning of the privileged position of science as the only reliable knowledge-producer. The positivism of science has been contested through a variety of discourses, as explained by STS and feminist theorist Jutta Weber (Weber 2006, 402-403): “the liberal feminist critique of an unfair and misogynist science, the Ecofeminist critique of Western hyperproduction, social movements challenging the privileged status of science, and the postmodern critique of ventriloqual politics of representation” are just a few examples of the kinds of critiques which have undermined scientific authority and knowledge-making. Ecofeminism and radical feminisms in general have also highlighted the ‘othering’ of nature in dominant Western scientific discourse, shaping nature in feminine forms — as passive, inferior and unruly, needing to “be controlled by an autonomous subject (a White man)” (Weber 2006, 401). These feminisms further argue that as a result, nature has been cast as a passive resource, whose meaning was only revealed when extracted and interpreted by man rather than being “regarded as an active agent endowed with its own logic” (Weber 2006, 401).
Science too, and more particularly technoscience\(^7\), has encountered its own challenges to previously stable boundary markers and categories, with the wave/particle duality existing at the core of quantum mechanics being the most well-known example (Weber 2006, 402). Quantum mechanics posited that all objects possess both wave and particle properties, where previously it was believed impossible for any object to display both these properties. The insights of Quantum mechanics were enabled via technological instruments and devices, thus significantly challenging the fundamental idea that technology reveals the world in an unproblematic way. Technoscience is an important contributor here, because the wave/particle duality can only be seen in very small objects — that is, at a subatomic scale — and so could not be ‘known’ prior to the development of technological devices, such as electron microscopes, which allow for the examination of atoms. Even more significantly, the principle of the ‘observer effect’ in quantum mechanics argues the act of merely *looking* at an object changes its behaviour, thus the act of observation is also an act of intervention. Traditional constructs of the disinterested scientific observer in the laboratory are challenged through this effect. Here science itself reveals a world unwilling to conform to neatly constructed categories, and the ongoing explorations within modern thermodynamics continue to confirm this revelation.

Feminist theorists Katherine Hayles (1999) and Donna Haraway (1991a, b) have embraced these collapsing categories and “have analysed the departure from the classical Cartesian heritage, with its dualism of observer and observed, subject and object, body and mind, towards constructivist epistemologies and ‘posthuman’ concepts

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\(^7\) Technoscience captures the concept of scientific knowledge gained through instrumentation. All modern science is understood to be technoscientific, for example, molecular biology and genetic engineering are sciences embedded in technologies and instruments. A more detailed analysis of technoscience is offered in Chapter Three.
of cybernetics, artificial intelligence, immunology, and brain research” (Weber 2006, 402). Haraway’s work in particular was an explicit attempt to address two main arguments within feminism. The first was to recognise that feminist attempts to find totalising, collective theories of unification were not only a mistake, but were perilous; and secondly that “taking responsibility for the social relations of science and technology means refusing an anti-science metaphysics, a demonology of technology, and so means embracing the skilful task of reconstructing the boundaries of daily life, in partial connection with others, in communication with all our parts” (Squires 2000, 367). These projects understand the complex, convergent nature of boundary dissolution, revealing powerful networks of influence — the social and situated context of the scientist, the impact and effects of observation, limiting and biased historical assumptions and so on — in science and technology.

Given this illumination of networks of influence and their contribution to knowledge-making, interesting questions are raised about the nature of previously impermeable boundaries: boundaries between human and animal, machine and organism, nature and culture. Feminist technoscience reveals far more leaky and unreliable boundary constructions, exposing category constructions as just that — constructions. The power structures of privilege, geographical location and race, to name a few, are too often denied by mainstream theorists of technoscience. Recast in this constructivist, value-laden light, technoscience becomes a process influenced by cultural values, but also by far deeper and more fundamental notions about the ‘nature of nature’ and the ‘nature of humanity’.
Conversely, the recognition that science and technology are culturally embedded reveals the technosciences as “central sites for the production of ideology” (Weber 2006, 407). Science as the revealer of truth becomes redefined as a producer/definer of truth which actively constructs our social worlds — including ideologies of power, gender and culture. With this in mind technoscience is reframed as what Donna Haraway calls a “cultural practice and practical culture” (Haraway 1997, 66). The implication of technoscience as a cultural practice and practical culture is its social nature. In highlighting technoscience as such, we do not diminish it, but rather emphasise the “presence, reality, dynamism, contingency, and thickness of technoscience. Culture denotes not the irrational but the meaningful” (Haraway 1997, 66). Once we understand that we are dealing with a cultural, social act, we understand the “situated, heterogeneous, and complex process in which many different agents like concepts, machines, humans, and animals produce meaning and thereby maintain or refigure cultural boundaries” (Weber 2006, 407). No longer set apart, outside or indeed above the social worlds we culturally inhabit, technoscientific acts are contextualised: they are situated, located productions emerging from a particular context, at a particular time.

For example, the ‘space race’ (occurring from the late 1950s to the mid 1970s) which saw ‘man’ land on the moon was motivated not simply by a scientific desire to explore the moon or to develop shuttle technology, but instead resulted from a complex network of reasons. The effects of the cold war and an ideological and political drive on behalf of the United States of America to beat the Russians in the race and thus demonstrate their advanced power as a nation was one driving force behind this pursuit.

Additionally, the outcomes delivered advanced military technologies as opposed to continuing space travel technologies. When technoscience is seen in this contextual, located fashion, “it becomes much easier to develop approaches which go beyond either
the euphoric affirmation of science and technology or their abstract negation” (Weber 2006, 407) allowing for more nuanced, complex responses to technoscience in a feminist setting. The space race in this analysis then is a multi-trajectory project, motivated by a range of influences and interests.

In the above quote, Weber’s goal is essential to consider. She highlights the error in both the technophobic and technophilic feminist attitudes towards technology. Both approaches construct a totalising position based upon the incorrect assumption that we even have a choice about whether to engage or not with technology, in particular ‘high’ technology. Technological development, for example, is not merely the outcome of patriarchal, militaristic formulations, but is instead dynamically produced within (and simultaneously produces) a cultural/social context, grounded in social realities and politics. One such example is the female oral contraceptive pill. Its marketing and use were made widely available only after legal proceedings regulated who could use the Pill — restricting it at first to married women, and later making it available to unmarried women. Its development in the laboratory was pushed by a female suffragist who encouraged scientists to speed up the research. The accompanying sexual revolution which occurred shortly after its release and the unprecedented phenomena of placing women in direct control of their own fertility, demonstrate the social, political and cultural influences on a scientific product (Watkins 1998). Properly understood, technoscientific discourse is therefore not a ‘choice’ to be accepted or rejected, but instead is an emergent property which shapes and is shaped by modern culture. Such an approach helps to sidestep false assumptions about the pro/anti technology debate within feminism.
Feminist Science and Technology Studies, (see for example MacKenzie and Wajcman 1985, Keller 1985, or Jasanoff 1990) expose the ways that culture and science are intertwined, mutually informing, and co-constitutive. In doing so, they illuminate the bias inherent in so-called facts, unravelling the traditional story of scientific discourse as neutral and value-free. They further show the inextricable links between the categories of science, technology and culture, revealing interwoven relations whereby categories are ‘mixed up’. This is a feminist project that seeks to “ontologically complicate things so as to break down ‘disciplinary’ boundaries which have abstractly extracted and com(de)partmentalized to such a degree that the objects of study have been ‘emptied out’, casting nature, culture, and technology as closed systems or pure objects where each one brackets off the other” (Menser and Aranowitz 1996, 8). The recognition of value-laden theory and the fallacy of ‘pure’ categories show the intimate links between “metaphors and factuality, between semiotic and material processes” (Weber 2006, 408). The boundaries that feminists have so long wished to challenge and disassemble may have been breached by elements of the very disciplines which constructed them. Nature and culture, human and machine, the material and the semiotic have collapsed into each other in a dynamic process which reveals what Haraway considers more ‘truthful’ practice and theory-production, enacting a dramatic shift upon the idea of objectivity and suggesting that ‘true’ objectivity is a partial, situated account of the world.

Technoscientific growth and expansion have invited challenges to ways of knowing (epistemologies) and ways of being and existing (ontologies) in the world, resulting in critical interest in science and technology from cultural studies arenas. Since the feminist disinterest in science and technology in the early 1980s, the exponential
increase of the intervention of science and technology into our everyday lives has sparked the growing field of feminist inquiry into technoscience. Increasingly miniaturised and portable technologies, the proliferation of the personal computer, the rise of reproductive technologies, bio-technologies and information technologies have demonstrated that science and technology co-create our everyday lives, in a far more fundamental way than was assumed by previous perceptions of science and technology as operating only on ‘meta’ levels of capitalistic, militaristic and global scales (Weber 2006, 398). The social implications of technoscientific developments are shown by feminists such as Haraway (1991a), to be intricately interwoven — shaping our lives in significant ways.

Technoscience redefines central terms and concepts — like relations between sex and gender — in such a way that the “relations of nature and technology and concomitantly those of gender are profoundly reshaped in the process of appropriating nature in Western societies, facilitating the idea of the co-construction of science, technology, society, and gender” (Weber 2006, 399). For example the construction of sex and gender through the biological sciences has been deeply ruptured by the growth in awareness of intersex births. The stark line between biological states of male and female have been confounded by the rate of intersex births — some 1 in 2,000 babies born of ‘indeterminate’ sex (Blackless, Charuvastra et al. 2000) — and the concurrent medical procedures which ‘assign’ a sex to these babies demonstrate the ways in which science has attempted to make bodies conform to existing categories of sex and gender, as opposed to allowing the categories to be understood in terms of the spectrum of sex. The effect is that the sciences encounter a contradiction between stable boundaries of sex — thereby maintaining assumptions about the dualism of male versus female — and
reveals that these categories are far more fluid. This is significant for the way the sciences are ‘at odds’ with each other and experience an internal tension in the technoscientific context, because technoscience is what allows for intersex to be ‘revealed’. In the context of this project which is embedded in hybridity, these shifting boundaries and knowledge challenges shape and inform technopagan agency. The technopagan embraces the contradiction of intersex in its agency as an embodied creature of deconstructed, complex and overlapping elements.

Feminists like Haraway have acknowledged that new technoscientific insights and possibilities are not purely liberatory in their potential, and that technoscience remains tied to “transnational capitalism” adding to systems of increasing global inequity between the rich and poor, the production and means of labour and growing divisions between ‘first’ and ‘third’ world living standards (Haraway 1997, 60). This recognition produces a two-fold outcome: “on the one hand, relations of domination are becoming more complex and opaque. On the other hand, the reshaping of central categories through technoscientific practices opens up new options for refiguring gender, nature, and sociotechnical systems” (Weber 2006, 399) Despite the oppressive potentials and realities, the complex role of technoscience in everyday life and the political shaping of reality means that in the end, a technophobic approach to the new technosciences is disempowering because it does not participate in these practices and has no agency within technoscience.

Instead, it is in understanding the cumulative nature of science and technology which exposes the located-ness of all elements in the technoscientific apparatus, illuminating enormous and complex networks of convergences of “science, technology, society, and
industry” (Weber 2006, 400). In understanding the interlocking nature of these formulations, “the idea that a masculinist technology determines a feminine Lebenswelt appears ridiculous…The demonization of technology becomes counterproductive as it hinders understanding of our life conditions in the age of technoscience and the refiguring of ontological realms of science, technology, society, and gender” (Weber 2006, 400). These insights reinforce how identities such as the technopagan can incorporate technology into its deepest views of existence and being, leading to sustainable ways of being in digital worlds.

I have initiated a dialogue with technoscience to unfold the complexity contained within discussions concerning technology. Technoscience and the critical appraisals of its inherent power structures reveal intricate and multifaceted networks at play in the construction of (scientific) knowledge. Feminist analyses of technoscience underscore the social nature of technology, disclosing the constructivist nature of ‘reality’. These approaches make known the intimate webs which entangle us within global technosystems, embedding us thoroughly in a technological world.

Having established a critical understanding of technoscience, and the futility of technophobia within certain strands of feminism, I now set out to explore the spectrum of feminist approaches to technology. From feminist technophobias through to cyberfeminist technophilias, I explore the variety of contributions — and shortcomings — emerging from these approaches alongside an explanation of contemporary technologies and their effects on our everyday lives. It is my goal through this discussion to establish a context in which a hybrid figure such as the technopagan is particularly suited to the technoscientific environment.
Feminist technophobias and cyberfeminist techno-topias

The assumptions of modernity, the faith in technological “progress” and rapacious industrialism, along with the militarism necessary to support it, have left us very lost indeed… The technological experts of the modern era, with their colleagues in business, government, and the military, are waging an antibiological revolution in human conduct. The moral systems of Western ethics and religion are nearly powerless in this struggle because those systems themselves are largely devoid of ecological wisdom. The crying need right now — if we have any hope of charting a postmodern, posthumanist, and postpatriarchal transition to the Age of Ecology — is for a new philosophical underpinning of civilization (Spretnak 1990, 9)

The replicants write programs, paint viral images, fabricate weapons systems, infiltrate the arts and the industry. They are hackers, perverting the codes, corrupting the transmissions, multiplying zeros, and teasing open new holes in the world. They are the edge of the new edge, unashamedly opportunist, entirely irresponsible, and committed only to the infiltration and corruption of a world which already rues the day they left home (Plant 2000, 335-336 emphasis mine)

Before unravelling the spectrum of feminist approaches to technology, a lexical inquiry into some central terms is useful at this point. Firstly, I wish to deliberate on the origins of cybernetics, which informs cyberfeminist theory and cyborg politics. Cybernetics as a term was coined by Norbert Weiner (1965) as a catch-all phrase for control and communication theory — of machines or organisms —which was free from bias within the existing literature. Derived from the Greek word to steer or govern, cybernetics focuses on feedback mechanisms and systems and seeks a unifying theory which can account for “communication, control, and statistical mechanics, whether in the machine or in living tissue” (Wiener 1965, 11). Cybernetics equates organic systems with mechanical ones, regarding their functions and operations as ontologically equivalent. Cybernetics then, seeks to understand the processes and functioning of systems, and to alter or intervene in these processes to achieve greater efficiency, speed or accuracy. The cyborg, as a cybernetic organism, has emerged from these theories of communication and control in the machine and the organism.
A corollary to the use of the term cybernetics come the prefix words of *cyber* and *techno* and it is useful to understand the distinction between the two in this thesis. *Cyber* as described from Wiener’s definition derives from the Greek word to steer, govern or control. Today, the term relates to computers and is most commonly used in reference to cyberspace, the imagined space in which networked information technologies occur. *Techno* on the other hand refers explicitly to technology and techniques. *Techno* suggests a more ‘material’ element than *cyber* does, deriving from its tool-based technological origins. *Cyber* then, is identified in feminist discourse as problematic for its ‘virtual’, fleshless qualities.

I begin this account of feminist approaches to technology by analysing the histories which have propelled some feminists toward embracing technology. Passionate and inspiring stories which constructed alluring visions of cyberspace; the potential for liberation which technologies of reproduction and reconstruction offer to the female body; and dreams of final flight from the bodies which contain so many of the markers which account for discrimination and domination are just some of the issues feminists confront when they construct narratives concerning technology. Yet, the battles over what approaches feminism should take towards technology have been ongoing and passionate. Most particularly, feminism has struggled to find non-determinist ways to grapple with the notion of technology.

One of the drivers of technophilia was the early technophobias expressed in feminism. In the era of post-Hiroshima and the aftermath of the Vietnam War, second wave feminism saw technology as inherently “patriarchal and malignant” (Stabile 1997, 506).
Technological embodiments were powerfully destructive, competitive and geared toward large-scale goals which traded off the well-being of individuals and environments in the name of ‘development’. Feminists who embraced theories of cultural feminism, and especially ecological feminism in the 1970s, had promoted a kind of essentialism of the female, which as Stabile observes was in the 1980s gradually giving way to more postmodern theories concerned with the fragmentation of the self within technoculture (Stabile 1997, 508). Postmodern and poststructuralist feminisms like Butler’s *Gender Trouble* (1990) emphasised the deconstruction of the self and the outright rejection of essences. Within this model, categories such as ‘woman’ and ‘nature’ cease to exist, and are viewed as merely constructions. Therefore, appeals to embrace inherent ‘femininity’ or its associated traits such as intuition or caring, become redundant projects for the postmodern feminist, because these categories are seen to be non-essential. As a result, these feminisms do not understand technology to be irrevocably embedded in male patriarchal control, and therefore see potential in technological progress and engagement. For example, cyberspace, which is discussed in the next section, has offered potentially liberating ways to negotiate constructions of the self especially as they pertain to gender.

**Cyberspace**

However, feminist technophobias have also been fuelled by the emergence of cyberspace. This point in the thesis marks the shift from technologies broadly to cyberspace specifically, as the key technology in this thesis. A distinctly ‘new’ space, it holds within it potential and pessimism. Where some feminists have rushed headlong into cyberspace possibilities, others recoil from its expansive and patriarchal qualities. The potential misogyny or egalitarianism of cyberspace is worth briefly exploring here to unpick the complexities of cyberspace.
Cyberspace is a term popularised by William Gibson’s classic science fiction techno-vision *Neuromancer*.

Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts…A graphical representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding… (Gibson 1984, 67)

At once a site for potential liberation or perpetual subordination, cyberspace holds the prospect for feminisms of either new possibilities or the familiar old patriarchal story in a new setting. The emergence of cyberfeminism and its role in the technophobia/technophilia divide warrant its deeper analysis. I now investigate the origins and manifestations of the “monolithically defined cyberfeminism” (Gillis 2004, 185) as a third wave of feminism.

**Cyberfeminism**

The term cyberfeminism is generally credited to Sadie Plant — who began using the term in the early 1990s along with the performance art group VNS Matrix (Wajcman 2004, 136) which will be discussed in more detail in this section — and is an explicit attempt to rupture notions of women as victims of technology. Cyberfeminism emerged partly as a response to mainstream notions that women and technology are incompatible; and partly in reaction to the trends within feminism in the 1980s and early 1990s to reject technology as a tool of patriarchal machinery, as I charted in the previous section. Consequently cyberfeminism sought to find *feminist* ways of engaging with and interrogating technology, specifically, “as a female-centred alternative to the overwhelming cultural dominance of men in regard to matters of technological agency” (Luckman 1999, 37). Cyberfeminism’s goal can generically be said to find subversive
means for exploring technological interaction in ways which do not perpetuate the subordination of women; beyond this, it resists singularity of definition (Luckman 1999, 36). Generally, it is broadly utopian in its outlook towards technology and the future: when cyberfeminists look to the technological future they see possibility, not disempowerment. The position of cyberfeminism is in some ways technologically determinist — to the extent that cyberfeminism does not seek to question whether to engage with technology, but rather how — and is heavily influenced by postmodern theories of deconstruction, and by psychoanalytic insights into selfhood (Luckman 1999, 1). Throughout this section these principles of fragmentation and partiality of identity are revealed as core elements of cyberfeminist perspectives.

Cyberfeminism was inspired to build an alliance with technology, seeing both women and technology as victims of capitalistic patriarchy, and to seek out revolutionary ways to take up technological possibilities as tools for liberation. Cyberfeminism then becomes inherently subversive, but not simply on the part of women, rather it is “an insurrection on the part of the goods and materials of the patriarchal world, a dispersed, distributed emergence composed of links between women, women and computers, computers and communication links, connections and connectionist nets” (Plant 2000, 335). The connections Plant speaks of here are evidenced by the possibilities contained in online forums, cyber-activist groups and knowledge-sharing communities which take place in cyberspace. In an era of ‘girl power’, ‘lipstick’ (McRobbie 1999), ‘stiletto’ and even ‘slut’ feminism cyberfeminism’s embrace and perhaps even mastery of realms previously off-limits to women and its challenge to notions of female technological ineptitude, struck a (power) chord with many (especially young, Western) women.
Groups formed online tagged with titles like Cybergrrls\(^8\) or Webgrrls\(^9\) proudly claimed a new generation of feminism, actively distancing them from their ‘foremothers’.

Cyberfeminism broke away from traditional feminism, and despite their shared banner of ‘feminism’, cyberfeminist solidarity with these earlier feminisms could be said to end here (Wakeford 2000, 355). In fact, these groups could even be said “to be ambivalent or even hostile to patterns of behaviour which they associate with an ‘older style feminist rhetoric’, and in particular the idea of a prescriptive or homogenous women’s movement” (Wakeford 2000, 355). In its place they assert an independent ‘girl power’ style of expression, which emphasises perhaps a form of feminism aligned with post-liberal feminism eager to step away from the ‘bra-burning’ stereotypes of 1970s and 1980s feminisms. These young women — and the emphasis is distinctly on youth — wish to take control of their own liberation, as Carla Sinclair is quoted as saying in DeLoach (1996) “Grrrls take responsibility for themselves — we don’t blame men for anything, but instead focus on ways to improve and strengthen ourselves. Grrrls enjoy their femininity and kick ass at the same time” (Wakeford 2000, 355). These cyberfeminist manifestations provide an interesting insight to current attitudes toward feminism, particularly by the younger women it often seeks to represent.

Cyberfeminism propelled young feminists away from collective action based on notions of solidarity and unity, and towards a more individualistic sense of liberation, informed by a greater awareness of difference and diversity between and amongst women.

Cyberfeminism was equally active in manifesting itself outside of academia, and originally flourished in fields of performance art, political satire and online community building. Sadie Plant identifies the Australian performance art collective ‘VNS Matrix’ (da Rimini, Starrs et al. 1991) as an early exemplar of cyberfeminist activity. In fact, the group is recognised as having started using the term ‘cyberfeminist’ at the same time Plant was on the other side of the globe. VNS Matrix started out as a digitised billboard displayed on the Sydney streets named *A Cyberfeminist Manifesto for the 21st Century* and was an attempt at viral communication (Plant 2000). Designed as a cyber-game in which players infiltrate the ‘Big Daddy Mainframe’, VNS was marked by its evocative language of resistance, empowered sexuality and suggestive organic imagery:

We are the modern cunt  
Positive anti reason  
Unbounded unleashed unforgiving  
We see art with our cunt we make art with our cunt  
We believe in jouissance madness holiness and poetry  
We are the virus of the new world disorder  
Disrupting the symbolic from within  
Saboteurs of big daddy mainframe  
The clitoris is a direct line to the matrix  
The VNS matrix  
Terminators of the moral code  
Mercenaries of slime  
...  
We are the future cunt

(da Rimini, Starrs et al. 1991)

The sexual empowerment and in particular the provocative language of ‘cunt’ was welcomed by cyberfeminists who found this challenge to perceptions of women’s sexuality and embodiment, and the challenge it presented to masculinity and male power, to be exciting and powerful. Creations like the VNS matrix offered up a vision of cyberspace which, far from excluding women and being perceived as a growing space for masculinity and misogyny, instead heralded a landscape of female sexual power, political subversion and an inversion of traditional norms around sexuality, in
particular in its support of queer sexualities and dominant female sexual behaviour. The ‘virtual’ nature of cyberspace enables fluid and malleable agencies which allow women to play with sexuality and sexual identity. This playfulness is liberating because it offers a sexual freedom to women too often denied them, and because it reveals the mutable nature of sexuality and sexual identity, opening up the potential for sexuality to be flexible and shifting in cyberspace, considering identity as separate from the body.

As media and cyberculture theorist Susan Luckman suggests, cyberfeminists “make much of the potential offered by the Internet to explore different identity constructions” (Luckman 1999, 41). Considerations of the body, feminism and liberation are projected into cyberspace. Cyberfeminists were quick to note that cyberspace holds great potential for finding ways to circumvent gender stereotypes which are usually reinforced through visual cues of gender identification. In virtual spaces — including the rapidly growing spaces of Multi-Users Dungeons (MUDs) and Massively Multiplayer Online Role Playing Games (MMORPGs) — these cues are absent, and an opportunity exists to potentially explore spaces without gender cues, or to try on the gender which has previously been ‘other’ to the user. In a feminist consideration of identity, cyberspace and cyberspace remind us about the performative nature of identity and reveal to us their constructed-ness, and their influence through and on social phenomena. Like proponents of computer-mediated communication, cyberfeminists see “great transformational benefits of Internet ‘play’ and exploration” (Luckman 1999, 40) and the ability to explore and manipulate gender is most enticing. These spaces offer new modes of communication, so that a shift actually occurs in the ways we communicate online, and may in fact hold the potential to provide a “level playing field” (Luckman 1999, 40) which has been separated from the usual gender or racial cues which alter
equity in human face-to-face relations. This kind of identity ‘play’ online highlights the subjectivity of the individual and the construction behind markers of identity, and finds a space which allows these markers to be tried on, cast off or manipulated.

Despite claims of gender destabilisation and the freedom to ‘try on’ another gender, political theorist Judith Squires reminds us that for the most part, gender categories have remained stable, and the internet is yet to live up to the enormous potential for gender deconstruction that cyberfeminists (among others) have claimed for it (Squires 2000, 364). Similarly, Susan Luckman notes that many women will ‘masquerade’ online as men in order to avoid harassment or unwanted attention. In taking on the male persona, they simultaneously escape their potential harassers, and are able to experience the power and autonomy usually experienced by the male online, free from harassment, unwanted attention or sexual innuendo (1999, 41-42). However this ‘freedom’ becomes quickly problematic for two reasons. Firstly, this position ignores embodiment on a fundamental level. It assumes that the body can be ‘shed’ online simply because it cannot be seen by other users, despite the fact that users online are at all times embodied in their online communications, and supposes gender can be separated from sex in a fairly unproblematic way. Secondly, if women find they can move through cyber-spaces more easily as a male persona, in taking up the habit of logging on as men and enjoying the freedom contained within that identity — which should in the process be actively illustrating gender inequity — “in practice the status quo is affirmed; it is men’s agency which remains unquestioned online” (Luckman 1999, 42). We must question then whether these seemingly liberating moves in cyberspace are truly opening up new and exciting potential for critiquing gender construction, or if it simply offers us easier ways
to join those with the power, and perhaps shifting the power imbalance onto another social group or category with less technological know-how or awareness.

These are important critiques, especially if the trend is one where women simply become used to ‘performing’ maleness online, and in the end, nothing changes, the same structures which sanction male domination are perpetuated. Even worse, technologically literate women online will be adding their prowess to the stream of assumptions regarding male technological competence and female technological illiteracy.

Cyberfeminism is regularly accused of being apolitical (Squires 2000; Sofoulis 2002). Despite deeply political works by writers like Haraway, cyberfeminism risks dropping political analysis and instead simply embracing cyberspace uncritically. Sadie Plant for example, expounded a form of feminism that never specifically articulated political action; and in the end her theory has “no sense of a political project at all” (Squires 2000, 369). The metaphorical power of the cyborg, and the concurrent strength of cyberfeminism as a body of theory is so great, that she (the cyborg and the cyberfeminist) appears political even in inaction so that “[i]n effect, despite her global movements and avowed empathies, the cyborg feminist need not do anything in order to be political” (Stabile 1997, 512). Where writers like Haraway presented a model in the cyborg which was explicitly political, offering ways to think through complex issues relating to material difference, “for others it offers the option of transcending them altogether; of leaving the messy world of material politics behind and entering a post-political utopia of infinite possibility” (Squires 2000, 369). For Squires the point is that we must not abandon political projects and we must remain alert to the material,
political ramifications of our engagements. Two central issues emerge here: firstly, we need to be mindful of the *creative* project of imagining the role of technologies on *our terms*, and secondly, we need to be attentive to the political project of the development of “regulations and controls which actually govern the form and uses of these technologies” (Squires 2000, 370). Squires reminds us that this is a dual project, and regardless of how many claims are made concerning a future (and a present) in which the line between the virtual and the real are no longer distinguishable “we cannot afford to engage in political utopias alone: we still need to negotiate with the mechanisms of state and market” (Squires 2000, 370).

Critiques have been levelled at the tendency toward the cyberfeminist focus on techno-utopias. For example, cyberfeminist-inspired projects produced some disillusioning results despite the optimism of cyberfeminist visions of the techno-present and future. As Sofoulis notes (2002), Cornelia Sollfrank’s investigation of female hackers found very few in her search and regrettably noted in her report that “[m]y clitoris does not have a direct line to the matrix — unfortunately. Such rhetoric mystifies technology and misrepresents the daily life of the female computer worker” (cited in Sofoulis 2002, 100). These critiques illuminate a degree of mysticism at work in cyberfeminist articulations, placed in contrast to the material realities of women working in computer-related fields. The evocative language of VNS matrix and other cyberfeminist visions, proved essentially unhelpful to these practical investigations.

The traditional male-dominance of areas concerning technology means that Computer Mediated Communication (CMC), as Luckman tells us, can actually *facilitate* sexism and misogynistic behaviours in spaces like the internet (Luckman 1999, 39). For
example, male users traditionally outnumber female users in various forms of CMC. While this demographic is shifting as more and more women ‘get online’ it remains true that the internet contains a disproportionate amount of pornography for men, echoing real-life trends, and that computer games are designed with a traditionally ‘masculine’ user in mind. These examples evidence the possibilities for perpetuating sexism in virtual environments and demonstrate why there is feminist wariness towards cyberspace.

Despite cyberfeminist optimism toward the possibilities contained within cyberspace, the dream of escaping gender online seems something of an illusion: “[c]yberspace cannot escape the social construction of gender because it was constructed by gendered individuals, and because gendered individuals access it, in ways that reinforce the subjugation of women” (Luckman 1999, 36). If identity is understood in terms of the boundaries of the self, and where those boundaries are drawn, we must consider who has the power to draw those boundaries. In the hope that the self can be redefined in cyberspace, it is vital to bear in mind “that our society is still deeply patriarchal, and…we cannot assume that current cybernetic developments will not also result in ontologies that, although redrawn, are none the less still highly gendered” (Squires 2000, 362). For political theorist Judith Squires it is critical we remember that “the boundaries of the self were drawn with a patriarchal pen” (Squires 2000, 362) and hence any attempt to redefine the self or to seek reformulation of the concept of the self is necessarily shaped by patriarchal influence.

However, I think the potential which resides in cyberspaces still holds promise, if only in offering a challenge to our perceptions about the fixity of identity construction — one
of the major reasons these spaces held appeal for cyberfeminism. Our ability to ‘play’ with these previously fixed roles of identity in cyberspace “raises key poststructuralist questions regarding the uselessness of conceiving identity in terms of single, and unified, non-contradictory subjectivities” (Luckman 1999, 41). In this view, cyberspace facilitates the understanding of gender as a mutable, constructed state.

In other feminist views however cyberspace technologies were capable of positively emphasising feminine essences amongst women. Sadie Plant’s cyberfeminism supported the idea that women could find not merely potential in technological engagement, but that they were in fact particularly well suited to it because of their female status. Tracing a historical connection between women and early forms of ‘programming’ technologies, such as those found in the ancient art of weaving (Plant 1997) Plant argued that women’s intimate history and literacy with technological interaction has been hidden from us. In particular, she follows the path of Ada Lovelace, a 19th century female mathematician credited with writing a comprehensive description of an early form of computer — the analytical engine (Plant 1997). Plant’s thesis is that despite the popular conception of women’s alienation from and incompetence with technological devices, they were in fact, the first to actively engage with emerging technologies; they were the “first telephonists, operators, calculators” (Plant 2000, 330). They were also among the first computer programmers, of whom Ada Lovelace stands as the primary exemplar. The analytical engine of Lovelace and her colleague Charles Babbage is inspired by the jacquard loom — another technology traditionally used by women.
Plant contends that an advanced technological system such as cyberspace, which she also refers to as ‘the matrix’, is a space in which women should feel especially comfortable (Plant 2000, 328). She finds that cyberspace is inherently a female space (Plant 2000, 333) one which is in reality the ‘natural’ realm of women, not men. According to Plant this space is suited to women as opposed to men, and as Susan Luckman points out, “although the dominant men do not yet know it, computers do not serve them or their interests” (Luckman 1999, 38). Instead, the processes involved in negotiating cyberspace are far more suited to women conversant with a history of weaving, of movement between and across tasks and of stitching, quilting and patching together elements and alliances. Plant finds this connection to be one which validates women’s familiarity and connection with computer technologies: “[w]eaving is the exemplary case of a denigrated female craft which turns out to be intimately connected to the history of computing and the digital technologies” (Plant 2000, 332). In constructing a narrative which draws parallels between software programming and these traditionally female arts of weaving, quilting and knitting, Lovelace is not Plant’s only source. She also draws on Freud’s work of interpreting female penis envy, who identifies (astonishingly) that weaving and plaiting are women’s only true art — though it is significant that he suggested this was the case because women were essentially copying the mat of pubic hair which covers their ‘lack’ of a male member (Plant 2000, 332). Freud’s back-handed acknowledgement of women’s connection to histories of weaving simultaneously denigrates the practice of weaving: “[t]his is a move which dissociates weaving from the history of science and technology, removing to a female zone both the woven and the networks and fine connective meshes of the computer culture into which it feeds” (Plant 2000, 332). In so doing, Freud emphasises a
distinction between ‘high’ and ‘low’ technologies, valuing the ‘high’ as complex masculine space; and relegating the ‘low’ to the simplistic realm of the feminine.

It is relevant to note an overlapping metaphor popular in ecofeminism. Karen Warren advocates ‘quilting’ as a valuable concept for conveying notions of patching together difference, emphasising diversity and community acts of co-operation (Warren and Wells-Howe 1994). These examples show an interwoven history both practically and linguistically between concepts and actions of weaving, quilting, knitting and plaiting and computer technologies and networking in relation to ‘women’.

Others too, have recognised the ways in which cyberspace could be considered ‘female’, though in less endearing terms. Zoe Sofia notes the way that computer hacking treats cyberspace as ‘female’ in the way that cyberspace “can be imagined as a maternal or feminine body to be penetrated, cut up and manipulated in quests to appropriate and control resources” (Sofia 1999, 60). This perspective problematises Plant’s appeal to ‘female space’ by showing how it is not an intrinsically positive concept, and can in fact be used to perpetuate the conceptual domination of women as passive in contrast to the active agency of the male (hacker).

Nevertheless, Plant’s work and her astute and powerful observations concerning connections between weaving and computer programming were vital to investigate for fully exploring ways of being in contemporary technoculture. The dispersed, anarchic and decentralised structures of cyberspace are especially suited to women, according to Plant. In a phallic world of male centrality and dominance, the virtual space of the matrix presents a challenge to masculinity which has always defined itself as the one,
the centre. In Plant’s vision, confronting cyberspace for women is a ‘natural’ act, whereas for men, those who have always ‘fit’ with technology, cyberspace is not so welcoming: “[i]f the phallus guarantees man’s identity and his relation to transcendence and truth, it is also this which cuts him off from the abstract machinery of a world he thinks he owns. It is only those at odds with this definition of humanity who seem able to access this plane” (Plant 2000, 333). For Plant, the partial, non-fixed nature of traditional female identity construction sets women in harmony with cyberspace in a way masculine singularity cannot — and again she refers to Lovelace as an example of this suitability. She most interestingly notes how Alan Turing, prosecuted for being a homosexual, and forced to take oestrogen as an alternative to imprisonment, was then inspired to produce a new set of brilliant mathematical models, of which the Turing Machine was one (Plant 2000, 333). Her argument here is that it is feminised states of being which have proved the most productive and influential on worlds of cyberculture and computing.

Plant’s writings in *Zeros and Ones* (1997) and *On the Matrix* (2000) have been heavily criticised, in particular by those cyberfeminists who followed after her. Plant’s position of advocating cyberspace as female space — a position ratified by writers like Dale Spender (1995) who also believe women are more ‘attuned’ to the operations and communications of cyberspace (Luckman 1999, 37-38) — whilst optimistic and powerful in its suggestion and potential, is ultimately essentialist. The position appeals to a reduced notion of female essence, suggesting that at the heart of each female human lies something innately ‘feminine’ which accounts for ‘women’s experience’ or ‘women’s ways of communicating’. In the context of feminist theory which attempts to deconstruct notions of inherent femaleness, these arguments are problematic. As I have
argued, the debates which circulate around the strengths and limitations of cyberfeminisms reveal important issues concerning identity, embodiment and questions of ‘femininity’, especially when questions of essence surface.

Despite Plant’s position at the forefront of early cyberfeminism, and her call to welcome cyberspace technologies with passion and optimism, her version of cyberfeminism differs significantly from other prominent cyberfeminist theorists. In contrast to theorists like Donna Haraway who invoke the cyborg figure as a model of resistance and encourage an ongoing analysis and critique of feminist involvement in technological spaces, Plant by distinction does not present such a challenge. She believes instead, that in post-patriarchy, feminist activity and contribution is not required. Rather for Plant, in Susan Luckman’s analysis, we are witnessing an inevitable course unfold, “an inescapable process of male redundancy” which “does not require organised feminist intervention” (1999, 39). This apolitical position can be found in a variety of cyberfeminisms, largely due to the assumption that simply interacting with technology in general and cyberspace in particular, regardless of the nature and context of that engagement, will be liberatory. As I have suggested in the earlier discussion of the limitations and fear which surround technology and cyberspace from a feminist perspective, some cyberfeminisms are nonactivist, seeing determinism in technology which in itself will ensure female liberation.

What Haraway and Plant do share is an appreciation of some the metaphors which increasingly permeate digital frameworks and cyberspace. Sociologist Nina Wakeford (2000, 356) highlights Haraway’s interest in the ‘network’ as a potentially powerful addition to “the feminist toolkit”; the image of the network suggests “the profusion of
spaces and identities and the permeability of boundaries in the personal body and in theody politic” (Haraway 1991b, 170). The “network ideological image” is significant for
Haraway because it explains and identifies the concept of boundary crossings between
the personal and political and is most promising in its dual definition as both a corporate
term and a feminist strategy. This ‘schizophrenic’ switch of meaning is exemplary
practice for a feminist cyborg — the ‘toggle’ between multinational strategy and
feminist solidarity practice is perfect for challenging binaries, as Wakeford (2000, 356)
reminds us. Importantly here Haraway employs another term advocated by Plant: the
weaving metaphor. Haraway emphasised that: “weaving is for oppositional cyborgs”
(Haraway 1991b, 170). This statement recognises the historical ties to women and
weaving, and it offers rich imagery which empowers women in digital, networked
worlds.

As I will argue throughout this thesis, weaving is also an apt metaphor in technopagan
contexts as a symbol for the web-work of spell-casting and the perception of
interconnectedness within the neopagan worldview. Wakeford (2000, 356) suggests that
weaving is akin to ‘surfing’ online; to building and crossing online communities; to
hyper-linking and wikis on the web and the interplay between the social and the
electronic in cyberspace. Finally, the metaphor of weaving is alluring because it
subverts traditionally ‘masculine’ ideals about the power relations which operate in the
creation and negotiation of new spaces and places. As a result, in place of “the notion of
the frontier, weaving could be used to emphasize the relationships within electronic
networks, and between pages themselves, as well as the individuals who create them”
(Wakeford 2000, 356). Haraway’s emphasis on metaphor and its rich value is once
again brought to the foreground to remind us how deeply representations deliver
meaning. The emphasis on weaving is another example of the importance of metaphor I have argued for in this thesis, which is reflected in technopagan agency.

Cyberfeminism is a movement infused with possibilities and optimism. I have shown how it has approached the uncertain realm of cyberspace and embraced it as an avenue toward liberation. While some cyberfeminists see this project as one of ‘invading’ masculine space and claiming it as their own; for others, cyberspace ‘belongs’ to women. Tensions exist between these two approaches, with the patriarchal dangers of uncritical technological expansion articulated in the previous discussion of technophobias.

The technophilic response to feminist technophobia has proven equally insufficient due to its totalising stance. Cyberfeminists have presented an alluring vision of cyberspace replete with disembodied cyber-liberation and the subversion of ecofeminist trends away from the technological and towards the ‘maternal’ and ‘nature’. Arguably what cyberfeminism has lacked is an ability to measurably, critically and significantly differentiate within itself the strengths and weaknesses of the drive toward a cyborg existence where technological devices shape and (re)define agency in fundamental ways. For some critics within feminism including Judith Squires, cyberfeminism could be its own worst enemy in masking the true potential of cyberspace within a barrage of uncritical outpourings of technophilia without enough critical attention to the dynamics at work such that “whilst there may be potential for an alliance between cyborg imagery and a materialist feminism, this potential has been largely submerged beneath a sea of technophoric cyberdrool” (Squires 2000, 360). As a distinct attempt to find an alternative to the ecofeminist technophobia which refused to engage with technology,
cyberfeminism has failed in so far as it “frequently ends up sounding largely indistinct from the form of mystical maternalist feminism of which the technofems are so scathing” (Squires 2000, 368). In search of a figure which could avert the essentialism identified in the goddess figure of ecofeminism, cyberfeminists ended up taking on the cyborg as “an icon for an essential female being” (Squires 2000, 368) and parallels have been drawn between Plant’s appeal to a liberated cyberfeminism (1997) and Mary Daly’s goddess (1973) within ecofeminism as similarly universalised and essential creatures (Squires 2000, 368).

Where ecofeminism has been sternly reminded of its own errors in identifications which essentialise the female or romanticise the feminine; cyberfeminism needs equally to be reminded that the material matters, and that we must hold on to the “political pursuit of the practical manifestation of an appropriate technology: unintimidating, accessible and democratic” (Squires 2000, 371). Whether technophobia or technophilia is at issue, they both make incorrect assumptions (Stabile 1997, 510) and as a result will necessarily present unsound analysis. The notion of either the full embrace or wholesale rejection of technology are totalising approaches and are therefore fundamentally flawed.

What emerges here is the ongoing tension where on the one hand, formulations of feminism articulate a fragmented, constructed sense of self — one devoid of essences. On the other hand, the material realities of inhabiting a patriarchal world in a female sexed body remain central feminist issues, especially in the context of scientific interventions into women’s bodies, legal challenges to women’s autonomy regarding their own bodies and of course, the implications for embodiment in an increasingly virtual world. How can feminists negotiate these equally important considerations,
without affirming the limitations that go with failing to recognise the multiplicity of feminist concerns? The true danger lies in the absolute affirmation of one position coupled with the outright dismissal of the other. Perhaps the greatest failures of cyberfeminism and anti-technology feminism has been their absolutist approach, embracing either technophilic euphoria at the liberation perceived within cyberspace or the regressive turn away from technology to be found in some forms of ecological and cultural feminisms. Perhaps a partial explanation for this distinction can be answered by Carol Stabile who suggests that we study the cyborg and related cyberfeminist explorations because it is sexy, savvy and fun. To investigate the lived reality, the material conditions and economic disadvantage for women is far more dull and grey and of course, more depressing. Stabile suggests feminist theory needs to focus more on the realities of women’s lives, and turn away from the first-world academic tendency to focus on signs and representations (Stabile 1994). My preference here is to enter a dual project in which the exploration of the material realities alongside the utopias of signs and metaphors are taken seriously as equally valuable investigations capable of giving form to the feminist future.

To address all of these concerns and construct a feminist model attendant to the complexity of feminism’s interaction with technology, subsequent theorists have proposed alternatives to cyberfeminism as viable ways to move forward in these considerations. I explore technofeminism as a potent response to technophilias and technophobias in feminism; a tempered remedy to the issues raised in this chapter so far. Judy Wajcman emphasises the need to reject the totalising stances articulated previously here, and to instead approach technology as complex, negotiable, and mutable.
Recognition of these [technological] opportunities is not to endorse utopian ideas of cyberspace being gender-free and the key to women’s liberation. I remain sceptical of exaggerated claims by cyber-gurus and cyberfeminists about the Internet being the basis for a new form of society. Rather, it is to stress that the Internet, like other technologies, is flexible and contains contradictory possibilities (Wajcman 2004, 120).

Acknowledging the importance of cyberfeminism whilst remaining mindful of some of its shortfalls, Wajcman has attempted to articulate technofeminism (Wajcman 2004) as an alternative to the breach between technophobia and technophilia. This model of feminism endeavours to build on “the insights of cyborg feminism, but grounds it firmly in a thoroughgoing materialist approach to the social studies of technology” (Wajcman 2004, 103). Taking the analysis of cyborg feminisms on board and bonding it with a constructivist theory of technology, Wajcman is hopeful of creating a model in technofeminism capable of more adequately addressing feminist agendas without resorting to extremes of technophobia or technophilia. In approaching technoscience from a feminist perspective in this fashion, Wajcman’s hope is that technofeminism “eschews both the lingering tendency to view technology as necessarily patriarchal and the temptation to essentialise gender” (Wajcman 2004, 103). Wajcman sees both the cyberfeminist approach, alongside ecofeminism, as perspectives that biologically essentialise women. With the exception of Haraway’s material-semiotic actors — which I have previously raised in this thesis as central to my investigations into hybrid agency — which successfully avoid this essentialism, too often has cyberfeminism made claims about ‘women’ and in particular in regard to their own ‘special’ relationship to technology.

The technofeminist approach sees gender and technology as a “mutually shaping relationship” (Wajcman 2004, 107), so that concerns regarding the patriarchal nature of technology may be reinscribed as a two-way dynamic in which both spheres are
influenced by the other, thus rendering technology useful to feminism. Wajcman reminds us of the importance of remaining aware of the sociotechnical when considering technology: “it is never merely technical or social” (Wajcman 2004, 106). Thus we acknowledge the complexity of networks which converge in the ‘technological’, revealing not a neutral realm of ‘things’ but intricate social matrices of people, organisations, theories and artefacts (Wajcman 2004, 106).

Despite Wajcman’s endorsement of Haraway, she is nonetheless wary that the ‘cyborg solution’ can easily lead to a fetishisation of technological developments (Wajcman 2004, 108). The technological determinism found in strains of cyberfeminism “assign too much agency to new technology, and not enough to feminist politics” (Wajcman 2004, 127-128). Wajcman’s technofeminism is an attempt to redress this tendency, resulting in a new form of feminism she sees as offering a twofold promise, that is “a different way of understanding the nature of agency and change in a post-industrial world, as well as the means of making a difference” (Wajcman 2004, 130). Sidestepping the determinist “cyberdrool” (Squires 2000, 360) of cyberfeminist discourse, and avoiding the essentialist technophobia of ecofeminism, Wajcman presents her model for technofeminism as an explicitly political discourse equipping feminists with the proper tools for engaging with and critiquing technoscience.

Wajcman’s model of technofeminism is a useful response to the extreme divides between technophobia and technophilia in feminist approaches to technology. Eager to temper these extremes whilst importing the insights within both of these positions, Wajcman offers a promising manifestation of technofeminism. Charting Wajcman’s characterisation of the technofeminist position shows the pivotal role the cyborg plays
in feminist ontologies of technology. These investigations highlight the need to understand agency in relation to technology, and the various approaches which can be employed to consider agency. The cyborg ontology and its divergent partner, the goddess, form a key metaphor of agency within this thesis. To heighten and flesh out this relationship, a more in-depth consideration of the cyborg is pertinent. In the next section I explore the beginnings of the cybernetic organism, its representations in popular culture and (science) fiction, and of course, Donna Haraway’s characterisation of the cyborg as the hybridised agency of the material-semiotic actor.

**Cyborgs as hybrid agency**

Solving the many technological problems involved in manned space flight by adapting man to his environment, rather than vice-versa, will not only mark a significant step forward in man’s scientific progress, but may well provide a new and larger dimension for man’s spirit as well (Clynes and Kline 1995, 33)

Having presented the spectrum of feminist approaches to technology in the previous section, I suggest that feminist discussions about technology and cyberspace, which have broadly divided between ecofeminism and cyberfeminism, have factionalised the cyborg and goddess figures. I seek to emphasise the complexities of cyberculture in relation to feminism and to disrupt the ‘cyborgs versus goddesses’ divide. This thesis uses the technopagan as a way to reconcile the cyborg/goddess figures and articulate an agency capable of flourishing in contemporary culture. In this section I present an exploration of the cyborg in a variety of manifestations, and as critical to the hybridity of technopagan existence. I begin by introducing the cyborg as it was first articulated in 1960:

What are some of the devices necessary for creating self-regulating man-machine systems? This self-regulation must function without the benefit of consciousness in order to cooperate with the body’s own autonomous homeostatic controls. For the exogenously extended organizational complex functioning as an integrated homeostatic
The cyborg, or cybernetic organism, is a creature of both organic and technological makeup. The cyborg was first introduced as a concept by Manfred Clynes and Nathan Kline in 1960 in the article *Cyborgs and Space* (Clynes and Kline 1995). For Clynes and Kline the cyborg operated as a potential way to overcome the limits of the human body presented in the pursuit of space flight. They saw the possibility for a new kind of evolution in which humans took an active role in their own “biological evolution” (Clynes and Kline 1995, 29) freed from the constraints of heredity (Clynes and Kline 1995). Rather than the traditional mode of human interaction with the environment, the cyborg model was one in which humans adapted to their environment as opposed to attempting to alter the environment to suit human needs. In the context of space travel, this might involve altering the way humans breathe, eat, sleep, or eliminate waste. These adaptations would also reduce the need to ‘bring our environment with us’, instead modifying the body and what it requires to the environment.

It is significant to note that Clynes and Kline emphasise the need for cyborg solutions because without them, ‘man’ becomes a slave to ‘his’ machine, constantly monitoring its operations and functions, as opposed to the cyborg state of subconscious self-regulation. Embedded in this suggestion is the implication that the cyborg state will allow us to become more fully human: “leaving man free to explore, to create, to think, and to feel” (Clynes and Kline 1995, 31). This original cyborg vision was not located in a disconnected, robotic self, but rather was faithful to the notion of being more human, and that without these alterations we would actually become less human. They argued that without these enhancements, human beings are isolated and removed from new
environments, whilst a cyborg state could draw humans closer to their environments. They further posited that the cyborg state enables us to enter ‘hostile’ environments and populate them in ways impossible in the purely human state. These enhancements then, could allow for more direct and expansive experiences of environments.

While Clynes and Kline defined and introduced the cyborg to the world, the hybrid human figure of organism and machine is popularly known through media and fiction. Raising the term ‘cyborg’ will rarely elicit a blank stare in response — in popular culture, we ‘know’ what cyborgs are because we see them in film, television, and various other representations in the media. Because these representations deeply shape and inform discussions and understandings of what it might mean to ‘become cyborgs’ it is important to explore these popular representations in more detail, and further because these investigations reveal the importance of fiction in the construction of legitimate and responsible ways of being. It is also necessary to contrast these representations with Haraway’s cyborg, positioned as critical to this thesis, because the technopagan incorporates her cyborg ontology into its ways of being. In this section I consider representations of cyborgs in cyberpunk and science fiction, and feminist commentaries of these representations. Heavily socially coded and almost always gendered, cyborg fiction reveals a great deal about what we imagine the human-technology relation implies, and of course, exposes narratives concerning embodiment which are so crucial within feminist discourse.

Cyborgs emerge in popular memory predominantly through cyberpunk fiction and science fiction film. William Gibson’s *Neuromancer* (1986) remains the primary marker of the rise in passionate engagement with cybernetic ontologies, offering up to the
imagination a world of the not-too-distant future which has seen the total fusion of human and machine. In the cyberpunk world, it is the hacker who reigns supreme. Deck jockeys, crackers and coders are the heroes of our new future, they are the underground resistance, the rule benders and breakers, the colourful misfits of a cyberfuture where bodies can be modified and enhanced, sexual desires of every persuasion can be satisfied for a price and cyberspace is as ‘real’ as Real Life (RL). That is not to suggest the Gibsonian worlds are openly a site for human liberation. These are dystopic visions for the future, where there is a sense of chaos that the order of nation and state has dissolved into a mass of indulgence, consumption and exploitation. Women in particular remain as objects of abuse and subordination, conditions which can only be escaped through technological enhancements which require money or some other form of capital. This can be seen in the *Neuromancer* character of Molly for example — the object of the hero Chase’s desire — who has ocular enhancements and fingernails that protrude with deadly sharp blades at will. Her personal power, independence and lack of sexual inhibition derive greatly from these enhancements.

Interestingly, Gibson is often cited as the key protagonist in cyberpunk writing and of course, for his coining of the term ‘cyberspace’. What are too rarely acknowledged are the female science fiction writers who preceded him, who wrote unique and powerful visions of techno-futures. As Sofia (Sofia 1999, 60) has noted, Gibson has himself acknowledged his own debt to these works, including Anne McCaffrey’s *The Ship Who Sang* (1970), Vonda McIntyre’s *Superluminal* (1986) or the work of James Tiptree Jr (Alice Sheldon) including *Ten Thousand Light Years From Home* (1977). Feminist science fiction or often even science fiction written by women tends to explore notions of hybridity and the maternal body and its transformation in a futuristic world. Octavia
Butler’s *Xenogenesis* series (1987; 1988; 1989) follows a female heroine Lilith, a ‘woman of colour’, and her role in a newly hybridised human-alien race. Considerations of sexuality, given the alien race has *three* sexes, are presented as a dilemma between sexual norms and sexual desire (or, what I *should* feel, versus what *feels* good). This dilemma is a particular problem for many of the males in the story, unable to move beyond ideas about homosexuality, or the diminishment of their masculinity in partaking in alien sex. These narratives present an interpretation of agency which aligns with technopagan agency, and thus is important to this project. Further, Butler’s text is mentioned by Haraway in *A Cyborg Manifesto* as an example of post-gender feminist visions, illustrating its relevance to feminist discourse and my own study, and illuminating again Haraway’s statement that “the boundary between science fiction and social reality is an optical illusion” (Haraway 1991b, 149). In an additional homage to the political power contained in these feminist science fiction stories, Haraway’s *Modest_Witness@Second_Millennium.FemaleMan© MeetsOncoMouse™* (1997) makes a reference in the title to the “FemaleMan” — a direct link to Joanna Russ’ *The Female Man* (1977) another science fiction text which presents gender challenges to our visions of the future.

Imagery of cyberculture emerging from work like Gibson’s, while embraced by cyberfeminists as a site for great liberatory potential, is nevertheless problematic. Sites of cybercultural activity often perpetuate many of the constructions of women feminism seeks to avoid. With regard to cyberpunk writing for example, representations of women frequently conform to stereotypical notions about women, the female body, and in particular, female sexuality. Cyberculture theorist Claudia Springer reminds us that a common story in cyberpunk is one which circulates around a cybernetic female figure
who seeks revenge for some traumatic past, usually involving sexual and/or physical abuse (Springer 2000, 342). This figure presents a dilemma because she “is simultaneously one of the most compelling and one of the most problematic figures in cyberpunk, for her appeal on a feminist level is frequently undermined by her conventional patriarchal presentation” (Springer 2000, 342). Hidden within these narratives concerning cyber-females is a tale of caution regarding female sexuality and liberation. This can be seen in the case of the novel *Lady El* (Starlin and Graziunas 1992). It tells the story of a young woman killed in a tragic accident, whose brain is donated to a secret project in which it is hooked up to a series of powerful computer systems with which she can interact and control; but she is driven to violence and power by her personal memories of racism, poverty and traumatic childhood abuse at the hands of men. The lesson we are delivered is that if a woman escapes her role as the victim or the oppressed, “her autonomy and sexual independence can rage out of control and destroy the world” (Springer 2000, 345). What kind of representation we should read into these characters is ambiguous, and has sparked passionate debate as to whether female cyborgs are figures of female liberation, pornographic male fantasy or perverse fear.

Many feminist critics have noted that much science fiction writing tends to reinforce traditional notions of ‘the feminine’; further, social and especially patriarchal fears regarding technology tend to be placed onto the female figure (Doane 1999) as seen in the example of *Lady El* whose immense technological power risks the destruction of the world. Whilst some science fiction writers, particularly ones writing from a feminist perspective, attempt to undermine and rupture sexual identities, there remains an attempt on the part of many writers to maintain and perhaps even fortify these existing
boundaries of masculinity and femininity as they traditionally exist. Feminist, film and cultural theorist Mary Ann Doane similarly contends that female cyborgs often embody a form of female sexuality which is frequently unpredictable, voracious and destructive — either to herself or to others. Embedded in narratives involving female cybernetic organisms we regularly find a figure that could ‘go wild’ at any moment, unleashing her insatiable and devouring sexual appetite on her male victims (Doane 1999). As in the case of *Lady El* the lesson offered up within the text is that a “powerful sexual woman poses a terrible threat” (Springer 2000, 347) and so the male fascination with the dichotomy between the Madonna and the whore, the virgin and the vamp, continues.

Similarly, Claudia Springer observes that where cyborg imagery offers up a world where the boundaries between human and technology is thoroughly broken down, it does not tend to do the same for gender (Springer 1999, 41). The perpetuation of gender stereotypes, whether they reside in a fully organic or cybernetic body, persist to such an extent that “one does not have to be an eco-feminist (let alone a goddess) to recognise that most of the cyberimagery and cyberfictions produced to date have done little to challenge patriarchal stereotypes of gendered bodily difference” (Squires 2000, 364). The cyborg in these contexts is almost always gendered. For example, the *Terminator* (Cameron 1984) is the story of a cyborg sent from the future to destroy a boy who will become the rebel leader for humanity’s salvation from machines. The cyborg assassin, played by the extreme physical presence of Arnold Schwarzenegger, has a metal internal skeleton covered by human flesh, who relentlessly pursues his target marked for death. In *RoboCop* (Verhoeven 1987) we are told the story of police officer who after being fatally injured in the line of duty is transformed into the first model of cyber cops to replace human police in the violent society of the future. The critically injured police
officer encased inside a robot-style exterior, struggles with his remnant human memories, trapped in his cybernetic self. In the same way that male cyborgs like these are the height of traditional masculinity, contained within the female cyborg are many features associated with stereotypical femininity. Her role too is traditionally feminine in that she is often cast in relation to a male figure, as his love interest, or as a figure in need of his salvation/rescue (Balsamo 1999). Despite the reinforcement of these dichotomies, the female cyborg remains a worthy site of exploration because “female cyborg images do more to challenge the opposition between human and machine than do male cyborgs because femininity is culturally imagined as less compatible with technology than is masculinity” (Balsamo 1999, 151). These issues illustrate the limitations of certain cyborg representations, which can be contrasted against Haraway’s cyborg figure which is not gendered in the same ways, because it is a vision of a post-gender agency.

Nevertheless, it is still useful to investigate female representations of cyborgs within patriarchy. In a world where masculinity is traditionally associated with rationality, science and technology, a male cyborg does little to challenge human-technology relations. The constructions of humanity in human-technology relations remain ostensibly the same, and conform to mainstream ideals regarding technology. A female cyborg on the other hand, gendered within the ‘feminine’ confines of emotion, sexuality and weakness is constructed as incompatible with technology, and therefore mismatched with her ‘masculinised’ cyber-self, instantly challenging the dynamics involved in the human-technology relation (Balsamo 1999, 149). Feminist and new media theorist Anne Balsamo contends that female cyborgs are challenging because they “embody cultural contradictions which strain the technological imagination.”
Technology isn’t feminine, and femininity isn’t rational” (Balsamo 1999, 151 emphasis mine). What remains to be considered here is something of a dilemma: the figure of the cyborg, especially embodied as female, is a jumble of oppressive and liberatory ideals; she remains an enigma, potentially empowering, and possibly pornographic. The ‘hardwired’ women of science fiction stories “clearly embody a fetishised male fantasy, but they also represent feminist rebellion against a brutal patriarchal system” (Springer 2000, 343). This ambiguity is strangely appropriate; in the midst of a debate which attempts to consider whether a hybrid agency like the cyborg can offer up liberation or continued oppression the most fitting answer becomes both ‘yes’ and ‘no’. It is this ambiguity which accounts for why the cyborg is useful as a hybrid agency and it is this ambiguity which is taken up in Haraway’s cyborg figurations.

Sexuality occupies a central place in the imagery of cyberpunk fiction. These elements are often celebrated in cyberfeminist circles, where the cyborg’s sexual status is one of its most appealing elements: “[p]leasure (erotic pleasure in particular) and desire are very much at the core of the cyborg as envisaged by its feminist proponents” (Luckman 1999, 39). However the relationship to the body in cyberpunk is a troubled one. The body is simultaneously transcended and deeply present in cyberpunk narratives. The well-worn science fiction desire to escape the meat, as Gibson put it (1986), delivers enlightening insights into both our view of the body in the present and the desires we place onto the futuristic body. They further articulate the potential for a body-less existence, so that what is offered in these mediums is an uneasy relationship to the body — especially the female body. For Sadie Plant this desire for bodily transcendence is deeply present in technocultures: “[d]riven by dreams of taming nature and so escaping its constraints, technical development has always invested in unification, light and
flight, the struggle for enlightenment, a dream of escaping from the meat” (Plant 2000, 334).

Cyberpunk articulations of the human relationship to embodiment are not confined to fictional renderings alone; they exist in our virtual worlds, in academic discourse, and in biomedical visions for the future. Traditional masculinity, in its reification of the mind and denigration of the body restates its desire to accomplish a heightened state of being through total transcendence of the body, a view which could be traced back to the Platonic ideal that the physical is but an inferior reproduction of “a purer, ideal realm of perfect form” (Graham 1999, 429). It does this however, whilst simultaneously holding onto the body in these futuristic imaginings of the cyborg, responding to our ontological need for our existence to be somehow located, residing in a physical body, one that feels, breathes, and fucks. The dream of flight from the body is perhaps driven by a double desire — on the one hand a kind of perverse hatred and desire for the female body, as the object of heterosexual desire and domination, and the giver of life, manifested in some kind of ‘womb envy’. On the other hand, the drive to escape the body is also about escaping nature, of the achievement of total human autonomy in the attainment of existence which does not rely on materiality and embodiment. Most importantly, it is about escaping mortality, the final masculine challenge to defy the boundaries of life and death.

This exploration of the cyborg in popular fiction elicits some useful and informative readings of the cybernetic organism. The cyborg in these narratives is almost always gendered, challenging the notion of a post-gendered future embodied in the cyborg. These fictions reveal the way that female figures and cyborgs in science fiction are
always sexualised, whilst males often remain neutral. The deep embodiment of the
cyborg as manifestly physical similarly challenges the vision of a body-less future.
These narratives begin to unfold notable clues about how we understand embodiment
and its role in the technological present and future. I attend to these considerations in
more depth now, to uncover the implications of the role of the body in cyberspace.

The potential of cyberfeminism — or perhaps a post-cyberfeminism — can only be
achieved when cyberfeminism is interpreted as a metaphor for understanding the
relationship between the body and technology and not as a way to explain or justify the
triumph of technology over the body, and its resultant transcendence (Squires 2000,
360). Cyberfeminism risks rendering the body insignificant or unimportant and this
Gibsonian move which articulates a desire to ‘escape the meat’ means forgetting the
importance of material, lived, embodied relations. As Stone states “[i]t is important to
remember that virtual community originates in, and must return to, the physical” (2000,
525) and “[e]ven in the age of the technosocial subject, life is lived through bodies”
(Stone 2000, 525). These are timely reminders of the role of corporeality in informatic
digital futures.

Cultural studies and feminist theorist Zoe Sofia and theologian and gender theorist
Elaine Graham both look at embodiment in the context of the distinction between
‘messy’ female corporeality versus ‘pure’ male reason (Sofia 1999, 60-61). They
highlight that our ‘leaky’, menstruating, child-bearing, and lactating bodies present an
ontological challenge to body boundaries already, and are ‘distrusted’ by men and
‘science’, because they do not ‘behave’ and are not ‘contained’. Traditional attitudes
towards female embodiment have operated to justify and naturalise the omission of
women from cyberspace in such a way that “[t]he exclusion of women from the digitalised world of perfect forms can be rationalised on account of the argument that their messy corporeality (and by implication, their non-rationality) compromises the circulation of pure reason” (Graham 1999, 430). In sum, women’s messy embodiment is an affront to neat, rational technology, and through such a rationale, the subordination of women is perpetuated under the guise of the maintenance of reason and order. Delegation of women’s bodies to non-rational, animal, naturalised states which clash with the inherent reason of the male is also the core element of the ecofeminist analysis. These arguments are vital reminders of the role embodiment plays in identity construction and the active attempts to silence and delegitimate these experiences on the part of patriarchy. Perhaps most importantly, so long as patriarchy continues to denigrate the female body, feminists need to take these devaluations as a reminder that to disregard the female body is to fall in line with a patriarchal agenda. In the context of this thesis, and through the analysis of the cyborg, the material-semiotic actor and other hybrid creatures, technopagan agencies are interpreted in a distinctly embodied fashion. As I suggest, technopagan agents are formed in the context of praxis in which embodiment informs the construction of identity.

The masculinist desire to escape the body and the feminist warning of the dangers of such a pursuit are central themes in cyberfeminist theory. The cyborg in particular is appealing because it is immediately identifiable as an embodied agent and also because it is ambiguous in its construction. Much of the initial appeal of Haraway’s cyborg is that it presents to us a figure which is inescapably embodied — in both the organic and mechanical sense. Yet as I will argue in the next section of this chapter, Haraway’s appeal to the cyborg as a post-gender identity diverges somewhat from these physical
manifestations, and is more interested in a cyborg ontology — a political shift to hybridised, nondualistic categories, and modes of being and existence in which there is a possibility of agency outside of gender categories. Despite this focus, the physical power of an embodied cyborg remains. For cyberfeminists, the imperative to remember the body is one element it shares with ecofeminist theory, and in the context of our rising digital cultures, their joint warning remains relevant and timely; indeed, “the central point to keep in mind in the context of a discussion on cyberspace is that the last thing we need at this point in western history is a renewal of the old myth of transcendence as flight from the body” (Braidotti 1997, 528). It is especially vital that in digital futures where virtuality is a common theme, that we maintain attachment to embodiment.

As I have suggested, considerations of embodiment in virtual cyberspaces reveals a complex and fraught relationship to the material body. The virtuality of cyberspace is at once liberated from the body, and inextricably tied to it. Cyborgic states of being too, demonstrate the tension between post-gender possibilities and the legacy of the body in cybernetic prosthesis and ontology. As it is configured in science fiction, the cyborg is a problematic figure. Haraway argues for a more nuanced cyborg agency, and it is this cyborg manifestation which I now consider in more detail.

Haraway's hybrid monster: the cyborg

The explicitly cyberfeminist approach to technology for many feminists was inspired by Donna Haraway’s ‘Cyborg Manifesto’ (1991b). This thesis draws heavily from the figure of the cyborg in Donna Haraway’s work, specifically in terms of its invocation as a hybridised identity of organic and technological origins. Cyborg ontology shares an
affinity with the technopagan in terms of its ability to step outside of the traditional
dualistic categories — especially those of gender — to challenge the agency of humans
and technology, and to highlight the collaborative nature of human-technology
relations. Haraway’s contributions to feminist deconstructions of dualistic boundaries
are embodied in the cyborg, challenging us to understand identity and agency as
hybridised and multiplicitous.

The powerful imagery of a female cybernetic organism, existing in both material reality
and meaning-making practices, has been embraced positively by most cyberfeminists
(Luckman 1999). Widely recognised as one of the few feminist texts to actually be
addressed by non-feminist scholars — a sure sign a text has had groundbreaking effect
on discourse — the Cyborg Manifesto continues to be studied today, as a departure from
previous feminist explorations into technological relations. In particular, Haraway’s
playful and ironic vision allows us to consider issues including subjectivity, identity,
tonology and politics in the context of Western technoculture. Due to its hybrid status as
part human, part machine, the cyborg “calls into question the ontological purity
according to which western society has defined what is normatively human” (Graham
1999, 424) providing just the kind of boundary challenge that is required in the digital
age. With its rich and provocative imagery of a cybernetic organism finding home in a
world humans sometimes feel increasingly estranged from, Haraway’s figure of the
cyborg was heralded as the new figure for feminist liberation.

It is not clear who makes and who is made in the relation between human and machine.
It is not clear what is mind and what body in machines that resolve into coding
practices. In so far as we know ourselves in both formal discourse …and in daily
practice …we find ourselves to be cyborgs, hybrids, mosaics, chimeras
(Haraway 1991b, 177)
It is worthwhile to note that part of the power of Haraway’s cyborg imagery comes from her location as represented in popular culture. Whilst Haraway’s cyborg is a post-gender figure, she later remarked that the cyborg of her manifesto was essentially, a ‘girl’: “the cyborg is a bad girl, she is really not a boy…She is a girl who’s trying not to become Woman” (Penley and Ross 1997, 20). This denotes a relevant facet for my own study, because it reminds us that the cyborg is always in flux, it is always changing and never quite finished. Cinematic portrayals of female cyborgs are common, particularly in genres of science fiction. As I outlined, these figures are often sexually liberated, or at the least, sexually charged; they are physically powerful, highly intelligent and technologically proficient. Susan Luckman notes the ways in which cyborg representations, both of Haraway’s making or of science fiction, offer strong imagery for women and feminists because “[g]enerically, cyborgs have been equated with agency; with a strong and inviolate self” (Luckman 1999, 40). Cyberfeminists find the cyborg appealing for its inherent strength, grounded in a materially present body and technological expertise. The cyborg in popular culture, as seen in the films I have discussed like Terminator, and RoboCop, and in various Manga films and science fiction novels is presented as a figure with power, authority and muscle and cyberfeminists “seek to appropriate elements of these representations, in the hope of likewise endowing their own cyborg selves with the positive qualities exemplified in these fictional renderings” (Luckman 1999, 40). In this position, cyberfeminists view these representations to be a fitting agency for contemporary culture.

However, as I discussed problems remain with these representations, perpetuating myths about sexually predatory women and fear of technological prowess, particularly when it resides in a female body. Having outlined these critiques, it is worth noting that
Haraway’s own cyborg has been interpreted as a part of this larger cyborg family, so despite the intricacies of Haraway’s own vision of her cyborg, and its positioning as a figure removed from these popular visions, she (the cyborg) is nevertheless coloured by these imaginings (Balsamo 1999, 153). In sum, while Haraway’s cyborg does not reside in these popular fictions, the figure of her cyborg is often read within broader popular contexts, because the cyborg is both a product of popular culture and a strategic metaphor. These complex compositions of the cyborg identity contribute to its appeal as a model of agency in a complex technological world.

The cyborg of Haraway’s construction is a challenge to boundary wars — wars waged on the maintenance of disciplinary, epistemological, dualistic categories which define and order the Western world. According to Haraway, “[t]he cyborg appears in myth precisely where the boundary between human and animal is transgressed. Far from signalling a walling off of people from other living beings, cyborgs signal disturbingly and pleasurably tight coupling” (Haraway 1991b, 152). Invoked as a symbol for the contravention of disciplinary, gendered, embodied or cultural boundaries, this cyborg exists in liminality and transgresses borders. According to Balsamo, Haraway’s model of the cyborg demonstrates

the ambiguous constitution of the body and subjectivity — predicated on the blurred boundaries between organism and machine, the individual and the technological, the fictive and the real. By challenging these and other culturally entrenched binarisms, the image of the cyborg becomes compatible with, and maybe even useful for, feminist theory (Balsamo 1999, 153).

For cyberfeminists, this challenge to static and normalised identity is a crucial element of liberatory pursuits in feminism, as it challenges fixed states of identity, and breaks down the lines between the enemy and the ally. Where earlier feminisms had sought to construct a somewhat simplistic framework for identifying the ‘good’ guys from the
bad’, Haraway resolved to do away with these totalising categories, instead searching for ‘unlikely alliances’ and partial connections (Haraway 1991b). In this sense, the cyborg directly challenges feminist identity politics, instead advocating “partial and contradictory identities that accept difference rather than defend against it” (Springer 2000, 339). Contingencies, strategic moves and fragmented agencies are the hallmarks of this cyborg identity. In our age of growing digitisation and the rise of computer mediated communication, we seek ways to better ontologically appreciate these new human-technology relations, comprehending technological interactions as moving beyond a merely ‘tool-based’ connection: “[f]usion with computers can provide an illusory sense of personal wholeness; the fused cyborg condition erases the difference between self and other” (Springer 2000, 338) whether that other is another human, or the other of the computer screen. Seen in this way, interest in cyborg politics is driven by a desire to infuse these new interactions with a strategic potential; they signal the search for richer levels of engagement within our lives and a desire to recognise agency in ways that are not humanist in their field of vision.

This endeavour is consequently parallel to a technopagan project which seeks to consider human-technology-world relations beyond standard dualisms or humanisms, and to re-cast ontological understandings of agency and existence. Cyborgs, as simultaneously organic and mechanical reflect the posthuman state of increased technological interaction, biological alteration and intrusion, and of the de-centred, deconstructed self. Technopagans, like cyborgs, also recognise the diversity of being and agency, and thereby that feminisms are incapable of (nor should they seek to) representing women as the homogenous group which they have previously been constructed as.
Cyborg imagery tells us a great deal about what we think it means to be human, and therefore, what is a-human; the opposite or antithesis of humanity. Anne Balsamo notes that each representation of a cyborg in popular culture “implicitly defines the meaning of the terms ‘human’ and ‘artificial’” (Balsamo 1999, 150). The cyborg confronts us with imagery of human difference and in doing so ruptures ideas about ‘otherness’ (Balsamo 1999, 146). Cyborgs confront and fascinate us because they simultaneously close and widen the distance between self and other, human and machine, natural and artificial. Contained within the cyborg body is the otherness which has always remained at a distance for humans, and we are instantly faced with a question about what boundaries remain to make us ‘us’ anymore. Balsamo (1999) defines the cyborg in two possible ways: in the first the cyborg constitutes a coupling of human and machine, a union which occurs within the body itself, causing the boundaries of this body to be redrawn in a very physical sense, and this is often the literal interpretation of the cyborg in popular culture. In the second sense, derived from Haraway, the cyborg is established as “the identity of organisms embedded in a cybernetic information system” (Balsamo 1999, 152) and in this case the boundary between the body and technology (communication technology in particular) is “socially inscribed, at once indistinct and arbitrary” (Balsamo 1999, 152).

It is this second cyborg which is of most importance to this thesis. Unlike the first, it is a figure which does not emerge distinctly from popular culture and science fiction imaging of human/machine hybrids in the most literal sense, but instead appeals to the technologically embedded state of being which describes our being-in-the-world in contemporary digital culture. Balsamo’s contention is that Haraway’s cyborg is a
distinct attempt to find a way out of the anti-science and technophobic trap which feminism found itself in. It provides a useful way to think through a female identity who is not only unafraid of, but who actually emerges from, technology. It challenges the notion of technology as ‘other’, and attempts to rework problematic feminist relationships to technoscience because while “feminism often remains sceptical of the patriarchal promise of technological development, women need to develop ways of reading and responding to technology that resist opposing it to an unproblematic ‘nature’” (Balsamo 1999, 152-153). The cyborg of Haraway’s creation then is not simply a challenge to gender construction, she is also a mechanism to subvert the “traditional exclusion of women from participation in science and technology” (Graham 1999, 426). The cyborg also reflects the boundary dissolutions that are increasingly witnessed in technoscientific pursuits, and as the exposure of boundary transgressions increases, what is revealed is “the fragility of the ontological boundary between nature/embodiment (with which women have perennially been associated) and culture/technology (assumed to be the appropriate domain for men)” (Graham 1999, 426). In uncovering the fragility of this boundary, Haraway also undermines the traditional view that “has forbidden women a stake in rationality, scientific innovation and public discourse” (Graham 1999, 426). Instead, it is in boundary collapses that Haraway suggests we can learn “how not to be Man, the embodiment of Western logos. From the point of view of pleasure in these potent and taboo fusions, made inevitable by the social relations of science and technology, that there might indeed be a feminist science” (Haraway 1991b, 173).

The cyborg is a figure of technoscientific knowledge in the ways it builds identity from a variety of sources: feminism, the military, capitalism and biology, to name a few. It is,
Haraway reminds us, ‘unfaithful’ to its origins, and so offers an image which makes no appeal to universal essences, to fact or truth or beginnings. The cyborg is technoscience through a feminist lens. Haraway’s message delivered through the cybernetic organism is that identity is formed through a complex set of interactions and influences, some of which may be undetectable, but which include corporations, institutions, tools, techniques, theories and policies. We are comprised of convergent networks of agents which make up the world and subsequently formulate and reformulate the subject. There is no ‘pure’ person in nature, no individual separate from science and technology, and no identity devoid of politics. Being-in-the-world is technoscientific and the cyborg is a manifestation of this fact.

Haraway’s cyborg emerged as a powerful figure for feminist politics and identity exploration. However, her concluding remarks of the *Manifesto*, which stated that “though both are bound in the spiral dance, I would rather be a cyborg than a goddess” (Haraway 1991b, 181), are problematic from an ecofeminist perspective, and it is this final positioning of the cyborg in contrast to a goddess which lend most weight and substance to this thesis’ argument for technopagan worldviews and identities.

Haraway’s statement is problematic with regards to the way in which my project links nature and technology, and hence it is worth examining her statement further.

**Cyborgs vs. Goddesses: The unlikeliest of alliances?**

Whether she intended it or not, Haraway’s final comment had given feminists what they perceived to be an ultimatum and to fall on the side of the goddess was to falter. I suggest Haraway’s meaning has been misinterpreted and gave the impression a choice must be made between the cyborg and the goddess. I further argue it sanctioned the
ongoing barrage of scathing critique of some ecofeminists’ advocacy of female empowerment conceived through the concept of a goddess and subsequently, of ecofeminism more generally. This role of the goddess in relation to ecofeminist ideologies is discussed in Chapter One, and is considered further in this section, before it is elaborated on in Chapter Four. The goddess is a key figure in ecofeminist and neopagan ideologies, and a figure I appropriate as equally empowering as cyborg agencies. The goddess is elemental to neopagan praxis and by extension, to technopagan agency. In what follows, I weigh the cyborg and goddess agents, constructing a case which resists their ongoing antagonism and instead argues for their kinship.

Firstly consider the beginning of that final line: “though both are bound in the spiral dance”. The reference to the spiral dance — a neopagan dance performed at festivals and gatherings which ‘weaves’ its participants together in a spiral pattern — is a direct reference to Starhawk’s hugely popular book *The Spiral Dance: A rebirth of the ancient religion of the great goddess* (1979) (Graham 1999). Haraway’s words here are a call to recognise that our discussions need not exclude one of these figures in order to affirm the other — they are *both* a part of our ontology of the interconnection that constitutes the world. Although Haraway clearly articulates her preference for the hybridised cyborg as opposed to the deep organicism of the goddess, it is nonetheless the case that they are kin. Yet the misinterpretation that the cyborg and the goddess are oppositional led to a factionalised stance between ‘the goddess worshippers’ on the one hand, and the ‘the cyborg feminists’ on the other. What has been read into this text is a false dichotomy Haraway would have been loath to see so deeply affirmed. Instead, what Haraway was attempting to critique was the trend towards seeing the goddess as a
representation of female purity, wholeness and naturalness. This is a valid critique, but one which has advocated a totalising stance toward ecofeminism, reducing a diverse field of philosophical discourse down to a few early texts — such as Mary Daly’s *Gyn/Ecology* (1973), and Susan Griffin’s *Woman and Nature: the roaring inside her* (1978) — both of which sought empowerment through the evocation of holistic female and ‘feminine’ symbolics. While this thesis cautions against the unreserved embrace of ‘essentialised’ goddesses, I simultaneously argue that the goddess figure has provided empowering symbols and metaphors of women’s agency.

The debate between cyborgs and goddesses mirrors the nature of interactions between science and technology with the nonhuman world. Likewise, the metaphors of goddesses versus cyborgs appear to follow these same lines of natural and artefactual (Lykke 1996, 23). In the context of feminist analyses and critiques of science and technology, Haraway’s analysis shows how the artefactual can offer an empowering metaphor able to be used within digital cultures. However, the prioritisation of the cyborg over the goddess does not properly acknowledge the issues relating to nonhuman nature that ecofeminists draw attention to. Moreover, where the shortcomings of a goddess figure have been heavily documented (Biehl 1990; Plumwood 1993) and were attended to in Chapter One, what is too often neglected is what the cyborg leaves out. Spiritual ecofeminists advocate the consideration of a goddess figure in part due to the hope that she may “help to redirect society, science and technology away from their present policies of violence — sexism, racism, ‘naturism’, and so on” (Lykke 1996, 14).
Outright dismissal of the goddess and the total embrace of the cyborg — a position advocated in some cyberfeminist circles, but not by Haraway — assume that the social order is essentially reasonable, that equality exists across varying groups, be they human or nonhuman groups and that we simply need to ‘get online’ and become techno-literately to get empowered. This fails to account for the complex power relations in technoscience regarding how knowledge is produced and how technology and technological access is stratified across various groups. Cyborgs are not by default empowered, they can be poor, exploited, or caught up in the mechanics of production and consumption. If the cyborg can be so freely read as an inherently political figure, then why can the same not be said for the goddess figure? The cyborg is construed as political through the assumption that by merely ‘claiming’ cyborg status, one invokes a politically subversive identity without actually ‘doing’ anything, as a result of the cyborg’s conflation of the human and the technological. It is important to note that Haraway would disagree with the ‘default’ political status of the cyborg, arguing instead the cyborg needs to inspire action otherwise it is rendered politically impotent (Sofia 1999). For example, a cyborg could still embody a conservative or disempowering position by getting breast implants or other forms of cosmetic surgery.

Most significantly while cyborg feminists have done a resounding job of making the goddess a figure of shame within feminism, they have failed to demonstrate any real political acknowledgement of nonhuman agency. Cyberfeminism acknowledges the agency of nonhumans, but seems to take this recognition no further. The nonhuman in these modes is always a technological nonhuman, rather than an ecological or biological nonhuman. Haraway on the other hand, has long drawn these ecological nonhumans into the centre of agentic explorations including primates (1989, 1991b) and dogs
(2003). Again, excepting Haraway, cyberfeminism tends not to address the ecological destruction associated with the rise of neither CMC, nor the ecological pollution which underprivileged (usually women) are exposed to in the production of our cybertopias. Cyberfeminists fail to acknowledge their own privilege demonstrated through their ownership of the term ‘cyborg’. As ‘first world’ educated women we can proudly claim this title to articulate our metaphorical and material state in technoscientific reality, but for a ‘third world’ woman, her cyborg status is “conferred on her” by her ‘first world’ sisters (Stabile 1997, 512) and is a state of disempowered material relations to technological production, as opposed to the symbolic status of the first world cyborg identity. As a result, third world cyborg women are identified as such by others due to their participation in the means of production, such as the construction of technological apparatuses like circuit boards or silicon chips. A first world woman on the other hand, claims her cyborg status for herself by the means of her LASIK eye surgery, hormone replacement therapies or In-Vitro Fertilisation technologies.

Where cyberfeminists have revelled in the figure of the cyborg as a site for potential gender deconstruction and posthuman reconfiguration, for many ecofeminists the figure they have chosen to consider is the goddess as she emerges from neopaganism. By no means an uncontroversial symbol, she remains nonetheless evocative and rich in her offering of imagery, symbolism and ontology. Despite her problematic nature, as discussed in Chapter One on ecofeminism, we should be careful not to dismiss her, nor fail to recognise her potential as a powerful figure in feminist theory, particularly in ecofeminist theory, or her symbolic role as a figure of feminist empowerment (Graham 1999, 422).
The goddess — whether taken up by theorists as another material-semiotic actor, as a purely metaphorical conveyor of feminist ideals and liberation, or as a genuine ontological attempt to reconfigure world-views concerning existence and embodiment — remains, like the cyborg, a provocative and enticing figure for feminist consideration. Few ecofeminist scholars would attempt to argue that certain figurations of the goddess are not deeply problematic. Most particularly, compositions which relied on regressive or romanticised ideals, be they ideals about the past, about nature or about women, are detrimental to aspects of feminist theory and liberation. However, there remain other goddess figures which are too often overlooked in the attempt to dismiss all goddess imagery within feminism (Graham 1999). For Elaine Graham, Irigaray’s positing of a simultaneously transcendental and immanent god in order to reclaim the divine from patriarchy is one such example (1999, 432). For others, polytheistic traditions which contain multiple representations of goddess figures, such as the Hindu goddess Kali, goddess of darkness and destruction, rupture notions about purity and serenity in female figures of divinity. The same kind of critique could be launched toward cyborg figures, though interestingly, this does not happen with the fervour with which goddesses are dismissed. Popular culture representations of cyborgs as discussed in the previous section can replicate and reinforce gender binaries and make dangerous assumptions about femininity and female sexuality. However, the weakness or inadequacy of certain cyborg figures does not sanction the wholesale dismissal of cyborgs as potential sites for feminist liberatory musings. Similarly, I argue the same should be the case for goddesses — isolated appeals on the basis of essential femininity should not warrant the dismissal of the goddess figure in entirety.
Elaine Graham offers another way to consider the goddess, as similar to the cyborg in its ability to challenge dualistic boundaries. In the same way that the cyborg helps us to reconsider human/machine boundaries and human/animal distinctions, so too we might “also seek to evoke the goddess to deconstruct the boundary between the spiritual and the material, immanence and transcendence” (Graham 1999, 428). Cyborg theorist Nina Lykke considers the goddess and cyborg “as two metaphorical landmarks” (1996, 24) that share much. Firstly, both of these figures are quite intentional attempts to address and transgress the boundaries between the human and the nonhuman (Lykke 1996, 24). They are boundary crossers who have an interest in the dismantling of binaries which falsely purify the world into separated and essential categories. A human manifestation of a cyborg or a goddess is a hybrid: a creature made up of many parts, whose relationship to the world is complex and deeply interwoven. Secondly, the cyborg and the goddess each present a challenge to the scientific worldview which always sees the nonhuman as object, as inferior, as human resource and without agency (Lykke 1996, 24). The cyborg and the goddess share the goal of reassigning agency outwards to nonhumans (Lykke 1996, 24).

I argue the goddess struggles to achieve the cyborg’s political sway because she has been essentialised by cyberfeminists, thoroughly maligned as a sign of regressive feminism, essentialist ‘earth mothers’ and technophobes. However, more nuanced and sophisticated approaches to this figure present complexities which subvert this claim to purity, and as I will argue the figure of the technopagan appropriates the goddess as a potentially subversive figure. The technopagan merges the cyborg and the goddess by becoming both cyborg and goddess, a creature of the earth, technoscience, myth and embodied reality. Attempting to avoid further dichotomising and factional play in
feminist politics, I will offer the technopagan as a duplicitous figure which constructs agency residing in naturecultures, in technoscience, in symbolism and social reality.

Distinctions between cyborgs and goddesses circulate around exactly that — difference. A richer vocabulary and approach to reconfiguring the construction of the female will be better served through a consideration of what they both share. For example, both the cyborg and the goddess are ‘semi-mythical creatures’ (Graham 1999) which “serve as key figures by which some of the implications of posthuman technologies for the ways in which we think about our own human identity are explored” (Graham 1999, 422). Despite their differences, both present ontological challenges, both seek to empower women, and both provide critical considerations regarding female embodiment. The cyborg and the goddess each offer ways to think through concepts of nature, technology, sex and politics — and significantly the line between nature and technology, of particular interest in the cyberpresent — rendering them useful creatures worthy of exploration. Whilst confronting these issues in very distinct ways, they both “evoke all sorts of ethical and political ideals and enable new understandings of responsibility, identity and community as envisaged under the posthuman condition of hybrid, nonessential human nature” (Graham 1999, 422). Both of these figures then offer challenges to patriarchy: the cyborg, for the various reasons addressed in this chapter, and the goddess because “she disrupts patriarchal polarizations between immanence and transcendence, humanity and nature that have traditionally sanctioned the domination and exploitation of the natural environment and, by association, the subordination of women” (Graham 1999, 422). The two figures then, are consonant and dissonant. They share much — as I have explained, and also diverge — there is a flux I want to emphasise in putting forward technopagan agency.
Nina Lykke suggests that both the cyborg and the goddess constitute forms of Haraway’s monsters — boundary creatures such as simians, cyborgs and women—and indeed share significant kinship. In recognising these two creatures as kin, we acknowledge how each of these figures “in important ways contribute to the deconstruction of the great divide between human and non-human” (Lykke 1996, 28). Instead of the continual positioning of these figures in opposition, rather than forcing the choice to be ‘either a cyborg or a goddess’ we should instead encourage the fields of feminist science studies to see the wholesale rejection of either of these creatures as undesirable. What would serve us better would be to “talk more about their monstrous sisterhood” (Lykke 1996, 28) and in such a conversation, “[w]hy not explore the potentials of cyborgoddesses?” (Lykke 1996, 28). This statement underscores my aim in this dissertation to posit the technopagan as such a figure. Inherently a cyborgoddess, the technopagan serves this purpose fruitfully and creatively. As I will suggest, the cyborgoddess of technopagan embodiment can perhaps better signal our simultaneously organic and technological composition. In deconstructing nature, we must be careful not to forget our role in an ecological network upon which we rely for survival. The hybrid techno-organicism of the technopagan evokes our mixed origins of both natural and artefactual construction. Technopagans remind us of our embodiment, our ecology and our technologies.

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In this chapter I have traversed the landscape of feminist approaches to technology. I began with an examination of technoscience and feminist investigations of the male bias inherent in this domain. These feminist critiques expose the contextual nature of
technoscientific knowledge in contrast to its traditional positioning as a neutral, context-free site of truth-production. I then attended to the variety of feminist approaches to technology, charting the spectrum of technophilic and technophobic attitudes to technology in various forms of feminism. These divergent attitudes and understandings of technology reveal the tension within feminism between recognising the integrated role of technology in human life, and the view that high technology and cyberspace in particular, has a masculine bias. The field of cyberfeminism was addressed within the context of emerging cyberspaces, charting the possibilities contained within this vision, as well as the technofeminist approach which succeeds it. The role of embodiment was then considered as pivotal to cyborg considerations and feminist projects for female empowerment and equality. I then attended to the critical role of the cyborg in feminist approaches to technology, and its specific relevance to this thesis’ uptake of a hybridised identity fashioned in the wake of the cyborg. Donna Haraway’s representation of the cyborg was introduced as a key figure informing the hybrid relations of human and machine. The cyborg’s appeal and power as a feminist figure within global technosystems was then contrasted against the organic goddess emergent from strands of ecofeminist spiritualities. Challenging their roles as oppositional enemies, I located these two figures as kin, suggesting an examination of their consonance could produce fruitful outcomes in dismantling the divide between them and their correlated theoretical arenas of cyberfeminism and ecofeminism. As such, I argue for the recognition that dissonance and consonance can coexist, and that there is nothing wrong with contradiction. I have argued that mindful of the essentialist perils residing within some goddess figures, goddesses play a crucial political role in a way similar to the cyborg. I have argued cyborgs must be critically appraised according to the same analyses goddesses have been subjected to in feminist theory.
What emerges out of this discussion is a need to investigate more deeply the role of technology in relation to ideas of what it means to be human. A deeper philosophical and ontological inquiry into some of the multiple ways to understand technology is required. Hence the concept of agency remains critical to these questions, and so it is important to explore the human-technology relation and what it comprises, in particular, constructing the concept of a variable ontology capable of attending to these broad treatments of agency. In the following chapter I use three key theorists — Don Ihde, Bruno Latour and, again, Donna Haraway — to unpack the complexity of human-technology relations and affirm a hybrid agency capable of reflecting the complexity of being in the more-than-human-world.
Chapter Three
Humans, Technology, Nature and Agency: A network of actors

Somewhere in our societies, and in ours alone, an unheard-of transcendence has manifested itself: Nature as it is, a human, sometimes inhuman, always extrahuman

Bruno Latour 1993, 98

Upholding the model of the technopagan as embodied potential for moving through and understanding a world of ‘high technology’ presents challenges and possibilities for existing philosophies which attend to the role of technology in the human experience. It is here I attend to the philosophy of technology and its analysis of how we understand the relationship between humans and technology. Discourses which consider the relationality between humans and technology offer alternative frameworks for thinking more deeply about ways of being-in-the-world. This analysis is useful to the inquiry into technopaganism because it helps unravel what is meant by technology, and to deepen insight into forms of ‘new’ or ‘high’ technology such as those opened up through the personal computer, computing networks and their related communities. This facilitates an appreciation of what it means to be human in a technological world, and how technopagan agency operates as an appropriate embodiment of human-technology relations.

The technopagan gains the ‘techno’ part of its name through an understanding that this identity deliberately communes with technology in a variety of ways, ways which are largely positive, creative and filled with potential. The ‘techno’ makes a series of assumptions about what kinds of technology are engaged by the technopagan, and for what purposes they are employed. It also brings the neopagan towards the ‘techno’, providing a green ground for techno-relations. What the technopagan offers to these inquiries is a particular mode of engagement with technology and technological devices
which questions and challenges our assumptions about, and brings into question, the nature of our relationships with technology.

As I will suggest in Chapter Five the synergy in technopaganism between the ‘techno’ discussed here and the neopagan tradition discussed in Chapter Four, is one which respects, acknowledges and recognises particular wisdoms of ancient cultures and traditions, and provides a rich platform from which to understand technology as not simply ‘new’ or ‘innovative’. In particular, this identity operates in ways which are culturally specific, non-linear and not incongruous with notions of ecological sustainability, indigenous knowledge and spiritual holism. In this chapter, I demonstrate that through the reconceptualisation of technology and the human relationship with technological devices and concepts, technology can be understood as both new and old, primitive and advanced, and spiritual and scientific. Re-positioning technology via three key theorists — Don Ihde, Bruno Latour and Donna Haraway — technology is re-contextualised as inextricably tied to the experience of being human. Alongside this process, I challenge the labelling of neopaganism as regressive or technophobic approaches to technology which can instead have affinity with the technopagan. I demonstrate as a key goal in this chapter that neopagan praxis, and technopaganism in particular, actually embodies appropriate, viable techno-human relations.

This chapter focuses on these three theorists for a variety of reasons. Whilst many theorists could be employed to provide insights into humans and technology, it is these three figures who richly contribute to my proposal of the technopagan as a suitable figure for thinking about ways of being-in-the-world. Ihde, Latour and Haraway can appear divergent theorists in many ways, yet in this chapter I explore each for their
contribution to my argument for the technopagan, and in so doing I draw several parallels between their work. These links, whilst drawn together in this thesis independently, have also been demonstrated in the text *Chasing Technoscience: Matrix for Materiality* (2003) a collaboration between Ihde, Latour and Haraway, along with Evan Sellinger and Andrew Pickering who each see “science as a wider social practice” (Ihde 2003, 3). This publication, which treats technoscience as the matrix within which materiality emerges as fundamental in science, validates the way each of these theorists is used here, as they each bring something different to the discussion, whilst sharing this interest in materiality.

Hybrid agency is one key element which interests me here. In the introduction to *Chasing Technoscience* Ihde suggests three explanations for this collaboration of theorists (Ihde 2003, 4). Firstly, all of these theorists employ interdisciplinarity as a key component of explorations of technoscience; secondly, each “forefronts materiality in unique but comparable ways” (Ihde 2003, 4) and finally, they all attend to investigations of the technological in non-neutral and philosophical ways (Ihde 2003, 5). Each participates in a discourse of technological investigation beyond its traditional boundaries. Thus Ihde explores the *relations* between humans and technology, outlining a series of ways in which humans commune with technological devices. This analysis positions the instrumental and the material at the focal point of philosophical investigations into human-technology relations. Latour more radically approaches this relation by reconceptualising the agency of humans and technology to such an extent that these very categories become obsolete in his analysis. Instead, he focuses on material objects as agents, regardless of their ontological status as humans or nonhumans, and the way various agents comprise socio-technical networks. Haraway
contributes to these discussions by drawing the materiality of Ihde’s analysis and the semiotic focus of Latour into her material-semiotic actor. While Haraway’s material-semiotic actor was not resultant from these relations, there has been some cross-influence, as seen in Haraway’s consonance with Latour’s concept of the socio-technical. Haraway argues that agency is irreducibly material and semiotic. It is the focus on materiality which forms one of my key interests here. Drawing from each of these positions, I focus on the importance of several key factors. This includes acknowledging the role of the material and the instrumental in the production of knowledge; the socio-technical, networked dynamics of agentic interaction in knowledge construction; which can inform the hybridised figure of the material-semiotic actor. As such, I argue these theoretical positions, taken together, each contribute a methodological insight which can inform the technopagan project of hybridised identities.

In this chapter I map a number of approaches to understanding technology in relation to the human. Primarily, I problematise the concept of technology and its role in relation to the human. Using philosopher of technology Don Ihde’s analysis of the human-technology relation, I illustrate the affinity between humans and technology, shattering the concept of technology as ‘other’. In particular, I argue that through this model, the technopagan worldview can be re-visioned as non-regressive in its approach to technology. I take this analysis a step further by drawing in Bruno Latour’s rupturing of the distinction between humans and technology through Actor-Network Theory. This approach redistributes agency, comprehending technological objects as actors within networks, equally agentic to their human counterparts. These positions allow for a hybrid agency of suitable human-technology relations. I use Latour’s identification of
the transition of human knowledge from ‘Anthropological Matrix’ to ‘Great Divide’ as yet another way to interpret the technopagan worldview. The technopagan endorses the Anthropological Matrix worldview which regards interconnected networks as the defining feature of ways of knowing. Embodied within Haraway’s material-semiotic actor, I argue the technopagan enacts the notion of knowledge as a commodity shared between humans and nonhumans. I return to her cyborg to chart its relations to the technopagan as a hybrid, material-semiotic actor cognisant of the agency of nonhumans. These discussions set up an alternative view of technology, knowledge construction and hybrid identities, providing the ground upon which the ontology of the technopagan rests.

**Heidegger, Ihde and the Philosophy of Technology**

It is important to first clarify how technology is configured in relation to these theorists. This task is made more complex by suggestions that technology takes different forms, and that ‘modern’ or ‘high’ technology is fundamentally different to more traditional or pre-modern forms of technology. Further, philosopher of technology Don Ihde reminds us that definitions are not neutral, presenting challenges to what might be counted as technology, hence I start with a necessarily broad definition of technology in order to map some concrete ground upon which to build our understanding of the term (Ihde 1993).

In Chapter Two I began to develop the concept of technology, drawing from Ihde and Heidegger to bring forth a sense by which we come to understand ‘technology’ and the more recent shift to its more appropriate definition as technoscience. I now develop these concepts in more detail in order to attend to the complexity contained within
philosophies of technology. To begin, I define technology, using Don Ihde’s three criteria for what constitutes technology. First, a technology must possess some kind of material, or substantive component; second, the technology must be embedded in some set of ‘uses’ or praxes which humans make of these materials; and third, there must be some form of ‘relation’ between the technology and the humans who make, design or use them (Ihde 1993, 47). Ihde states that while such a definition is insufficient to capture all aspects of what could be labelled technology, it is certainly flexible and broad enough to encompass a wide range of ‘technological’ objects. For example, this definition will fit a form of ‘high’ or modern technology, such as a computer, and yet also complies with ‘prehistoric’ technologies which Ihde calls ‘found’ or ‘first’ technologies — such as the act of picking up a stick to probe an area of ground, or using a curved object as a vessel. This particular qualification also applies to nonhumans, as we become increasingly aware that many animals are tool users — a practice Ihde calls proto-technological. Female primatologists like Jane Goodall were able to show how chimpanzees not only gathered but made tools for particular uses, such as grass reeds to retrieve termites out of their mounds, or large sticks to measure the depths of bodies of water being traversed.

What is particularly compelling about Ihde’s analysis is that he argues that no human cultures have been found to be pre-technological (Ihde 1993, 49). Not only have all human cultures been in some way technological — which brings into dispute notions about ‘primitive’ cultures — but that technology is in fact complicit in the evolution of humans; without technological artefacts, humans would not have evolved from our primate ancestors. More than this, Ihde’s assertion is that the relationship to and with technology itself is what defines us as ‘human’. Seen in this light technology’s role in
human life shifts from a product of development and progress, to a fundamental feature of what it means to be human. This analysis re-positions our current state of technological ‘progress’ as less radical than we might at first assume, and certainly refutes suggestions that our current interactions with technology are somehow ‘unnatural’. Instead, what is formed is a relation of affinity, collusion and cooperation between humans and technologies.

Another illuminating feature of Ihde’s philosophy of technology is its consideration of the way that technological development and innovation can differ greatly depending on context: hence the cultural specificity of technological objects is an imperative feature. Dominant, culturally biased Western analyses of technologies between differing cultures tend to construct the technological devices of non-European or indigenous cultures as necessarily less advanced than European devices. Further reflection demonstrates that in some cases non-European technologies are not only sufficiently ‘technological’, they have been shown to be more advanced than their European counterparts. Multicultural analyses show that rather than technologies being more or less advanced between cultures, they are instead culturally specific, cultivated in concert with the particular environment in which it is developed and used. One example is the Mayan calendar, which is in fact more accurate than most modern calendars, but operates off a system of vigesimal or base-20 mathematics, so would require the importation of that entire mathematical system in order to be used by other cultures. Hence, despite its superiority as a technological system of time measurement it remains unused in broader cultural contexts today (Ihde 2000). What this shows is that forms of technology are not necessarily better or more advanced than each other, and at least must be assessed within their cultural context. Further, the ‘importation’ of
technological devices from one culture to another will transform the meaning and function of the device given its new context. The South Pacific culture of Puluwateans incorporated the compass (an innovation from China) into its culture but its use also changed: the compass only allows navigation along a straight line and the Puluwatean navigation technique used wave patterns to steer a straight course, hence the compass became largely decorative, an object of interest, rather than a useful technology (Ihde 2000).

These cultural contextualities assist in posing a challenge to the dominant modes of understanding the ‘unfolding’ of history and science as somehow linear and progressive. Examples of technological knowledge and skill which remain unsurpassed today stand as illustrations of the inaccuracy of this linear understanding. For instance, Roman concrete and its use in the construction of the Pantheon cannot be replicated today with the same structural strength and longevity, and the method of its construction confounds modern architects (Moore 1995). Linearity is further challenged with the knowledge that the formula for concrete was actually lost after the fall of the Roman empire after 400 AD until 1824 (Herring 2002) compounding the sense in which technological skills are found, lost, and then (sometimes) found again in a non-progressive fashion, as opposed to the notion of a steadily accumulating bank of human knowledge and technological innovation. Further, perceptions about what ‘modern’ technology might look like are also contextual. On a recent trip to Hong Kong I was shocked to see skyscrapers being constructed and maintained with the use of scaffolding made of bamboo. From my perspective this seemed unsafe, and it appeared absurd for something so ‘primitive’ to form the structural exoskeleton of modern constructions of steel and glass. We see in this example a juxtaposition of seemingly incompatible
materials bonded together in a successful partnership. The construction of technology, history and science as ‘developing’ in a linear fashion is representative of a kind of ‘utopian progressivism’ (Ihde 1993, 62) which chooses to understand the unfolding of time and the human events surrounding it as following an unbroken chain of events which steadily improve, develop and progress.

While social theorists increasingly understand this kind of world view to be inaccurate, it remains the dominant mode of understanding our past and the past of ‘Others’. Dominant narratives confirm the notion that “with the rise of science all previous superstitions, false beliefs, and, sometimes implicitly, sometimes explicitly, religions have been deconstructed” (Ihde 1993, 60). A kind of myth gets constructed around certain stories, such as the tale of Columbus’ world journey to prove the earth was not flat. Ihde reminds us that most (educated) people knew the earth was spherical around this time; rather it was the size of the earth which was in dispute. Regardless, the ‘myth’ proliferated into a “progressivist mythology designed to show that religious people were superstitious; that science dispelled such superstition; and that such knowledge was progressive” (Ihde 1993, 62). The analysis within the philosophy of technology of the multiple, multicultural, non-linear understanding of history and technological progress is one which would be welcomed within the neopagan perspective: the spiralling of time, the ‘advanced’ knowledges of non-European and indigenous cultures and the acknowledgement of context and particularity, sit especially well within a neopagan worldview.

The philosophy of technology presents a reading of technoscience which challenges modes of Western hegemony, destabilising theories of Western technological
domination and knowledge-power. This consideration alone however, does not account for the scope of questions which circulate around technology. The relationship that technology has to science is also of interest. Often regarded as the instrumental arm of scientific inquiry, it is useful to examine how the technological relationship to science operates, because it reveals the complexity of the relation as co-constitutive.

The relationship between technology and science is a key issue in the philosophy of technology. To conduct this exploration, I begin by contemplating how technology and science relate to each other, and indeed what is meant by these terms. In Chapter Two I set out the discussion concerning technoscience, analysing the relations between science and technology. I now develop this discussion in more detail in the context of Ihde’s considerations. Ihde’s definition of technology, presented at the beginning of this section certainly offers a guide by which to understand what is meant by technology, but what I am interested in exploring here is how we understand the two terms of science and technology in relation to one another. The importance of this task has been demonstrated in Chapter Two through the illumination of the intimate connections which exist between science and technology. In relation to this thesis, I discuss these issues as central in the context of the hybrid agency of the technopagan. A seemingly juxtapositional actor of ‘primitive’ and ‘modern’ composition, theories which challenge the established relations between science and technology and about science as the grand narrative of nature, allow the technopagan identity to be reconstituted as an appropriate actor in digital society. Departing from constructions of technology as new, and neopagan and earth-based spiritualities as regressive and anti-technology, these discussions enable the technopagan to be situated as a suitable agent with which to reconsider human-technology relations.
Specifically, the relation between science and technology questions, firstly, notions about science as a neutral body of knowledge generating isolated truth-forms outside of any ‘context’, and secondly, the role of instrumentation in producing these truths. There are significant differences between modern (tool-based) science and Greek (contemplative) science and probably the most fundamental of these differences is the development of instrumentation (Ihde 1983) used in modern science which allow for measuring, the controlling of variables, and for seeing that which was previously unseen. Indeed, the historical shifts in our understanding of what constitutes science, is telling. Current narratives of science would label it a practice based in modernity, a process of experimentation, based in truth/fact finding. Experimentation in science entails the use of technologies and/or instruments “against which and in relation to which the phenomenon is compared” (Ihde 1993, 6). Technologies thus positioned, become central to the practice of science and the pursuits of knowledge; technologies control what can be known. The implications of this analysis are that it shows how the way we ‘see’ affects what we know, and thus that instruments shape what is real for us. The result is a reality which is variable and shifting, dependent upon technologies.

Keeping in mind the development of instrumentation as a marker of ‘modern’ science, it is then reasonable to suggest that the relationship between science and technology as it is demonstrated through this analysis suggests that it is technology which makes (modern) scientific practice possible. Only through instrumentation which allows measurement, observation and control can scientific hypotheses be tested. Interestingly, it could also be suggested that scientific hypothesising itself begins as a contemplative act — the scientist begins with a theory and then conducts experimentation which tests
the theory to be true or untrue. However, the inverse could also be said to be true — that it is the existence of instrumentation, such as a microscope, which prompts theorising/hypothesising to come forth from what the technology enables or allows.

The science and technology relationship is important for destabilising the supposed linearity of knowledge and development. In rupturing the seemingly teleological, progressive structure of science as knowledge-building which gives rise to technological developments, it legitimates my argument for the positioning of the technopagan as neither regressively anti-technological, nor utopically technophilic. Instead the technopagan can be placed into a complex context of technoscience, replete with feedback loops and dynamic non-linear development and creation. Secondly, the impact of technology on science reveals that knowledge is made in praxis, and is thus significant because in putting forward the technopagan as a suitable hybrid figure in contemporary culture, I wish to position technology as more *primary* to humanity than the way in which it was traditionally set up.

Having established the relationship between science and technology it is important to investigate their precedence in relation to one another because discussions of precedence challenge the idea of technology as ‘new’ and re-frame the instrumentality of technology as a primary aspect of knowledge-making. Traditional modes of history and philosophy compose a narrative which sees technology as arising from science, an assumption which is premised upon the notion that scientific knowledge determines technological conceptualisation and development. This supposition is disputed by Martin Heidegger (1977), and in turn Don Ihde (1983). Heidegger argues that technology logically precedes and indeed is more fundamental than, science. This
analysis is informed by Heidegger’s discussion around ‘the essence of technology’ in which he states that it is not the ‘technological’ aspects per se which constitute the essence of a technology, rather, the essence of technology for Heidegger is more about of mode of ‘revealing’ the world, it is an ontological process through which we see and interpret the world. Heidegger argues that the current utilitarian view of technology — one which treats technology as merely a means, as solely a tool, and as neutral — misses the very essence of what comprises a technology. One mistake of viewing technology in this way is that it constructs technology as value-free, as separate from, and indeed below, social values. Ontologically, for Heidegger (the essence of) technology is not tool-based, but rather is a way of experiencing and shaping the world, it is ‘calculative’ thought. Taken this way, Heidegger acknowledges that while technology (the essence of) ontologically precedes science in its perception of the ability to manipulate, interact, and affect, historically he sees ‘modern’ (instrumental) technology as coming after science. As will be discussed in the next section, whilst Ihde agrees with Heidegger’s prioritisation of technology over science in the ontological sense, he disputes Heidegger’s claim that historical priority of science over technology remains. Underscoring Heidegger’s position is his belief that there is some fundamental difference between ‘modern’ technology and ‘traditional’ technology. Heidegger’s assertion that there lies some essential difference between ‘modern’ technology and ‘traditional’ technology is made in part due to what he perceives to be a basic shift in the perception of nature.

Modern technology, for Heidegger, has rendered the natural world bestand ‘standing reserve’ — what Ihde translates as a ‘resource well’ — and the practices of modern technology are designed to wrench the resources of the natural world from it in forceful,
even violent ways. For example, the machine technology of the second half of the eighteenth century reveals nature as resource: the forest becomes lumber, the river becomes drinking water and irrigation, and in a very real sense, the ‘usefulness’ of nature shifts from intrinsic value in its own right as aesthetic, as sacred, or as a biosystem, to instrumental, human use-value. This instrumental view of the natural world inappropriately assigns value solely in terms of human use and has in more recent times shown itself to be highly unsustainable. As Ihde suggests, the ‘world-revealing’ which lies at the heart of Heidegger’s definition of technology, reveals the natural world as “a source of energy for human use, and this mode of relating to the world becomes, in a technological era, the dominant primary way in which we understand world” (Ihde 1983, 241). For Heidegger, the understanding of nature as standing reserve is the very condition of modern technology. The standing reserve view of nature lies behind all modern science, and it is for this reason he claims that modern science is the child of technology. As ecological philosopher Patsy Hallen reminds us, Heidegger was not despairing of technology, because he saw it as ambivalent, and suggested that even the potentially damaging effects of technology were not what were to be feared. For Heidegger, the principal cause for alarm lay in the view of nature as standing reserve, rendering us unable to see or understand nature in any other way (Hallen 1988b, 143). The identification of standing reserve by Heidegger and its implications resonate strongly with many contemporary analyses of the environmental crisis in ecological philosophies, which identify this ‘use value’ view of the more-than-human world as lying at the heart of this deepening problem (See for example Naess 1973; Merchant 1980; Fox 1990; Armstrong and Botzler 1993; Zimmerman 1993). In relation to this thesis, Heidegger’s position offers a critical insight into our contemporary understanding of science and technology as the means to convert nature into a resource.
The power of Heidegger’s argument lies in his inversion of the traditional relationship between science and technology. He asserts that science is the tool of technology, demonstrated though his example of physics where rather than the status quo argument which sees the science of physics as preceding technology, he argues instead, that physics is the tool of technology, and as such, it is technology which precedes the science of physics. Indeed, it is the very existence of technology which provides the conditions for the possibility of physics. This is because modern physics is by its very nature experimental, and therefore relies on technology — instruments, equipment and apparatus — to conduct the work of physics. So for Heidegger, physics — even as pure theory — positions ‘nature’ such that it reveals itself to science in a calculable, measurable way. Therefore, physics, in advance is enabled theoretically by (the essence of) technology because it “orders experiments precisely for the purpose of asking whether and how nature reports itself when set up this way” (Heidegger 1977, 21).

Further, understanding technology in the world-revealing, Heidegerrian sense of relating to the world allows us to see science as the ‘tool’ of technology, in which the scientific act becomes an act of knowledge and power. That is, when technology is defined beyond mere tools and into the realm of the essence of technology — as a mode of revealing the world — science “becomes a means of knowledge which gives power; science becomes Baconian10. And with this move the inversion is completed: Technology, as the revelation of the world as standing-reserve, is the ontological presupposition and ground of modern science” (Ihde 1983, 241).

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10 Baconian refers to Francis Bacon, the 16th Century philosopher who is regarded as a father of the scientific revolution. In Bacon’s figuration, nature, regarded as a resource, needed to be violently intervened with in order to wrench her secrets from her ‘womb’.
As I stated, despite Ihde’s concurrence with Heidegger regarding the ontological precedence of technology over science, he departs from Heidegger at this point, arguing Heidegger does not go far enough in asserting only the ontological priority of technology over science. Ihde’s argument, integrating the work of both Heidegger and medieval historian Lyn White Jr. brings him to argue that technology both ontologically and historically precedes science. For Ihde, praxis precedes explicit theory — it is only through the lived implementation of a craft, for example, which can suggest the pure theory to support that craft, or praxis. To look at it another way, if we recognise that humans have never existed without tools, technology then must necessarily therefore precede the scientific practice of theorising about things systematically and hypothetically: the act of science is an act of self-awareness. For example, the invention of the clock transforms the perception of time, so that “once clocks are developed, we begin to perceive time through technology” (Ihde 1983, 245). The clock therefore represents a ‘scientific’ mode of understanding time so that time “is perceived via or through the clock and this perception is a technologically mediated perception” (Ihde 1983, 245) as opposed to the perception of time as tied to lightness and darkness, and to seasonal changes, for example. This position can be read against a neopagan worldview in the way that it understands different technologies to reveal different worlds. More specifically however, the point Ihde is really trying to make here is that technology is the condition of the possibility of science (Ihde 1983); that it is the existence of aspects/elements of technology which allow us to conduct the practice of science be those technologies instrumental tools, or tools of thought, like language. The transformative process from praxis to science is explained by Ihde: “[s]cience, in turn, becomes the coming-to-self consciousness of these activities, a self-consciousness which projects the form of life implicit in the praxis upon the universe, and a self-
consciousness which becomes increasingly purified of diverse elements” (Ihde 1983, 251). The point is that science, through specific technologies, is the means by which we come to think of the world as measurable, definable, quantifiable and calculable. It allows us to examine discrete, isolated elements of nature in a ‘controlled’ fashion. The clock, for example, places time outside of the context of the world, and renders time as somehow universal and historical, and thus time embedded in the clock becomes a way of seeing. Neopagan technologies and rituals then, run counter to this abstraction of the clock, because neopagan technologies of time measurement are located within their local environment. As a result, it becomes important to consider what technologies we choose to see the world with, given this defining power.

Here Ihde is pointing towards the process of abstraction embedded in technological processes, an abstraction which is relatively recent. The inventions of the Renaissance era often emulated human and nonhuman forms, and it was only later that technologies were separated from these organic ties, becoming removed from their ties to the world of lived experience, of praxis: “[o]nly gradually did the abstraction needed for Technology in its contemporary sense emerge and thus free technologies to be ‘scientific’ in the sense of being embodiments of a purely technological metaphysics” (Ihde 1983, 251). Feminist critics of scientific knowledge — such as Keller (1985) and Harding (1986) — can only too well remind us of the problems, inaccuracies and potentially detrimental effects of a science which believes itself to be separate from, above and removed from the natural world in which it is so wholly embedded. These positions highlight that there are ways of using technology which are not separate, or removed from, the world, and which are instead praxical and embedded and it these uses of technologies I consider to be sustainable and responsible.
Having established the relationship between science and technology, and their historical and ontological relationship to one another alongside Ihde’s positioning of science and technology as contextual, cultural and located, I turn now to consider the human-technology relation as theorised by Ihde. Specifically, I suggest that being human is expressly a state of being in a human-technology relation. Through this thesis, I problematise positions which seek to place technology at the heart of explanations for ‘new’ or ‘current’ social problems and issues, and re-shape our understanding of technology in ways which construct technology as a counterpart integral to human existence — and a crucial one at that. In recognising that technology precedes science, it challenges the authority and abstraction of science in similar ways to that in which feminist critiques of science have managed to challenge its authority. Seeing technology as the precedent to science allows us to understand its relationship to humanity as not ‘new’ or ‘progress gone mad’ but an evolution of sorts which has been underway since we came ‘down from the trees’. Further, it sets up ways to understand technology as contextual and located, not removed from its environment.

However, while I agree with Ihde’s assertion that context and locatedness allows us to see the way that ‘traditional’ and ‘modern’ technologies have different effects but ultimately, share much, I suggest digital and information technologies, which are the focal point of this thesis because this is where the technopagan dwells, differ from ‘traditional’ technologies at least in the way they are perceived. Every age regards its technological developments as unique or different, and so there is a sense in which the level of our technological interactions and mediations today are occurring in an unprecedented fashion. Primarily, in contemporary culture digital, networked
technologies are constructed as offering a significant departure from all previous forms of communication and connection. Developing relations in purely virtual spaces and building interactions removed from their traditional contexts frame digital technologies as vastly different to earlier forms of technology. The dispersed authority of wikis or the expansive communities in social networking forums shift traditional structures of knowledge, authority and power. This is key because it can potentially redistribute power and knowledge in egalitarian ways. It is also significant because the technopagan is digital and so emerges from these technological networks. Considerations of technological relations demonstrate the role of instrumentation as a cornerstone of human experience, and it is this instrumentality that I examine now.

A small but growing number of philosophers who began to inquire into the technologies of science have been labelled by Ihde as ‘instrumental realists’. What is significant about this shift in the focus of philosophical inquiry is that it recognises the role of technological devices, of instruments, as central and crucial devices that play a role in mediating the science being done — and therefore the ‘knowing’ being conducted — through and with these devices. Not only can these devices magnify or reduce the subjects or objects of study, they also offer up the world in a particular way, framing the object of study in specific formations. There is a danger in theorising which “leaves technologies outside science altogether, or else takes them for granted as simply transparent devices used in experiments” (Ihde 2004, 120) because it removes the agency of technological devices and allocates no role to technology in the process of science. When such assessments are made, we assume that “instruments are ‘neutral’ and this is a philosophical position concerning technologies and is thus open to debate” (Ihde 2004, 120).
When the idea that technological instruments are neutral is deconstructed, the task becomes one which inquires into the ways in which these devices mediate, influence and impact our scientific investigations. The devices themselves become the focus; they become central, not peripheral. In fact the role of instrumentation could be recognised as the “technological embodiment of science” (Ihde 1991, 99). Instrumental realism emerges in the recognition of a technologically embodied science, that reveals the ‘real’ to us (Ihde 1997) and in the related praxis and perception through those instruments (Ihde 1991). Modern science is defined by its instrumentation, distinguishing it from the history of contemplative, speculative science. The relation between science and technology then “is not simply accidental, but essential” (Ihde 1991, 96). Within science the implications of instrumental realism are that it is not only the theories of science which need to be critiqued or analysed, but the very praxis of science requires attention also (Ihde 1991). Significantly, the instrumental realist position moves science from its location in unquestioned ‘truth-revealing’ extracted from neutral objects, and towards a point at which both theory and practice converge as sets of interests which shape the knowledge-production of science. Instrumental realism highlights the role of the technologies of science “as the means by which discovery occurs and knowledge is expanded” (Ihde 1991, 103). Ihde takes this position further to remind us that science is far more than ‘by chance’ embodied technologically, it is instead an essential relation of knowing embodied in instrumentation (Ihde 1991, 103).

The implications for this inquiry also reverberate outside science, rendering our whole world a series of technologically mediated interactions, calling into question the nature of our experience with the world, and I would suggest, offers a view of the world which
becomes increasingly situated and contextual, as we each interact with technological devices in different ways, and for different reasons. It reveals a world which is always mediated, and never ‘just there’. The world comes to us, or we come to the world through our instruments and technologies, which shape, frame and mediate the way in which we read and interpret the world.

One way to unravel the human-technology relation is through a deliberation of the kinds of human-technology relations which exist. Ihde offers three primary types of human-technology relation: embodiment, hermeneutic and alterity relations, and two corollary/fringe phenomena for consideration: background and horizontal phenomena. The purpose of this analysis is to examine the structural features of the variety of human-technology relations, which for Ihde focus around the ways in which we are bodily engaged with technology.

The first of the human-technology relations are embodiment relations, existential relations with the world in which one’s praxis is embodied (Ihde 1990, 72). For example, visual technics, such as wearing eyeglasses, is a relation in which we take a technology into ourselves in the sense that the eyeglasses become the medium with which we perceive the world. To use an example apt for this thesis, in playing a video game on a computer, the screen through which we experience the game withdraws, and becomes an invisible window through which we interact with the game. This technology relation acts a mediator between us as the seer and the world, as the seen. Though this alone is not enough to constitute an embodiment relation, crucial to this relation is a need for the technology to function in a transparent way so that it ‘withdraws’ and functions as a part of oneself.
Ihde notes the way in which these relations render our embodiment mutable rather than fixed, for in order for these relations to operate, we must be able to shift our perception of our body so that it can extend or retract depending on the various embodiment relations in use. Within science, embodiment relations abound because visualising technologies are so prolific in their operations of ‘revealing’ the world. For the expert or scientist, this embodiment relation is shown through the microscope as it becomes an extension of the human eye when used, and thus becomes an extension of seeing. In these relations, the role of magnification and/or reduction is a key function. A microscope magnifies, as does a telescope in the way that it ‘zooms’ us across a great distance to magnify the studied object, and through this magnification, both objects in view are necessarily removed from their context and rendered the same size — without which the technologies would be essentially useless. It is our own ability to ‘take on’ and learn the embodiment of technology — such that there is a ‘habit’ of seeing where we become highly literate in these technologies and learn to differentiate between a planet and a cell, for example — which allows us to differentiate between the very large and the very small. It is the nature of our embodiment that we appropriate and relate through technologies. The result is that the world is revealed to us through a bonded relationship between us and our technologies, such that our knowing of the world is embodied in these relations, and this knowing involves the recognition that agency is always collaborative.

As I will elaborate in Chapter Four, neopagans usually perform ritual work within a sacred circle which is cast through a series of symbolic actions which create a safe space within the four compass points. Discussions of reimagined human-technology
relations show that a magical ritual using tools and artefacts enact a human-technology relation, as does ritual conducted in a circle in the woods or in a circle created on the internet. Thus the computer becomes a lens through which we connect and relate to others. Within this view of human-technology relations, the circle cast outside in the woodland and the circle cast across the digital networks of cyberspace are ontologically equivalent.

The second form of human-technology relations are *hermeneutic relations*, where hermeneutics is understood as ‘interpretation’ generally, and textual interpretation and reading specifically. Ihde reminds us that “writing is a technology embedded in language” (Ihde 1990, 81). Where embodiment relations are technologies taken into oneself and through which we perceive the world, hermeneutic relations are relations in which a technology *refers* to some sense of the world. A map or chart (given as Ihde’s example) refers to a location in the world — we read the map and interpret its signs and markings as representative of an outside world — it refers beyond itself (Ihde 1990, 81).

To return to the computer game example, the user interface (UI) of an online Role-Playing Game is a case of a hermeneutic relation because the interface features maps, quest boxes, compasses, and calendars, all of which communicate about and refer to, the virtual world we are entering. I look at my UI and see what time of day it is in the virtual world, what compass direction I am headed in, which friends are online, and what quests I need to complete. Another example Ihde offers of a hermeneutic relation is a thermometer. We read the thermometer, interpret the symbols on the bar and ‘know’ —hermeneutically — that it is cold outside. Hermeneutic relations then, present a *referential* kind of seeing. The primary differentiation between a hermeneutic relation and an embodiment relation is that in hermeneutic relations, the immediate thing which
is perceived is the thermometer, for example, and not the world to which the thermometer refers — we primarily perceive the instrument, not the thing the instrument measures: “[i]n a hermeneutic relation, the world is first transformed into a text, which in turn is read” (Ihde 1990, 92).

The final of the three primary human-technology relations Ihde explores are alterity relations (1990, 93), where alterity is understood as ‘other’. In this case, relations are explicitly to or with a technology in which we experience the technology as ‘other’. Appropriately for this thesis, Ihde uses the example of video games, a relation in which both embodiment and hermeneutic relations take place, but there is also a sense in which the user is engaged explicitly with the game, with the computer as ‘competitor’. The technology is seen as ‘not me’ but as an ‘other’ with which we interact. In my own computer game example, the ability to ‘hack’ a computer game treats the code of the game as an agentic other. Ihde posits the otherness of alterity relations as something of a fantasy, given that no technology is truly ‘other’ and so instead we perceive it as ‘quasi-other’. The ‘quasi-other’ of alterity relations makes the technology the focus, rather than the technology being a tool through which we perceive some aspect of the world, such as the moon, or the weather.

These three forms of human-technology relations exist along a continuum for Ihde, from the immediacy and transparency of the embodiment relation of eyeglasses to the semi-transparency of a hermeneutic relation, through to the alterity relation where “technology becomes quasi-other, or technology ‘as’ other to which I relate” (Ihde 1990, 107). These relations are ‘direct and focal’ but are not the only kinds of relations. There exist also “fringe and background phenomena” (Ihde 1990, 108) background
relations and horizonal phenomena. Background relations are phenomena in which technologies operate discretely in the background, such as the hum of the refrigerator or the blowing sounds of the air conditioner. These technologies may require some initial intervention, such as programming the air conditioner, but if the device functions correctly, it then operates on its own, with no human intervention, with the remaining relation being one of the background function of its operations — usually the production of ‘white noise’. In computer technologies, a virus protection programme is an example of a background relation in the way that it is initially set up, and then runs somewhat automatically in the background of the computer’s other functions.

Where all previous relations outlined contain some sense in which “there is some experientially recoverable difference between what is experienced and the experiencer” (Ihde 1990, 112), in the case of horizonal phenomena, there may be a transformation in which technologies cease to be technologies (Ihde 1990, 113). Horizons in this context refer to limits, not limitlessness, and so seeks to understand “the question of the extremities beyond which there is no recovery” (Ihde 1990, 112). The clock could be understood as an example of the horizonal phenomena, because the technologies of clocks have become the way in which we understand time, such that it is difficult to distinguish between time and the clock. The horizonal relations present a world in which the distinctions between nature and artifice become significantly blurred in ways in which the previous relations do not.

These relations outline the depth and variety of ways in which humans commune with technology. A continuum of relations exist through which our experience of the world is mediated, enhanced, translated and referred. In the context of this thesis, these relations
assist in demystifying human-technology relations and illuminate the broad context in which these relations can exist, and the collaborative nature of agency.

In recognising that humans have only ever existed in relationship with technology, the way human-technology relations are explored changes dramatically. In this context, this relation shapes the very basis upon which we understand our human-ness. To attempt to separate out humans from their technologies in order to understand what it is to be human is to construct a model of human-ness which is inaccurate and fails to properly recognise humans as tool-using beings, ignoring our growth and development throughout history as constituted as being-with-technology.

Ihde’s analysis of technoscience enables us to consider issues relating to our understandings of our relationship with nature. In particular, this analysis presents a different way of framing ecological concerns, particularly in the context of environmental philosophies which have too often simplistically identified ‘high’ or ‘modern’ technology as the cause of so many of these problems. In considering human relations with nature, it is useless to demonise technology, but it is imperative to understand our relations to technology if we desire better ecological relations. Earlier in this section I noted that Ihde makes a distinction between technologies employed by humans and the use of technologies by animals, which he calls proto-technological. Humans and animals have the ability to damage or compromise their environment without forms of ‘modern’ technology, but technological devices amplify this ability to modify and alter, and the ecological crisis is an example of this amplification.

Understood in this fashion, the “non-neutral, transformative power of humans enhanced by technologies is an essential feature of the human-technology relations” (Ihde 1993,
In looking at technology within a broader context, and seeking to understand the reasons behind the unprecedented degradation of the more-than-human world, care must be taken to avoid thinking which leads us (too easily) to identify forms of ‘high’ or ‘modern’ technology as the culprit.

Heidegger foregrounded the role of the technological in relation to nature, as does Ihde in noting the need to examine our worldviews of ‘nature’. After all, Ihde reminds us that even simple, ‘traditional’ uses of technology can dramatically alter the environment, as seen in the construction of the pyramids in Egypt (Ihde 1993, 52). Instead, it is important to understand that the level at which this degradation occurs, the rate of decline in biodiversity and the starkness of ecological destruction is facilitated by these technologies, and that these technologies are not neutral and therefore must be read in context. This means taking several things into account, including the nature of the technologies involved; the relation of these technologies to the humans using them; and, the cultural context in which they are used (Ihde 1993, 54).

The emergence of theories of technoscience and the philosophy of technology is a rich field of inquiry which has much to offer a study into technopaganism. Primarily, the philosophy of technology presents an alternative perspective for how we can understand the role that technology plays in our lives. Analyses which understand technology in ways which are ‘not new’ and instead as the traditional and constant companions of humanity, re-define the technopagan in a less oxymoronic, less controversial way. If we acknowledge our long-standing and often harmonious interplay with technological devices, then a worldview which incorporates those devices into an ontological space, which includes spirituality, becomes less startling, and in fact resonates with Ihde’s
theories in many ways. In particular, spirituality can reveal particular kinds of human-technology relations in specific contexts, and allows neopagans for example, to see the world as an agent, while technopagans see the technological as a part of this agency, by seeing the virtual and the digital as a part of ‘natural’ existence. Further, these considerations reveal a praxical element of human-technology relations, which develop in the practical interplay between the agency of the human and the agency of the technology. Secondly, the analysis which makes little or no distinction between traditional technologies and ‘modern’ technologies, deconstructs notions about ancient pagan cultures as necessarily primitive, and challenges the assumption that in order to live in harmony with the more-than-human world, people need to be non or anti-technological. In fact, in contemporary society today examples abound which draw the ancient and modern together. One example is the identification of ‘henges’ in the ‘built’ environment. Where Stone Henge is noted for its funnelling of the rising sun through an avenue of the structure at one point each year, namely the dawn of the Winter Solstice, urban examples of this phenomenon have been noted, such as ‘MITHenge’ and ‘Manhattan Henge’. MITHenge occurs along the ‘infinite corridor’ of the MIT campus, where the rising sun tracks along the corridor in a fashion similar to the Stone Henge event. Similarly, the long streets of New York provide a similar effect, as the sunlight is funnelled through the high rise corridors of Manhattan.

Through Ihde’s model, we can see that sites such as Stone Henge, or the existence of standing stones and burial mounds are technological devices of some sophistication, especially in the context of readings which understand erections like Stone Henge to be time measurement devices (Ihde 1993, 59). Stone Henge, despite its uncertain purpose, is generally understood to mark major seasonal and celestial events, such as solstices, in
the way it aligns with the sun at particular times of year. Instead we can interpret
ancient cultures in terms of context, recognising that the technological devices used by
these cultures were functional and useful for their purposes. Simply because they do not
resemble more familiar kinds of technologies does not render them anti-technological or
primitive.

I assert that Ihde’s call to re-cast technology into a broader historical context, in ways
which properly recognise the (crucial) role of technology in science, offer a rich source
by which we can understand and interpret technopaganism. Using the understanding of
the human-technology relation, the emergence of identities which simultaneously
embrace digital culture alongside and in harmony with, ancient earth-based spiritual
traditions is transformed into a sensible, pragmatic and highly praxical engagement with
our world. A technopagan performing a Mabon11 ritual online through a virtual
interface with a cyber coven fully embraces embodied relationships between humans
and technology. This is done through the ontological repositioning of technology. In
this model, the technological does not confront nature, nor is it nature’s antithesis. This
ontology instead reads technology as part of existence, including what might count as
sacred. In contrast to positions which locate the neopagan in a regressive, anti-
technological role, the neopagan who visits Stone Henge for winter solstice is actually
convening with nature through and with technology.

Having considered Ihde’s exposition of the human-technology relation, I now shift
trajectory to consider Latour’s fundamental repositioning of the relationship between

11 Mabon is a neopagan “Sabbat” which observes the autumnal equinox, traditionally to celebrate the end
of the harvest season.
humans and technology. It might be said that where Ihde presents us with categories for understanding the different kinds of human-technology relation, what Bruno Latour offers is a total disruption of the categories of ‘human’ and ‘technology’ and their relationship to one another. Presenting the human-technology relation in the way Ihde does maintains a humanistic centrality wherein we still ontologically distinguish between agents of human or technological status wherein the two-way relation between human and technology is primary. For Latour this falsely represents the way that actors — human and nonhuman — not only interact, but the way they are shaped and what it is that shapes them. Latour offers the network as a potential model for understanding relations between actors. A network metaphor is one which presents an image of a multi-nodal, three dimensional structure which emphasises the connections of things through relayed nodal points. This structure emphasises connection and interconnection: to reach a certain nodal point we may transit through several other points to reach our destination, through movement, relay and transformation. I begin by describing the Latourian concept of hybrids as critical figures in the network dynamic, and then introduce Actor-Network Theory as a useful analysis for understanding technopagan ways of being in contemporary society.

Hybrids and Actor-Networks

The hybrid forms a critical identity in this thesis, as manifested in the technopagan, so Latour’s exposition of their creation and proliferation in his seminal text *We Have Never Been Modern* (Latour 1993) is relevant to consider. This discussion overlaps with Actor-Network Theory (ANT), but is valuable in its own right for Latour’s insightful assessment of what it means to be ‘Modern’ and for understanding hybrid states of
nature-cultures and subject-objects, for example. Hybridity forms a powerful metaphor of lived reality, and locates technopagan agency within this reality.

Central to this discussion are some core concepts which must be grasped to follow Latour’s investigation. Latour examines ‘the moderns’, a term itself problematic for Latour, because it carries assumptions of triumph over its supposed opposite — the pre-modern ancient. So what does it mean to be modern? For Latour, modernity is defined by two kinds of practices which must remain separate in order to operate, and yet in recent times have become blurred. The first practice is that of ‘translation’ which “creates mixtures between entirely new types of beings, hybrids of nature and culture” (Latour 1993, 10). The second practice is purification: the creation of “two entirely distinct ontological zones: that of human beings on the one hand; that of nonhumans on the other” (Latour 1993, 10-11). These two practices are useless without each other — purification gains its purpose from the existence of translation, and without purification, the process of translation would “be slowed down, limited or even ruled out” (Latour 1993, 11). Crucially for Latour, so long as we see these two things as separate, we are modern, that is “we willingly subscribe to the critical project, even though that project is developed only though the proliferation of hybrids” (Latour 1993, 11). What Latour is saying is that these twin projects while both crucial, must always be dealt with separately in order for us to be truly modern. Once we consider these two processes in tandem, we cease to be modern. Latour suggests that it is the work of purification that makes translation possible, and that the denial of hybrids actually ensures their existence, the more we deny them, the more they proliferate.
Of course, Latour’s argument is that we are not, and never have been, ‘modern’.
Translation is hybrid networks, and purification is the modern critical stance of
distinction between humans and nature. For Latour, the link between translation and
purification is that purification makes translation possible, and the more we forbid
ourselves to see hybrids, the more possible their interbreeding and existence becomes.

That a delicate shuttle\textsuperscript{12} should have woven together the heavens, industry, texts, souls,
and moral law — this remains uncanny, unthinkable, unseemly (Latour 1993, 5)

What Latour is suggesting that in the modern state we assume we can isolate
everything, and deal with things separately. The modern state is one where the fabric of
things is no longer seamless (Latour 1993). Latour refers to ethnographers and
anthropologists: anthropologists examine the interwoven fabric of ancient cultures but
state that there cannot and should not be an anthropology of the modern world — which
ties into the idea that we cannot create a narrative of the modern world that draws
everything into one story not least because we build our worlds from facts, not stories.
Ethnographers do exactly this — look at cultures, engineering, ritual etc all
simultaneously — but this does not get done to our modern culture — only ancient
cultures or ‘other’ cultures\textsuperscript{13}. To be modern is to have somehow triumphed over the
passage of time — modernity has won the battle.

Latour suggests that moderns inadvertently create hybrids \textit{because} they assume they can
deal with everything separately: the idea here is that if we deal with nature and culture
as separate, then actors (within those categories) create translations across those two
poles and form networks, which leads to the creation of hybrids. If we consider only
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\textsuperscript{12} A shuttle is a tool used in weaving to hold thread and move it across the weaving device. It has since
come to mean transportation or movement.
\textsuperscript{13} Of course, the scope of inquiry for ethnographers has shifted since Latour first made this statement. Ethnographers now commonly study their own cultures along with those of ‘other’ cultures.
hybrids, then we are dealing only with the mixtures of nature and culture, and if we deal only with purification, we are looking at the total separation of nature and culture: it is the space/relation between these two tasks that Latour is trying to understand. Hybrids proliferate because we create poles of purification as heuristic devices to understand the world, and then forget they were merely devices for comprehending reality, not the world itself. As such, the divisions between human and nonhuman, nature and culture thrive through binaries, as has been similarly identified in feminist critiques of dualism.

This ‘modern’ state of Latour’s exposition is grounded in what he calls the ‘Great Divide’, the grand separation that marks us as modern. The Great Divide consists of two components, the first being the separation between humans and nonhumans, and the second being the divide between ‘Western’ culture and all other cultures, in which the West sees itself as a culture which is “not a culture, not merely a culture” (Latour 1993, 97). In contrast to the Great Divide is the Anthropological Matrix. Latour asserts that pre-Enlightenment there was the Anthropological Matrix — a great webwork of intersecting and overlapping interests, ideas, languages and ontologies. In this matrix varied elements/actors could be dealt with simultaneously, as connected and of shared concern, for example, the observational, contemplative, theological and the scientific can be considered alongside each other in this view. In the Anthropological Matrix hybrids rule — things are not simply objects, actors, or subjects or natures, they are nature-cultures (Latour 1993, 96), and subject-objects. With the Enlightenment came the Great Divide, where modern science creates a split between the world of Nature and the world of human endeavour. This creates a dynamic that asserts these two spheres need to be dealt with separately, indeed, that they can be separated in the first place — extracted, confined, measured and controlled. The modern state assumes that we
construct culture, but not nature. In fact, “the very notion of culture is an artefact created by bracketing Nature off” (Latour 1993, 104) such that Latour’s proposal is that the West has ‘created’ nature by the very act of supposing ourselves to be separate from it. This occurs through the discipline and practice of science which purports to simply ‘uncover’ Nature, rather than actively constructing it. For Latour, this Great Divide is breaking down due to the ever-increasing complexity of the networks which we now find ourselves immersed in — including information networks — and the proliferation of hybrids is occurring at a great rate as they undermine our existing disciplinary divides: the hybrid has breached these partitions. Global phenomena too challenge projects which attempt to deny the existence of hybrids. The hole in the ozone layer, Latour notes, is both ‘of Nature’ because it is an ecological problem and ‘human’ because it is our doing. DNA too, is a scientific discovery which is exposed as a component shared by all humans and nonhumans, such that its existence is implicated in the spheres of both nature and culture. According to Erik Davis, each technical development, each knowledge production “produces a new subject-object, a new technical actor that is registered and constrained by the entire matrix. It is this webwork that the Great Divide rips apart, allowing for the enormous and heedless productivity of the modern world” (Davis 1997, 3). Despite the breakdown of the Great Divide, it remains the dominant mode of understanding and relating to the world.

I argue that technopagan agencies restore this webwork that the Great Divide rips apart. Digital networks, which are nodal like a web, facilitate the patching together of dispersed categories, offering possibilities for their reconstruction and reintegration. Worldviews which weave together the silicon and the sacred are re-entering the Anthropological Matrix, wherein science and spirituality, poetry and politics can
converge and collapse into new categories and new modes of existence. In these convergent spaces lie possibilities for patchwork futures which are more faithful to our experiences of reality, and which properly locate us within techno-natural contexts.

The network structure as a model for understanding knowledge and ways of being allows for exchanges between human and nonhumans (animals), and between humans and nonhumans (objects) and suggests these interactions form networks which construct our experience of reality, knowledge and power. In simple terms, this is Actor-Network Theory (ANT), attributed to Bruno Latour, John Law and Michael Callon. Their background in the Sociology of Scientific Knowledge (SSK) and Science and Technology Studies (STS) brought them to the creation of this model for understanding relations between actors — particularly as they are interpreted and constructed through the work of social scientists. Entities, objects and discourses take their shape and form their substance through their interactions with other entities — they do not exist in solitary separation, there is no ‘pure’ form, no a priori entities; instead there are only relations to other entities, forms, nodes and actors. In Actor-Network Theory, the concern is not so much what actors are but rather what actors do. This ANT model is inherently anti-essentialist: in this model there is no pure essence, no essential quality belonging to any actor, object or thing other than their agency in the network. ANT then, is “a semiotic machine for waging war on essential differences” (Law 1999, 7).

Actor-Network Theory and related theories of the ‘modern’ state and hybrids are best framed as attempts to understand technoscience. Contrasted against previous theoretical attempts to talk about science and technology, technoscience recognises them as part of the same process (Sismondo 2004, 65). Actor-Network Theory is a social theory
centred on technoscience, similar to previous perspectives discussed in this thesis — such as feminist STS — which recognise that acts within science and technology are social acts, contrary to many of the assertions made by those in the disciplinary sciences, who might propose their work takes place outside the realm of the social.

Some key concepts central to ANT help define the theory better. The first term in ANT, actor, or actant, suggests that rather than simply acting, actants are things made to act. An actor can be people, objects, language or text. ANT suggests all actors have interests and those interests motivate them to ‘enrol’ other actors into their interests, thus creating an Actor-Network. This Actor-Network begins with the process of translation which in “ANT’s sense is not neutral, but changes interests” (Sismondo 2004, 69). Translation contains a three step process: problematisation, where an issue or problem is acknowledged to exist which requires attention or addressing; secondly, interessment, the gathering together of relevant actors who ‘agree’ to address the issue, usually by one actor who encourages other actors to accept their role in the network; and finally, enrolment, wherein the actors accept the roles assigned to them in the network. The result is an Actor-Network which consists of a set of actors who display a heterogeneity of interests.

One way to understand the network-building through the enrolment of actors in ANT is to look at the way that a software developer for example, enlists and gathers and puts

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14 One of the difficulties of talking about ANT is that its creators are reluctant to ‘pin it down’ in the way that naming a theoretical perspective does. Latour argues that ANT is a method not a theory — it presents us with a way to travel. By ‘naming’ ANT we assume we have contained it, defined it, set out its boundaries and this is in many ways contrary to the very idea of ANT — hence the emphasis on movement.

15 It should be clarified these actors are often nonhumans and the ‘agreeing’ occurs in non-anthropocentric ways. The materiality of the agents ‘act’ in unintentional or unorthodox ways.
together alliances in order to maintain and build their power as a key producer and shaper of computer software. The same acts take place for scientists and engineers — the difference in ANT is that it recognises that the enrolled actors are not only human — the actors can be objects, animals or language. Within ANT it is unimportant whether an actor is human or not — because again, it is what the actors do, not what they are, which is important. The implications of this approach ontologically are that actors are framed as dynamic, non-essential, symmetrical and ontologically equivalent.

In later writing Latour laments the network metaphor, because the rise of digital culture and the internet in particular have resulted in the sense that we all know what a network is. Further, the ‘web-based’ network is not the kind of network Latour had in mind — in internet networks, information moves from node to node unaltered — the information is accessible from anywhere and is the same wherever it is accessed — and this is the complete opposite of what ANT networks are about. Hence this notion of mutable, transformative networks exceeds the web-based network — in later writing he suggests instead replacing that metaphor with something like movements or trails, which emphasise tracking, method and travelling rather than location or place (Latour 1999, 17).

However, Latour’s understanding of digital networks is problematic because it ignores the variations of interpretation and context — which semiotically understands that meanings differ across contexts — which can occur through network transfer, and it also fails to recognise the growth in user-generated content in network technologies which centre on individual contribution and input. For Latour however, the World Wide Web has damaged the metaphor of the network, through the rise of what he calls
“double-click information” (Latour 1999, 15), the perception that information can travel through the nodes of a network unaltered, it is “transport without deformation, an instantaneous, unmediated access to every piece of information” (Latour 1999, 15) and this is the precisely contrary to what ANT intended with its network metaphor. Further, this highlights one of the interesting aspects of metaphor: metaphor is used to convey meaning through reference to another ‘thing’ but shared ideas about that ‘thing’ might not be the same, and even when it is, it changes and mutates meaning over time and through use.

Contrasted against this web-based understanding of the network, an ANT network instead posits that the movement of information through nodal networks necessarily transforms and mutates information/actors/objects and that it is through this interaction and movement that these objects and actors develop their form. Consider for example a Massively Multiplayer Online Role-Playing Game (MMORPG). The construction of the game requires game developers, story-builders, programmers, coders and researchers, as well as the code which too displays agentic properties, shaping what can and cannot be done in-game. It also enlists marketers, promoters and game-developing companies. The game will involve beta-testing from users, and then of course the broader market of users who will buy and play the game. The users feed back to the developers glitches in the game, shortfalls and problems, which are then fixed and rolled out through ongoing upgrades and modifications (mods) to the game. Other actors involved are the technology being employed to play the game, so that each user experiences the game differently depending on the variable capabilities of their machine, their servers, speakers, monitors, graphics cards, and their internet connection speeds. Participation in the game varies throughout time zones, ages of players — some play after school,
others after they have put their children to bed, others all day and night long — and these participations vary the game itself, so that certain times will make the game environment very busy, while at other times it is comparatively quiet. Examining the variety of actors involved in the network of the computer game like an MMORPG demonstrates the ways in which the communication amongst and between these actors necessarily shapes and defines the game itself, such that the game does not exist outside of this network. Without the network the game cannot exist, because the game is the network.

ANT in Latour’s figuration was never a theory of what the social was made up of — it does not attempt to examine what makes society exert pressure on actors. Rather, it is a method (a crude one, Latour notes) to learn from actors “without imposing on them an a priori definition of their world-building capacities” (Latour 1999, 20). For example, we apply humanist theories between subject and object which ascribe the active and the passive to these agents, requiring ‘them’ to conform to ‘our’ existing categories. This approach to method in the social sciences signals difficulties with language: Latour notes how poor the vocabulary of ANT has been, and this highlights not a failure on the part of ANT, but rather signals that the words of social scientists could never replace the “rich vocabulary of the actor’s practice” (Latour 1999, 20). The point Latour is making here is that social scientists, by nature of their method and what they do, which is to ‘sum up’ the actors they observe through the employment of (their own, existing) vocabulary and categories, necessarily through this process limit the interpretation of the actors they observe. Latour suggests it was the arrogance of social scientists who try to make the objects of their study — people of another culture, for example — fit their existing models of social interaction, anthropology, language etc, which required
addressing. The goal of ANT is to find a way to avoid this — firstly by becoming aware of the limiting process of ‘translation’ — the process of “making two things that are not the same, equivalent” (Law 1999, 8) — and secondly by attempting to avoid translation as a goal in the first place, because translation tells “us nothing at all about how it is that links are made” (Law 1999, 8). For example, to return to the MMORPG, in order to study the communicative network of the game, theorists understand communication within the game in comparison to something else, for example, face-to-face social interactions. In this view the MMOPRG will always be viewed as some kind of shadow of face-to-face interaction, and necessarily deficient. Instead, ANT would encourage a way of looking at a MMORPG as an agentic network in its own right, such that it allows actors to “deploy their own categories” (Latour 1999, 20) thus circumventing the problematic process of ‘summing up’. This offers a useful position from which to consider virtual communities and other worlds of technopagan agency.

The process of boxing and naming assumes that theory and thinking should be clear, ordered and ‘communicable’ — Euclidean, we could say — and this presents a problem for ANT theorist John Law. It renders complex and knotty thinking as difficult or impossible — rather, knowing, partly through the process of naming, erases the differences, nuances and complexities of a thing and smooths it into a broader object which more easily fits the existing categories in which we want it to fit. So complex, messy, heterogeneous thinking becomes impossible because it cannot fit the translation processes of ordering and boxing. Complexity is the goal here — and from complexity comes partiality — and Law reminds us to avoid playing the God-trick, because this partiality reminds us that the view from nowhere is no view at all. This project is

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16 Euclidean refers to geometry, named after the Greek mathematician Euclid.
significant as it relates to the technopagan as a creature of complex, messy composition and partial, shifting constructions of reality.

ANT is diasporic according to Law, — which produces the dilemma of how to talk about a thing, and hence the necessity of naming — without then reducing it through the naming/containing process. The dilemma he leaves us with then is how do we talk about complexity? Law finds hope in the ‘after’ of ANT in the work of Haraway (1991a, b) and Strathern (1991), who talk of partial connections and composite creatures like cyborgs, and this goes some way to finding a space in which to have a discussion about complexity without losing that very complexity. Marilyn Strathern employs a metaphor Law finds more rewarding than that of the network: fractals.

Fractals offer a solution to a problem: the objects/subjects we study are “always more than one and less than many” (Law 1999, 11) by which Law means that any discipline, for example, is not a single thing; it can never be defined ‘once and for all’, it is always in flux, un-containable and therefore is more than one, and yet it remains as a discipline; not some incoherent jumble of multiple ideas without connection, — and hence is less than many. In this sense, it is not a multiplicity or a plurality. Law calls for us to avoid dualism (which he argues are single on the one hand and many on the other) because dualism limits intellectual theory and practice. The either/or, the big or the small, and the one or the many refutes complexity and reduces the boundaries of thinking. Instead contemplation of the fractal\(^{17}\) — something which by definition occupies more than one dimension and less than two — conveys the sense of somewhere in-between. This

\(^{17}\)A fractal is a largely geometric form which displays self-similarity. That is, if we zoom into the structure, the micro structure reflects the macro and vice-versa. A fractal can be subdivided and continues to replicate itself in smaller and smaller parts. Fractals exist in nature, as exemplified in the snowflake, fern or honeycomb, and were named by Benoît Mandelbrot, the ‘father’ of fractal geometry
consideration is difficult because it cannot be pinned down; it is not singular, quantified or contained and resists all our existing frameworks about how we go about thinking about defining things in the world. Law argues the God-trick is alive and well, that the desire to pin down, reduce and contain is ever-present, but the real potential for change lies elsewhere: “[i]t [the potential for change] lies in the irreducible. In the oxymoronic. In the topologically discontinuous. In that which is heterogeneous. It lies in a modest willingness to live, to know, and to practise in the complexities of tension” (Law 1999, 12). This refusal to be pinned down resonates with technopagan ways of being in its juxtaposed, ironic and mutable state.

According to Law, ANT is a semiotics of materiality (1999, 4). ANT uses the semiotic insight of the relationality of entities, and applies it to all materials and not just entities which are linguistic. ANT can be seen as the “ruthless application of semiotics” (Law 1999, 3) drawing from the semiotic tradition that entities gain meaning through relations with other entities. This relationality does not mean, in the semiotic world, that there are no divisions, but that the divisions are effects or outcomes — not given, essential or primary. In sum, Law delivers ANT as a relational materiality. This analysis is significant because it takes two originally contradictory terms — semiotics and materiality — and brings them together in a way which attempts to shift our conceptual understanding of materiality. Specifically, it brings materiality into the realm of semiotic interpretation and makes semiosis a part of materiality; rendering materiality a realm which is not fixed by essence or ‘reality’ but is yet another element which is defined in relationship. Thus ANT brings forth a relational ontology which is ‘unhinged’ from the traditional ties of materiality.
As I show later in this chapter, this project resonates with Haraway’s material-semiotic actor, and specifically the cyborg. Haraway similarly constructs a challenge to the oppositional status of materiality and semiotics. Drawing them together into one identity provides promising avenues for considerations of the mutability of the material, and the materiality of meaning. I will argue the hybrid praxes of the technopagan are consonant with these projects. Agency embedded within material and semiotic significance presents alternative considerations for being and knowing.

From the standpoint of ecological philosophy ANT is promising because it insists that we cannot deal with humans without referring to nature and vice-versa; it highlights the inaccurate assumption that humans can be separated out from nature, and hence offers theory which rejects the dualistic separation of human and nature. In relation to the technopagan, ANT affirms existence as properly manifested in semiosis and materiality, and in the acknowledgement of our links to, and construction of, nature. It does seem however, that while ANT wants to treat all actors equally, it in some way is still ultimately interested in human actors — there does not seem to be the same interrogation of, for example, a table, which leads us to question how ANT truly views the role of, for example, nonhuman animals within networks. Indeed, can we fairly assert that a table is as dynamic, complex, and interesting as an actor which is human or animal? Perhaps within the ANT approach, the interests, dynamism and complexity of an actor will vary depending on the particular network in question. Mutability once again is emphasised — an agent’s role, significance and interest are variable depending on context, and on the other agents enrolled in that particular network. This mutability also presents a useful model for the technopagan as a figure influenced by feminisms that critique the essentialist position. I have discussed in the two previous chapters the
debates which occur within feminism in relation to the body and questions of essence. ANT’s interest in what agents in networks do contributes, for example, to the corporeal feminist view that questions of embodiment and the material conditions of existence need not be essentialist.

Yet in other ways ANT could be seen to be unhelpful to feminism because it does not deal sufficiently with embodiment. The decentralisation of essences presents pathways for navigating essentialist traps within feminisms, many of which have been addressed in Chapters One and Two. On the other hand, the outcomes of both of these chapters have demonstrated that despite the ‘problem’ of essentialism, embodiment remains central to feminist inquiry, and should be disregarded at our peril. I demonstrate in the next section on Donna Haraway, ways in which a feminist approach could borrow from ANT in promising ways, attendant to these feminist tensions.

In order to ground this complex theory into a concrete example, I will now consider how ANT can be applied to a neopagan event like Burning Man. Briefly, Burning Man is an anarchic ‘festival’ where each attendee is considered a performer, not a participant, landing in the desert playa of the U.S. Nevada desert to construct a temporary city for one week. Radical self-reliance and minimal resource consumption and waste production are emphasised, accompanied by an array of art installations, raves, dances, techno-performances and hallucinogenic inductions. What kinds of actors then, would be found at Burning Man? We find people — both participants and organisers, and folk who are both; we find vehicles — first the plethora of vehicles which carry people to this remote location in the desert and often transform into their homes for seven days; and then there are the many ‘art cars’ which are decorated vehicles which snake their
way around the playa as transport, art, or mobile disco. There are tarps, tents, chairs, hammocks and umbrellas. There are thousands of bicycles. There are kilos upon kilos of ice and litres of coffee (both the only consumables available for purchase), there is money, but very little, though arguably there is certainly a great deal of capital. There are speakers, sounds systems, complex lighting arrays and smoke machines. There are cigarettes, alcohol and illicit drugs. There is the ‘man’, a construction of wood, metal and pyrotechnics, who is ceremoniously burnt at the climax of the week’s activities to celebrate summer solstice. There are fire-fighters, doctors, volunteers, and police. There is MOOP (Matter Out Of Place, or rubbish) and the volunteers who stay behind to return it to its right place. There is sex, performance, friendship and grief. There is of course, nature: the sun radiating down on the baked playa, there is rain, fire and the ever-present and all-pervasive powder-white playa dust which covers everything, necessitating the regular use of goggles to allow people to see during their daily movement. All of these actors form a dynamic network of agents who come together to form what is known as Burning Man. The process of translation enlists and enrols the various actors to move to particular actant roles: actors translate car into home, moonrise into floodlight, wood into man. Cars are translated into art. Tents are translated into homes, domes and clubs. People are translated into performers. Desert is translated into dance floor, performance space and art gallery.

What is revealed in reading Burning Man through the Actor-Network lens are the complex agencies which comprise Burning Man. ANT reveals in Burning Man a lively, active set of agents shaping and forming the network of this desert festival. Where a neopagan event might concern itself with nature and people as primary agents, ANT uncovers the technopagan shape of Burning Man wherein a broader community of
agents is accounted for. The ANT interpretation recognises that there is no hierarchy between the desert and the disco lights, because all agents form part of the network of the Burning Man ritual. ANT applied in this way uncers its rich potential to ‘learn from actors’ and to recognise the breadth of definition to which ‘actor’ can apply. This hybrid sensibility is part of the technopagan composition, which I why I want to discuss these issues. The technopagan hybridity is encased within the dual materiality and semiosis of agency, and in the hybrid states of identity expounded by both Latour and Haraway.

In concluding this section of Chapter Three, it is worthwhile summarising what threads have emerged which can speak to my positioning of the technopagan as a suitable figure for considerations of hybridity in contemporary culture. Latour’s emphasis of the proliferation of hybrids in the realm of the ‘moderns’ exposes the nature-cultures and subject-objects which proliferate in society and illuminates the fallacy of distinct categories which operate to separate us from nature. Latour demonstrates how this distinction is what marks us a ‘modern’ in his critical sense, and that attempts to maintain these categories of distinction are not only false and actually facilitate the creation of more hybrids, but these categories are breaking down in the late-modern state because of the increasing complexity which causes these boundaries to collapse.

ANT’s exposition of the contextuality of actors in networks demonstrates the community of actors which converge in the production of knowledge, showing that the primacy of the human actor needs to be questioned. Aligned with feminist analyses and criticism of the false neutrality of scientific practice, ANT reveals the networks of influence which build knowledge and in so doing, they champion a process whereby we
learn from actors, thus reducing the arrogance of the ‘knower’ in science or social science. These networks reveal the contextualised nature of all actants, wherein these actors take form only within their networks, and should they be removed from these networks, they cease to contain meaning. As such, in examining actors, this assessment must always take place within the network in which that actor is located. Drawing this analysis into an interpretation of technopagan identity, ANT can reveal the material-semiotic existence of the technopagan, and validates its explicit location within boundary-breaking hybrid spaces of nature-culture, and subject-objects. The technopagan as hybrid distinguishes itself neither from nature nor culture, instead reading the world as non-distinct categories of convergence and influence. Similarly, the technopagan embodies an ‘Anthropological Matrix’ worldview, wherein disciplinary interest, fractal geometry, poetry and ritual exist within the same non-contradictory categories.

The convergence of the material and the semiotic has been taken into a more explicitly feminist analysis by Donna Haraway, and it is her inquiry I turn to now to explore more deeply the material-semiotic actor, and its role and relevance to feminist theory, philosophies of technology and constructions of agency in contemporary culture. Launching from Latour’s identification of the promise which lies in some feminist formations of networks, partial connections and fractals, and in the material and semiotic states of hybridity; in the next section I explore Donna Haraway’s multi-layered and rich contribution to feminist inquiry, technoscience and relationships of affinity. Building on critiques of technoscience, I explore Haraway’s recasting of the concept of objectivity, and the subsequent call for what Sandra Harding called a feminist ‘successor science’ (1986). I complete this chapter with further examination of
her much-referenced, perhaps over-analysed (Sofoulis 2002), yet groundbreaking work on the cyborg as a hybrid identity, and the role this identity occupies in relation to my own hybrid figure of the technopagan. Inextricably semiotic and material, the technopagan demonstrates viable hybrid states of identity attendant to sustainability within environmental crises, the proliferation of digital technologies, and pathways for spiritual sustenance and subversive worldviews.

Objectivities and Situated Knowledges

The question of how to understand the term ‘objectivity’ is a continuing subject of debate within feminism. This question is relevant to this thesis because it offers useful critiques of scientific objectivity and adds to existing considerations in this thesis of ways to conceive of ‘objects of knowledge’ and their agency. Haraway observes how typically debates over objectivity centre around what ‘they’ mean by objectivity — where ‘they’ constitutes masculinist traditions of science and philosophy — (Haraway 1991a, 183) versus its impact on ‘us’ — where “‘we’ are the embodied others, who are not allowed not to have a body, a finite point of view” — (Haraway 1991a, 183). The role and importance of embodiment, which has been addressed in each chapter of this thesis so far, is revisited later in this section as a central feminist and technopagan project, and crucial to my thesis.

Feminist debates concerning objectivity have “been trapped by two poles of a tempting dichotomy on the question of objectivity” (Haraway 1991a, 183). The first pole has seen social studies of science and technology make a strong and valid claim for the radical and socially constructed nature of all knowledge claims (especially scientific ones) while on the other end of the pole we find attempts to build a ‘feminist objectivity’ or
‘feminist empiricism’ which draws on humanistic, neo-Marxist traditions that provide for “our versions of standpoint theories, insistent embodiment, a rich tradition of critiques of hegemony without disempowering positivisms and relativisms, and nuanced theories of mediation” (Haraway 1991a, 186).

In the first ‘pole’, the social constructionist view, there is no ‘expert’, “no insider’s perspective is privileged, because all drawings of inside-outside boundaries in knowledge are power moves, not moves towards truth” (Haraway 1991a, 184). Despite the perceptive, revelatory and liberating identification by feminism that the ‘authority of science’ could be called into question, the unfortunate result of the recognition of the social bias within scientific method and practice was that it led down a path of endless relativism. Texts which engage in the feminist critique of science, such as Sandra Harding’s *The Science Question in Feminism* (1986) and Evelyn Fox Keller’s *Reflections on Gender and Science* (1985) reveal the interests and values which lie behind the supposed neutrality of knowledge constructions in the sciences in particular. However this insight results in an uncertainty where what can be definitively known is brought into fundamental (re)consideration. This poses several problems: firstly, this is a semiotic, but not a material approach, which focuses solely on symbols and signs and neglects bodily realities; and secondly, in ‘disarming’ science in this way, feminists inadvertently rendered science undesirable and unworthy of deeper examination. Where feminists started out wanting to demonstrate the contested nature of all knowledge claims, the unexpected result was a “kind of epistemological electro-shock therapy, which far from ushering us into the high stakes tables of the game of contesting public truths, lays us out on the table with self-induced multiple personality disorder” (Haraway 1991a, 186). What Haraway is pointing to here is the fundamental challenges
these insights make to knowledge constructions. The result is that core concepts of self, ideology and reality are violently challenged at a primary level, leaving us unsure of anything, the material, the symbolic, and so on. Further, the project of exposing the bias in objectivity and science rendered their pursuit undesirable:

[w]e unmasked the doctrines of objectivity because they threatened our budding sense of collective historical subjectivity and agency and our ‘embodied’ accounts of the truth, and we ended up with one more excuse for not learning post-Newtonian physics and one more reason to drop the old feminist self-help practices of repairing our own cars (Haraway 1991a, 186)

This outcome is a troubling one for those interested in building ‘better’ science for the purposes of finding more viable and responsible ways to see and understand the world.

For those whose motivation is a love and respect for scientific discourse, as Haraway’s is, despite its own misrepresentation of itself, the search was on for something more concrete, something that steps away from the postmodern chasm of relativism. This concerns the pursuit of that other end of the ‘pole’ — the construction of a feminist objectivity, or some kind of feminist empiricism. Despite the shortcomings of Marxism — and its failures to feminism, including its refusal to distinguish between power inequities between men and women within a class analysis, — many feminisms have drawn much from the Marxist call to hear voices ‘from below’, to recognise that the view from subjugation offers much to the construction of new visions of the world. Specifically, I refer here to standpoint theories. These theories are important because they ‘take a stand’, they have a position from which to discuss theory, and in this way they are strategically located in ways which are faithful to embodiment and partiality. They are ‘outside’ of the dominant discourses and as such are in a good position from which to critique them. Powerful in their ability to critique hegemonies and value embodiment, standpoint epistemologies avoid the endless relativism of social
constructivism. However, Haraway notes they do tend toward a totalising stance — visions of “the One (‘Woman’s’) Truth” (Schneider 2005, 101) — inadvertently re-creating the very logic they sought to deconstruct. Closely linked to this search for a feminist objectivity is the approach of feminist empiricism (Nelson 1990), which again draws on Marxian analysis in an attempt to “get a theory of science which continues to insist on legitimate meanings of objectivity and which remains leery of a radical constructivism conjugated with semiology and narratology” (Haraway 1991a, 186).

Specifically this approach seeks what Sandra Harding calls a ‘successor science’ (1986) which is described by Haraway (1991a, 187) as follows:

> Feminists have stakes in a successor science project that offers a more adequate, richer, better account of a world, in order to live in it well and in critical, reflexive relation to our own as well as others’ practices of domination and the unequal parts of privilege and oppression that make up all positions.

A successor science endorses “situated knowledges built collectively from partially shared perspectives that could...be called...truths” (Schneider 2005, 102). What is proposed in this model of science is a version of truth where the only truths are partial and incomplete, yet remain valid and responsible because they are honest about the impossibility of a totalising position.

The problem therefore becomes “how to have *simultaneously* an account of radical historical contingency for all knowledge claims...*and* a no-nonsense commitment to faithful accounts of a ‘real’ world” (Haraway 1991a, 187). Put another way, Haraway is calling for feminists to find a method which allows for the recognition of both the relativistic and constructed nature of ‘reality’ whilst also acknowledging that there is indeed something called ‘reality’, something material *and* semiotic, that we all share, that does somehow exist.
So how can these concerns be drawn together to produce what is still considered ‘science’ but which produces knowledge in more ‘truthful’ and unbiased ways? Firstly, we need to stop switching between these two ‘poles’ Haraway identifies. In fact, so unhelpful have these poles become, that Haraway calls for a new metaphor — in this case, the metaphor of a pole which has opposing ends, and with which only one end can be held at a time, needs to be replaced with a new metaphor — the “much maligned sensory system” (Haraway 1991a, 188) of embodied vision. As Schneider (2005) notes, this observation is at once simple, yet extremely perceptive: scientific vision, the ‘gaze’ is typically constructed as the ‘view from nowhere’, as disembodied, omnipotent; and yet all vision is fundamentally embodied, it always comes ‘from somewhere’, it is located, local and situated. Any claim to vision as everywhere, as omnipotent, is to play the ‘God-trick’ (Haraway 1991a) which presents a version of seeing which is nothing more than an illusion. Like Latour and Law, Haraway reminds us the view of disembodied omnipotence of vision is not only false, but dangerous, because it makes unrealistic claims about vision and knowledge.

Instead what offers promise is “a doctrine of embodied objectivity that accommodates paradoxical and critical feminist science projects: feminist objectivity means quite simply situated knowledges” (Haraway 1991a, 188). A re-casting of the concept of objectivity is called for here, not a rejection of it, and this new kind of objectivity dwells in embodiment, vision, and locatedness. The result is a version of objectivity which is about particularity and embodiment and “definitely not about the false vision promising transcendence of all limits and responsibility. The moral is simple: only partial perspective promises objective vision” (Haraway 1991a, 190). Where objectivity has
traditionally been understood to be about distance and separation, Haraway is suggesting that in fact, true objectivity is about closeness and connection: “it is precisely in the politics of partial perspectives that the possibility of sustained, rational, objective enquiry rests” (Haraway 1991a, 191). Partial perspectives approach knowledge with integrity, integrity about our location, our interests, our alliances, and constructs an account of knowledge with is faithful to those connections.

The call to embodied vision does not assume that vision is always and only ‘organic’ in form, and “technological mediation” (Haraway 1991a, 189) can also count in this model. Haraway has perceptively identified that feminist objectivity is the alternative to relativism, because both relativism and totalisation are god-tricks (Haraway 1991a, 191). This model challenges ideas about who or what can see and what can be seen, emphasising “elaborate specificity and difference and the loving care people might take to learn how to see faithfully from another’s point of view, even when the other is our own machine” (Haraway 1991a, 190). My recommendation of the technopagan identity finds richness in this proposition and in the contention that seeing can be ‘awarded’ to the ‘other’, and that that ‘other’ can be a machine. This is an ontological assertion which is of significant relevance to this thesis. Technopagans embody the concept that we can recognise vision in terms of machines, and acknowledge our own location as being in relationship with machines as significant. Active, egalitarian, agentic communion with our machines — and our personal computers in particular — are embraced within technopagan identities, and align with Haraway’s vision.

This focus on a new kind of objectivity, however, presents a potential problem. The term objectivity is so laden, so negatively charged for many feminists that Haraway’s
attempts to reconceptualise objectivity may be mired by its irrevocable location in masculinist knowledge claims. However, I argue there is power in holding onto the word and in contesting its traditional definition. For example, I undertake this project in Chapter Four when I discuss the neopagan use of the term ‘witch’. The word witch is caught up in a history of denigration and negative associations. Witch hunts and witch burnings, the ties between ‘bad women’ and witchcraft, and its resultant links to evil and malice make it a ‘marked’ word. However, rather than discard the word, many neopagans celebrate its reclamation, ‘taking it back’ from the perpetrators of negative imagery of witches. They aim to reframe the word in a positive light, and through its use draw attention to the damaging histories which need to be acknowledged in order to move toward more equitable futures. Similarly, reclaiming a word like objectivity can actually assist in highlighting its shortcomings and reveals the need to re-imagine and redefine objectivity as a concept.

Having recast objectivity in this new light, Haraway considers our interactions with the very things studied in the relationship of scientific observation: the objects of knowledge. Given the significant shift Haraway suggests regarding the way objectivity is understood, how might this appraisal redefine and reconceptualise the way we understand the very objects with which scientific study — and knowledge-making more generally — might be concerned? Within the context of this thesis, the agency of these ‘objects’ is crucial to consider, in the technopagan framework where machines can be divine. When our machines become more ‘lively’ and part of our intimate relations to the world, their agency is critical.
Traditional models of the study (particularly in the sciences) of ‘objects of knowledge’ conform to a Western, patriarchal approach “that turns everything into a resource for appropriation, in which an object of knowledge is finally itself only matter for the seminal power, the act, of the knower” (Haraway 1991a, 197). In this arrangement the role of the object is to maintain and perpetuate the power of the knower, and the concept of ‘agency’ of the object must be denied in order to maintain that power relationship: “[i]t — the world — must, in short, be objectified as thing, not as an agent; it must be matter for the self-formation of the only social being in the production of knowledge, the human knower” (Haraway 1991a, 198). This dynamic creates a picture where ‘objects of knowledge’ are passive, laid bare and offer up meaning only in so far as it is extracted and interpreted by the subject of knowledge — the scientist. The problem with this picture for feminists is that firstly, it is often women who are these ‘objects of knowledge’ — because they never possess the subjectivity of the knower, and are instead ‘constructed’ by science, they become the ‘known’; and secondly, in the search for a feminist objectivity, the first step must be to recognise instead the notion of what Haraway calls subjectobjects. Subjectobjects, as agents possessing object roles, but subjective agency also, must be acknowledged in order to be faithful to the project of situated knowledges which “require that the object of knowledge be pictured as an actor and agent, not a screen or a ground or a resource, never finally slave to the master that closes off the dialectic in his unique agency and authorship of ‘objective’ knowledge” (Haraway 1991a, 198). Haraway is calling for a challenge to the ‘backgrounding’ I identify through Plumwood in Chapter One as an element of dualistic thought. For Plumwood, one of the key dynamics of dualism is to place objects into the ‘background’ of knowledge, against which the ‘foreground’ of the subject is considered. The backgrounded element fades into the distance, as a passive backdrop to the active
agency of the subject being studied. The reassignment of agency which Haraway argues for draws objects from the background and into the field of vision.

Ecofeminists know all too well the tradition of framing nature as “the raw material of culture” (Haraway 1991a, 198), as meaningless emptiness from which meaning can be wrenched only when the gaze of the subject comes to pass across its surface. Haraway acknowledges the ecofeminist contribution to this area when she notes that “[e]cofeminists have perhaps been most insistent on some version of the world as active subject, not as resource to be mapped and appropriated in bourgeois, Marxist, or masculinist projects” (Haraway 1991a, 199). The framing of nature as a ‘resource well’ is emphasised by Schneider too, by pointing out that “[t]he objects of scientific knowledge, framed as ‘nature’, are seeable only as the ‘raw material’ for the work of, for opening up and understanding, for explanation by ‘culture’” (Schneider 2005, 111). This trend has been addressed in this thesis from Heidegger’s concept of ‘standing reserve’ in modern society, to ecofeminist appeals to ‘agentify’ the world/nature. In conceptualising instead subjectobjects, a relationship of dynamism and exchange is built, and power and influence is redistributed so that “[a]ccounts of a ‘real’ world do not, then, depend on a logic of ‘discovery’, but on a power-charged social relation of ‘conversation’” (Haraway 1991a, 198). When science is approached in this way, when practitioners are open to converse with the former ‘objects of knowledge’, a vastly different set of possibilities is uncovered in terms of what practitioners might expect to find in the study of a subjectobject.

As the object of knowledge also becomes a subject of knowledge, this transformation “makes room for some unsettling possibilities, including a sense of the world’s
independent sense of humour” (Haraway 1991a, 199). This position allows for the opportunity for unexpected outcomes, playful possibilities and humourous aspects of the world which are not accounted for in traditional constructions of knowledge. Within this sense of humour are “richly evocative figures…for feminist visualisations of the world as witty agent” (Haraway 1991a, 199) which need not draw on organic ‘earth mother’ imagery in order to do so. Contributions of ecofeminists are again recognised by Haraway, as are related ‘American Southwest Indian’ references to Coyote or Trickster figures. These positions offer promising and worldly accounts of possible ways of being which are concerned with humility and the recognition that objects of knowledge may not ‘behave’ in the ways we want them to, challenging our claims to superiority or Mastery (Haraway 1991a, 199). The project becomes one of bravely ‘giving up’ Mastery as the only pursuit worthy of attention, and instead striving for a feminist objectivity which “makes room for surprises and ironies at the heart of all knowledge production; we are not in charge of the world. We just live here and try to strike up non-innocent conversations by means of our prosthetic devices, including our visualisation technologies” (Haraway 1991a, 199). This framing of the world shifts from a project of control and dominion over the world and instead locates us within a larger context which may be more complex than we can comprehend. In this worldview, we are positioned as humble, receptive and available to alternative explanations of the world, including those which may be challenging, absurd, or even confronting to our constructions of reality.

I have shown Haraway’s position resonates with elements of the ecofeminist worldview in arguing for the agency of the nonhuman world. In making this move, the power relations in knowledge production shift, and the agency of the subject/object comes into
focus. Another way of articulating the subjectobject, is the material-semiotic actor — an agency which provides a useful interpretation of the technopagan.

The call to recognise the agency of objects and to embrace the concept of the subjectobject as a relationship of exchange results in the need for language which properly articulates this new relationship of meaning. Haraway’s own history in the field of biology has shown her that primatology and the biological sciences have themselves actually ruptured many of the dualistic categories we have previously taken to be ‘given’ in the strong ‘boundary-ness’ of things and relationships. In the face of these challenges to scientific knowledge a new kind of language needs to be generated which faithfully articulates the fluidity of boundaries, the social nature of actors and agents and the mutual nature with which actors are constituted. For Haraway, the figure which accommodates these discoveries and realisations is the material-semiotic actor.

Specifically, the material-semiotic actor is a way to understand how bodies and other material objects are produced/generated/reproduced in and through knowledge projects in the sciences (Haraway 1991a, 200). The contraction of the material and the semiotic into one, joined, deeply connected agent articulates a challenge to dominant Western philosophical thought and demonstrates support for feminist analyses of the illusion of binary dualisms. Challenging these dualisms, nature and culture become *naturecultures*, the subject and the object become *subjectobjects*, and the material and the semiotic become material-semiotic. A particular material-semiotic actor Haraway uses which is central to this thesis is the cyborg, which I attend to in the next section. This is an important step in considerations of agency, where “[t]he machine and the inanimate are, as in Bruno Latour’s writing, seen as far from inactive, and the relationship between
humans and the inanimate is taken seriously” (Schneider 2005, 22). This position speaks to the idea that our machines constitute a valuable and vital element of being, in which our relations to technological devices are integral components of existence. Technopagan worldviews are ones in which machines are animated and agentic.

The material-semiotic actor presents ramifications for the role of the social and scientific construction of embodiment, given this actor is explicitly material. In what ways can the biological, the material, be seen as constructed and mutable? For example, the contraceptive pill which I discussed in Chapter Two, produces a biological effect of ‘homogenising’ women’s bodies (Wajcman 2004, 50) based on a twenty-eight day lunar cycle. The continued use of the pill then affirms notions about women’s biological fidelity to a twenty-eight day cycle, despite the many female bodies which do not conform to this cycle. As a result, the biological body is constructed in a fundamental sense, despite the apparent essence, or immutable nature of biology.

The point here is that there is no pre-existing body or object which constitutes some essential, core, ground of being; instead objects take their shape and form through the boundaries that are generated around them, through their social interactions, through both the biological (material) and the interactive, social sites of meaning (semiosis). What is highlighted is an awareness that it is in and at the intersections that ‘bodies’ emerge and are formed. It is at this intersection too, that hope and possibility lie: in the embodiment of the world as witty agent, in the world as coyote, in the potent mix of biology, technology, science fiction and politics: the mix of bodies and meaning. Materiality and semiosis thus point to a convergent site at which definition takes place:
Feminist embodiment, feminist hopes for partiality, objectivity and situated knowledges, turn on conversations and codes at this potent node in fields of possible bodies and meanings. Here is where science, science fantasy, and science fiction converge in the objectivity question in feminism. Perhaps our hopes for accountability, for politics, for Ecofeminism, turn on revisioning the world as coding trickster with whom we must learn to converse (Haraway 1991a, 201 emphasis mine)

It is critical to note here Haraway’s final sentence: that her hopes lie with ecofeminism, along with other knowledge projects. Despite feminist critique to the contrary — which I attended to in Chapter Two — suggesting Haraway stands in direct opposition to ecofeminism, what she articulates is a desire to build upon, to construct pathways for stronger more potent versions of ecofeminism — not to tear it down as some have implied. This is important firstly because it articulates an affinity with the principles and practices of ecofeminist theory and practice, and secondly, it affirms my previous concerns regarding the construal of Haraway as anti-ecofeminist, and the related problems of the essentialising of ecofeminism in feminist critiques of ecofeminist theory. In relation to this thesis, Haraway’s desire to support, not dismiss ecofeminism, confirms my own positioning of ecofeminism as a valid theoretical and philosophical ground for a critical interpretation of hybrid agency.

The material-semiotic actor stands as a figure capable of embodying appropriate human-technology relations within constructed but shared realities. The exposition of identity as a simultaneously embodied and biological one, as well as constructed, meaning-based signifier, is a powerful identity for feminist politics. The technopagan is a material-semiotic actor, both ontologically hybridised and materially manifested through its human-technology relations. To enrich these possibilities, I consider the material-semiotic actor as critical to an interpretation of technopagan worldviews.
Cyborgs Revisited

One example of a material-semiotic actor, the cyborg — Haraway’s most notorious and well-known boundary creature — is “an effort to build an ironic political myth faithful to feminism, socialism, and materialism” (Haraway 1991b, 149). Cyborgs are significant for a number of reasons, not least because the cyborg is specifically a boundary creature; it lives at the margins of previously defined and definitive categories between human and machine, human and animal, and the organic and the mechanical. Haraway’s 1985 *A Cyborg Manifesto* was nothing short of ground-breaking, and one of the few feminist texts to be taken at all seriously by non-feminist discourse, as I mentioned in Chapter Two. Interestingly and appropriately, Zoe Sofoulis suggests that the term ground-breaking has been far too over-used in reference to this paper, and that in fact, we should think of the manifesto more like “the seismic center of an earthquake that jolted many out of their categorical certainties as it shifted the terrain of debate about culture and identity in the late 20th century” (Sofoulis 2002, 84).

Concerned by the trend to turn the feminist critical eye away from the laboratory and the increasingly pervasive world of the technoscientific, Haraway sought new ways for feminism to engage with technoscience, and presented a means for thinking through technoscience and the ‘modern’ human state: that model was the cyborg, a rich metaphorical and material agency upon which to muse about the state of the world and to act accordingly. Feminists in particular, approached ‘high’ technology, as I discussed in Chapter Two, as yet another element of Western power and domination, which would in fact strengthen the dualistic chasms they sought to dismantle. This approach was too simplistic for Haraway and failed to account for the possibilities contained within emerging technological practices. Instead, the cyborg offered a “a more nuanced and
complex angle of vision that sees the technoscientific as a terrain for the contestation of meaning and the possibility of remoulding and redirecting what looks repressive into something more subversive and even progressive” (Schneider 2005, 66).

Part of the impact of cyborg imagery is that it acts as a powerful metaphor for describing and displaying worlds of late-modern times whilst simultaneously embodying a real-life state of being. The cyborg embodies links between the organic and the technological, such that in a very ‘real’ sense we are all cyborgs, because we think technologically and embody cyborgic states. The technopagan is similarly metaphorical and material, and is concerned with linking responsible and sustainable behaviour with technological acts. The cyborg operates then “as a fiction mapping our social and bodily reality and as an imaginative resource suggesting some very fruitful couplings” (Haraway 1991b, 150). The cyborg is both metaphor and reality; it is both material and semiotic. It is a creature to be found in science fiction, modern medicine and in the art of war (Haraway 1991b, 150) and in everyday life. The figure of the cyborg mirrors our late-modern state: “[t]he cyborg is our ontology; it gives us our politics” (Haraway 1991b, 150). Haraway finds promise in the way that cyborgs can subvert heteronormative practices around biological reproduction and sex — because the distinction between organic reproduction and technological replication is disappearing, and no moral or ontological distinction between the two remains — and in its inherent inability to make claims to purity, innocence or naivety.

Given the trends in ecofeminism and cultural feminisms at the time of the mid-80s, Haraway was encouraged to find a way to think through feminist issues without resorting to claims of essences, ‘naturalness’ or ‘special relationships’ which were so
prevalent at the time as I outlined through the ecofeminist and feminist approaches to technology. Instead, Haraway presented a creature of ‘bastard’ origins (Schneider 2005, 61) whose beginnings lay within the workings of the military-industrial complex and who was by definition partial, incomplete and composite: “[t]he cyborg is resolutely committed to partiality, irony, intimacy, and perversity. It is oppositional, utopian and completely without innocence” (Haraway 1991b, 151). The cyborg does not then conform to religious narratives concerning purity or the Garden of Eden. This ontology of the cyborg is thus hybridised, contradictory and ambiguous. These variable states of being also apply to technopagan agency as similarly hybridised and paradoxical.

Some neopagan traditions for example, appeal to earth goddesses who may be deeply embedded in ‘the garden’ of nature, though certainly not the Garden of Eden — no heathens allowed! The technopagan, in contrast to these naturalistic appeals, shares the cyborg’s ‘mixed’ origins; and because the technopagan is ontologically connected to contexts which revere and respect both ‘nature’ and ‘technology’, do not appeal to ‘pure essence’ or naturalness. The technopagan emerges from nature-based spiritualities and technologies of the military-industrial complex and the internet in particular. Thus the technopagan and the cyborg are kin, constructed in consonant origins in the profane.

Haraway establishes the cyborg as having emerged out of a series of ‘boundary breakdowns’ which make its existence possible; further, these boundary breakdowns signify the historical period which we might call ‘late-modernity’. In acknowledging these breakdowns, we refuse to ignore the militarism and technophilia of the cyborg, as these elements constitute fundamental aspects of knowing and being. This is a step away from attempts to make universal statements — which as I have already discussed
are seen as dangerous by Haraway in their pursuit of totalising theory — and to instead embrace blasphemy and irony: “[b]lasphemy protects one from the moral majority within, while still insisting on the need for community. Blasphemy is not apostasy. Irony is about contradictions that do not resolve into larger wholes, even dialectically, about the tension of holding incompatible things together because both or all are necessary and true” (Haraway 1991b, 149). For the purposes of my inquiry, this approach is particularly useful: the premise here is that more than one truth can and does exist, and the acknowledgement of ‘multiple truths’ requires a new kind of framework. That is, Haraway’s reimagined form of objectivity, which is able to hold together these multiple truths. Haraway’s underscoring of irony as a crucial element in the constitution of the cyborg myth and her championing the value of an ironic approach is of great importance to this inquiry. Irony can be most simply understood as the state where the meaning of a thing is the complete opposite of its literal meaning. Thus irony is concerned with twists and turns and the complication of meaning. It is useful and adaptable to a technopagan model in its seemingly contradictory, juxtaposed state, located in the simultaneous embrace of nature and technology. In a technopagan ritual, this contradiction may manifest in the use of a Philips head screwdriver as a sacred wand or sword for casting magical circles. In this context, the technopagan is resolved into a useful, witty, connected creature in contemporary culture.

The three boundary breakdowns Haraway identifies as giving rise to the cyborg are the blurring of the divide between: human and animal; mechanism and organism; and the physical and the non-physical. These breakdowns in contemporary culture each have relevance to technopagan agency as well, which I why I investigate them here.
In the case of the first boundary breech, that between human and animals, Schneider notes how despite social and biological (especially in the field of primatology) evidence to resolutely support the breakdown of this distinction, it remains a major project of science and the humanities to attempt to maintain the border between the human and the nonhuman. Female primatologists in particular, showed that the boundary maintained on the premise that humans were the only tool-users was false, thus confounding the distinction of ourselves from nonhumans. Within the technopagan ontology, this boundary breakdown heeds the agency of nonhuman animals, grants them equal consideration within moral frameworks, and supports renewed attention toward sustainability and animal rights amid the ecological crisis.

In terms of the second boundary, the separation between mechanism and organism is of course, the state in which the cyborg emerges. Pre-cybernetic constructions of machines were clearly relationships where machines were under human control, whereas since cybernetics the relationship has shifted significantly. The organism-mechanism relationship of exchange and interaction is far more pronounced, as is the possibility of autonomy of machines and their intelligence, where Deep Blue\(^\text{18}\) or the Turing test\(^\text{19}\) stands as an example of machines confounding our rules and humans walk the earth with artificial heart valves, ocular enhancements and pacemakers. The hybridity of the technopagan embodies this boundary breakdown because the technopagan ontologically integrates technology — digital technology in particular — into its framework of

\(^{18}\) Deep Blue was a computer programme designed to compete against humans in the game of chess. The strategy involved in chess was assumed to be a marker for Artificial Intelligence, so Deep Blue held much interest to see if it could outwit a the reigning world chess champion, which it did.

\(^{19}\) The Turing test, invented by Alan Turing, was designed to measure the intelligence of a machine via its ability to mimic human intelligence.
reality. Technopagans do not see a disjunct between the ‘organic’ and the ‘mechanical’, instead choosing to see nature in the machine and vice versa.

Regarding the third boundary breakdown, technologies of miniaturisation are identified by Haraway as examples of the way it has become increasingly difficult to distinguish between the physical and the non-physical. Silicon chips, nano-technology, quantum mechanics and genetics are all examples of this miniaturisation. On another level, this boundary breakdown can be seen in the increase in virtual communications, seen in MMORPGs and social networking sites like Facebook, such that when we are immersed in these spaces, it is easy for the physical and the non-physical to become confused. Many of the technological ‘breakthroughs’ of the past few decades have centred around the creation and encoding of smaller and smaller objects, often ones we cannot even see with the naked eye. However, the ‘intangibility’ and apparent ‘cleanliness’ of these ‘invisible’ technologies is a dangerous thing for Sofoulis, as it cleverly masks “the materiality of the politics involved in their production, distribution, and the environmental aftermath” (Sofoulis 2002, 89). This is a significant point: these physical and non-physical boundary breakdowns perhaps render us more removed than ever before from the means and modes of production behind our new devices. We are drastically separated from the ‘history’, socioeconomics and eco-implications of production; from our gold-laden computers and mobile phones, to the lead-filled cathode ray.

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20 Somewhat prophetically, Haraway states that our best new machines are *portable and mobile*. The explosions of portable, personal music devices, not to mention mobile phones, are two examples of just how accurate her observation here was. She notes how these devices are so adaptable, easy to be moved and transferred — a feat human beings cannot so easily achieve because “[p]eople are nowhere near so fluid, being both material and opaque. Cyborgs are ether, quintessence” (Haraway 1991, 153).
With every shift in contemporary culture, every boundary breakdown, we simultaneously find that the standard models of hierarchical dualisms are becoming less relevant, and find ourselves in a far more complex network of meanings than the traditional model of binary superiority and inferiority. Haraway’s Informatics of Domination21 “contrasts terms from modernity and “white capitalist patriarchy” with contemporary forms of technoscientific knowledge and power which understand (and, in effect, produce) genetics, people, and populations in terms of principles of information, coding, and communication” (Sofoulis 2002, 85). Given the centrality of dualism to ecofeminist analyses of power dynamics, it is worthwhile examining the shift occurring within these binaries.

The traditional model of binaries was based on a structure of public vs. private, culture vs. nature, male vs. female etc. Technoscientific expansions and developments have meant that these splits have become deeply blurred and confused, rendering them somewhat less helpful than they once were. Haraway emphasises that “[c]ommunications sciences and biology are constructions of natural-technical objects of knowledge in which the difference between machine and organism is thoroughly blurred; mind, body, and tool are on very intimate terms” (Haraway 1991b, 165). The clarity with which we could once approach and identify oppression have been muddied and confused, resulting in the need for a new structure in which the emerging fields of knowledge including replication, ecosystems and artificial intelligence can be placed because “[t]he boundary-maintaining images of base and superstructure, public and private, or material and ideal never seemed more feeble” (Haraway 1991b, 165). The

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21 The full list of Haraway’s Informatics of Domination is included in Appendix 1
breakdowns of these previously stable categories necessitate a new approach which can accommodate their collapse.

Haraway challenges the tendency within feminism, in particular socialist feminisms, to rely on the model of dualism based in ‘white capitalist patriarchy’ as a way to critique current power structures (Sofoulis 2002, 86-87). She makes the important point that in addition to the fact that the contents and dynamics of the dualistic hierarchies are radically changing, it is a flawed position for feminist theorists to locate themselves outside of the oppressive frameworks of dualism or to deny their own roles in relationships of domination. As Sofoulis (2002, 87) states:

> Instead of critiquing technology from a feminist position miraculously “outside” the (post)modern world, and nostalgically harking back to a prepatriarchal agricultural “golden age” of maternal fertility goddesses, feminists might admit our complicity with the current world systems — including of course the communications technologies that enabled feminism to become a global movement — and begin taking care and responsibility for the way we design and use technologies. Haraway argues that the goals of feminist political and technological empowerment might be better served by myths and metaphors more appropriate to the information age — not an essential or pure, natural organism, but a figure like a cyborg.

It is my hope that Haraway would find my positioning of the technopagan as such a model and metaphor to be appropriate to this project. My own offering of the technopagan as one such potential model for feminists to reflect upon is an attempt to address these very concerns about the tendency to rely on the essential, organic figures as sources of feminist empowerment and to highlight the complexity of collapsing (and previously stable) boundaries. The technopagan is worthwhile because whilst it acknowledges its own location within technological power structures, it remains faithful to some of the sentiments expressed in these organic models. Whilst appeals to absolute purity are problematic, there remain elements within these ‘goddesses’ — such as connections to nature, respect for elements traditionally considered ‘feminine’ and
therefore undesirable, and attention to embodiment — that Haraway and Sofoulis mention that are helpful to feminist projects, and need not be essentialist or regressive — technologically or politically.

Establishing the cyborg as a critical figure in feminism and technology studies, I have highlighted how one of its strengths is its non-essential, ‘bastardised’ origins. Haraway appeals to this identity on the grounds that it can subvert previous attempts at unity in feminism, and in broader theory of humanist’ accounts of the subject, by highlighting the danger of supposing the universalised category of woman can ‘hold’ within it the diversity of agents who fit within it. Instead, an appeal to fractured, partial identities is a more appropriate way to talk about ‘woman’ ‘human’ ‘other’ and so on, in order to undermine the need to always search for ‘sameness’ in order to achieve unity.

A crucial impact of the Manifesto for feminism in particular, was the critique Haraway levelled towards feminist identity politics. Specifically, Haraway was critical of the way that First World, predominantly white, academic feminists of some privilege, had set up a ‘voice for women’, and in doing so, fed the idea that there existed some homogeneous, unified category called women, into which all members of the female sex could neatly fit (Schneider 2005, 67). Not only was this totalising identity inaccurate and misrepresented women and women’s issues, Haraway made the point that it was in fact undesirable to seek unification through gender, and to do so was to maintain the patriarchal project of dualism, homogeneity and universalism, because gender is a constructed, patriarchal category. 1970s feminism saw an emphasis on the principles of solidarity and unity, but Haraway makes the point that these goals are no longer sufficient and their potential to be damaging was becoming clear: “[t]here is nothing
about being ‘female’ that naturally binds women” (Haraway 1991b, 155). This critique could be especially targeted at elements of ecofeminism, which at this time, were proclaiming women’s special affinities with each other and with nature, along with an approach which encouraged the embracing of traditionally devalued ‘feminine’ roles, such as intuition and nurturing. Despite the positive sentiment of such an approach — the goal was to ‘lift up’ previously undermined and disrespected forms of work women traditionally carried out — the side-effects of the ‘uncritical embrace’ outlined in Chapter One on ecofeminism, were potentially dangerous and unhelpful to feminist projects. Zoe Sofoulis notes that the Manifesto attempted to find alternative pathways to “explore possible sources of empowerment for feminists in an era of postmodern technics, and to find something other than victim metaphors linking women with an idealised Nature from which technology was excluded” (2002, 85). This project turns away from the ecofeminist interest in earth goddesses, and instead considers fractured, deconstructed notions of the self which are wary of appeals to connections between women and nature to the exclusion of technology.

In place of uncritical appeals to the unity of all women by virtue of our sex, Haraway suggests we embrace affinities, not identities, and learn to be comfortable in uncertainty, leaky categories, blurred boundaries and difference, as well as continuity. The goal should be to resist traditional modes of thought which aim for contained, clear, concise approaches to forms of knowledge, and instead train ourselves to find comfort in our ambiguities. The goal of a ‘unified front’ or single vision is a dangerous one: she warns “single vision produces worse illusions than double vision or many-headed monsters” (Haraway 1991b, 154).
The dangers contained within totalising categories — regardless of where the categories come from, patriarchy or feminism — as methods and means for connecting with, and understanding the world are highlighted by Haraway. This leads her to ask “what kind of politics could embrace partial, contradictory, permanently unclosed constructions of personal and collective selves and still be faithful, effective — and ironically, socialist-feminist?” (Haraway 1991b, 157). It is in the cyborg identity that a model can be imagined which subverts these totalising systems of patriarchy, racism, heterosexism and capitalism as well as reductionist perspectives such as feminisms based on appeals to some kind of ‘natural’ or ‘organic’ essence (Schneider 2005, 67) which themselves seek to undermine these dominant modes of thought. The cyborg not only challenges the traditional ‘bad guys’ in patterns of domination, but also calls into question previous feminist attempts to undermine the dominant authority by essentially playing the same game. In identifying the limitations of totalising categories, we have learnt much, become more ‘street-wise’, lost our innocence and the lesson learned has been that totalisation is what needs to be challenged, regardless of what is contained within it.

Ecofeminism is particularly adept at highlighting the need to identify frameworks of oppression, as opposed to specific elements/subjects of oppression within these frameworks. Haraway’s position can again be seen to align with ecofeminism on this issue when she states that “I do not know of any other time in history when there was a greater need for political unity to confront effectively the dominations of ‘race’, ‘gender’, ‘sexuality’ and ‘class’” (Haraway 1991b, 157). While reminding us of the dangers of attempts to build essentialist or totalising unities, Haraway simultaneously calls for alliances among and between women and other groups in ways that are echoed in ecofeminist theory, in a ‘situated knowledge’ approach.
As I will suggest in Part II, the technopagan has evolved from neopagan and ecofeminist spiritualist appeals to naturalised, pure, earth goddesses. It has matured as an identity into a more complex creature which makes no claims to totality, instead embracing the partiality and contradiction Haraway endorses. The technopagan may embrace aspects of femininity, for example, but as an element of a flawed, fractured, partial system which, on its own, cannot constitute an adequate representation of women.

The proposition of a model which is borne out of, and in many ways committed to, the technological present, does not render Haraway, or my technopagan position, technologically determinist. Rather Haraway takes as her approach the social constructionist appeal to the ‘social relations of science and technology’ which recognises “a historical system depending upon structured relations among people” (Haraway 1991b, 165). Haraway emphasises as Latour does, the interrelations between technoscientific practices, and the social relations tied in with these: most importantly, the recognition that these two elements are indivisible, and are mutually constitutive. Sofoulis (2002, 88) notes that:

the exact shape taken by an object of knowledge (a scientific fact or a technological product) is the result of a specific and contingent set of interactions between its material character and the semiotic and/or technical operations to which it is subject, that is, how it is made to mean, and what is materially done to it or with it. This perspective stresses contingency and hybridity in the outcomes of networks and concomitantly downplays the idea that every technology follows some necessary and pre-ordained trajectory or ideological program

It is this last observation that leaves us with a wonderful potentiality. Contrary to technological determinism, it cannot be known where our social relations of science and technology will take us, and what agents and networks might be shaped though these
relations. This is an uncertain trajectory, but it is also one filled with hope. What it also means, Sofoulis (2002, 88) points out, is that agents emerging from a trajectory of ‘white capitalist patriarchy’ do not necessarily have to carry out the objectives of ‘white capitalist patriarchy’. So the ‘military origins’ of the cyborg can be about using the tools of the master and taking them up for unintended purposes. Similarly, the technopagan is an agency formed by the surprising synergy of technology, spirituality, agency, ecology and praxis. Instead, “it opens the way for an imaginative leap to speculate about the political and epistemological possibilities for using technologies to develop alternative connections with each other and the lifeworld” (Sofoulis 2002, 88). The technopagan makes these ‘imaginative leaps’ by coalescing tools, spiritual belief and eco-practice and therefore holds within it the possibility for a sustainable future.

It is the chimeric composition of the cyborg which offers feminist politics an array of empowering possibilities contained within this identity. Rather than agency which draws boundaries around sameness, common experience and shared origins (which may turn out to be myths), the cyborg instead endorses heterogeneity and finds strength in difference: “[i]mpure and not even “identical” to itself, the cyborg does not need to erase its differences from those to which it connects; a creature of parts, it can illustrate a widespread contemporary experience of having several partial identities and axes of political and cultural affinities” (Sofoulis 2002, 90). Contained within the cyborg ontology is the “hope that human beings might encounter difference in ways that do not seek to incorporate, tame, resource, or annihilate it” (Schneider 2005, 75). Cyborg ontologies then, are complementary not competitive, and seek both continuity and difference.
It is in this spirit, in fidelity to these principles of empowered feminist politics of affinity inspired by a cyborg myth that I propose the model of the technopagan as a material-semiotic actor willing and capable of adequately, but partially, addressing the depth of issues discussed here. The technopagan is positioned here as kin to the cyborg, a similarly hybridised, post-human, post-gender figure which generates itself in networks of connection. At once an earth-goddess and a product of the military industrial complex, I argue the technopagan can take up our own Western histories of ancient, mystical, pagan, earth-based spiritualities embodied in a technopagan agency which is cyborgic in composition. The goddess offers ecological sustenance to the technological embeddedness of her cyborg kin. The technopagan is thus humourous and serious about spirituality in the digital present.

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In this chapter I have complicated and broadened considerations of the human-technology relation. I began by applying Don Ihde’s model of philosophy of technology as a useful way to understand the human-technology relation. Ihde’s position reveals the intimate nature of our human-technology relations, redefining humanity as ‘always technological’. Through this repositioning, I was able to argue that claims of neopagan regression or earth-based spiritualities as anti-technological to be based in false assumptions about the history of human-technology interactions. Ihde and Heidegger’s exploration of the historical and/or ontological priority of technology over science further served this purpose, and problematises many of the assumptions within technoscience.
I then explored Latour’s concept of hybridity, as a foreground to the hybrid status of the technopagan. The Anthropological Matrix of the pre-Enlightenment era Latour identifies is resonant of a technopagan worldview, wherein diverse interests converge into complex interrelation. This worldview was contrasted against the ‘modern’ worldview of the Great Divide, marked by division and separation; distinct areas of interest which cannot be allowed to overlap. I then deconstructed the human-technology relation by applying Latour and ANT’s awarding of agency to nonhuman actors. This process allowed me firstly, to argue for the agency of nature; and secondly, to challenge the binary of human and technology, instead positioning them in far more complex networks of interaction.

Finally I returned to Haraway to further explore feminist challenges to objectivity, and to uncover pathways around and through the objectivity dilemma. Positioning Haraway’s argument for the constructed and material nature of reality as a viable model, I explored her material-semiotic actor and cyborg in particular as worthy embodiments of this model. Through these discussions, I also demonstrated how these three theorists, Ihde, Latour and Haraway, each contribute to my proposal of the technopagan identity, and the shared elements of their work. Ihde’s material, instrumental focus on human-technology relations, Latour’s obliteration of this relation in favour of a focus on the agency of actors in networks, regardless of their human or nonhuman status, and Haraway’s embodiment of these complexities in a reimagined approach to scientific objectivity encapsulated in the material-semiotic actor (as cyborg), all contribute to the understanding of the technopagan. I concluded this chapter by demonstrating the consonance between the cyborg and the technopagan, supporting my argument for the technopagan as a promising model of agency in contemporary culture.
Interlude
Interlude

In Part I of this dissertation I have discussed the series of feminist and ecofeminist approaches to technology. The positions have ranged from outright suspicion and even rejection of technology as a patriarchal tool of the oppressor, to the optimistic embrace of technology offered by cyberfeminists. The rise of the digital age in the West has positioned technology at the centre of human experience and mediation, necessitating its consideration as central to philosophical discussions of identity in contemporary culture. Ecofeminist wariness towards technology reminds us of the patriarchal imprints on technological culture, and digital technologies in particular. Conversely, cyberfeminist theory has demonstrated the promise which lies in the digital realms of cyberspace. Virtual spaces render identity mutable, in the ability to play with the construction of the self online. These spaces reveal the performativity of gender and advance the feminist project to show gender constructions to be nonessential. However, as I showed in Chapter Two, problems lie in cyberfeminist approaches which are uncritically optimistic toward cyberspace, and which fail to heed warnings from ecofeminism regarding technology. These competing positions between technophilia and technophobia are echoed in the emergent identities of ecofeminist goddesses and cyberfeminist cyborgs. Positioned as rivals, feminist approaches to technology tend to split along the ‘cyborg versus goddess’ line. I argued this dichotomy is inadequate in navigating a suitable pathway toward appropriate human-technology relations, because it maintains dualistic boundaries and both sides of the binary are too totalising in their construction of identity. I argue their agency should be conflated, and that their merging is what holds potential.
In order to transgress this binary and to suggest a more appropriate form of agency, I expanded the analysis of technological interaction by exploring the human-technology relation through three key philosophers, Don Ihde, Bruno Latour and Donna Haraway. These three figures add depth to understanding the nature of the human-technology relation by problematising and complicating the way our technological interactions are understood. In particular, they emphasise the role of the material in these relations. Emergent from this discussion was a picture of being-in-the-world in which technology is intimately woven into the fabric of agency. Never without technology, and never removed from technological mediation, humans are defined by their technological relations. So embedded and intricate are these material-semiotic relations that the human can be interpreted as a hybrid figure, an actant entrenched in networks of relations with other actors, actors who may be other humans, objects, tools, theories or nonhuman animals. The cyborg is such a hybrid figure through which we can consider agency in contemporary culture. Defined through technological networks and constituted of organic and mechanical composition, cyborgs offer a useful ontological figure for considerations of existence.

What emerges from Part I of this study are a community of actors which I argue are all worthy of consideration, and which all offer useful contributions to the central themes of this thesis. Cyborgs, goddesses, hybrids, actors, nonhumans, naturecultures and subjectobjects are just some of the material-semiotic actors which surface through these considerations of human-technology relations in an ecologically compromised world. Respectful of all of these figures in their ability to speak to questions relating to agency, yet dissatisfied with the tensions which exist between some of these actors, I aim to reconcile these positions.
In Part II I construct an agency which incorporates and speaks to this emergent community of actors, through the figure of the technopagan. I begin by exploring the neopagan ontology from which the technopagan emerges and then present the technopagan as an agency capable of overcoming the problems identified in Part I and of breaching some of the divides which exist amongst this community of actors. The technopagan as consciously hybridised in name and existence, transgresses the ‘cyborg versus goddess’ boundary and confounds the tension between technophobia and technophilia. Incorporating the insights of ecofeminism and cyberfeminism, acknowledging the primary nature of the human-technology relation, and refusing to ignore the role of spirituality in ways of dwelling in the world in a sustainable manner, the technopagan is a viable and promising figure for the digital present. At home in the ‘natural’ spaces of neopagan ritual and the virtual spaces of networked worlds, the technopagan seeks neither purity nor totalised construction, and apprehends the materiality of semiosis as constitutive of agency. As I will argue, respecting the technological in forms of earth-based worship and recognising the divine in the context of virtual worlds, the technopagan is a rich and promising figure in contemporary culture.
All Watched Over by Machines of Loving Grace

I like to think (and
the sooner the better!)
of a cybernetic meadow
where mammals and computers
live together in mutually
programming harmony
like pure water
touching clear sky.

I like to think
(right now, please!)
of a cybernetic forest
filled with pines and electronics
where deer stroll peacefully
past computers
as if they were flowers
with spinning blossoms

I like to think
(it has to be!)
of a cybernetic ecology
where we are free of our labors
and joined back to nature,
returned to our mammal
brothers and sisters,
and all watched over
by machines of loving grace.

Brautigan (1970, 1)
Part II

Chapter Four
Neopagan Ontologies and Histories

Neopaganism has seen increasing popularity over the last five decades as an earth-based spirituality, and is at the heart of feminist and ecofeminist identifications with forms of women’s spirituality and goddess worship. Regarded in some feminist and ecofeminist circles as a movement with the potential to liberate, empower and carve sustainable worldviews which subvert patriarchal, mechanistic and overly humanist practices and assumptions, neopaganism holds potential as a liberatory ontology. An appealing departure from the confines of traditional religions, neopaganism offers a spiritual pathway which emphasises self-determination and celebration of life. Neopagans view life as a cyclical, embodied state deeply engaged in the seasons and cycles of the planet. They engage in sustainable and sustaining practices which emphasise and acknowledge human and nonhuman agency within ecological systems. Neopagans are important to investigate in this thesis for four reasons. Firstly, they are linked to ecofeminist spiritualities which draw heavily from neopagan influences; secondly, they focus on female empowerment and the celebration of the ‘feminine’; thirdly, they are directed toward ecological sustainability and reverence; and fourth, neopaganism along with considerations of the human-technology relation, provides the conceptual and material ground upon which technopaganism is built.

This chapter presents a characterisation of pagan and neopagan ideologies, through an examination of their history, lived practices and worldviews. I begin with a consideration of the etymological links of many of the central terms employed in such a discussion, such as ‘pagan’ and ‘witch’. A deliberation on the historical roots of paganism — both ancient and recent — and the related neopagan resurgence is presented, in order to illuminate the pathways which account for the revival of pagan
movements over the last five decades of Western history, particularly in Britain, the
United States of America and Australia. I then examine the insights of feminist
ontologies as a precursor to, and consonant with, neopagan ontologies, detailing their
significance, and thus furthering the understanding of neopaganism. I present a brief
typology of various branches of neopagan practice and belief, in order to develop and
deepen the recognition of the variety and complexity within this diverse movement. To
build on these discussions an explanation of neopagan practice and ritual is presented,
primarily to emphasise the importance of practice as central to the neopagan world
view, and also as a tool for defining neopaganism amidst its diversity. Considerations of
practice are cast in the context of Ihde’s notion of praxis as it relates to technology and
tools, to show how neopagans articulate their beliefs through practice embodied in
technologies. Finally I consider the limitations of the neopagan identity and outlook, to
understand what areas of the movement require further development and consideration,
and to foreground the move towards technopagan ways of being which avoid these
limitations.

Paganism and neopaganism are terms which are becoming increasingly common in
contemporary and popular culture. Neopagans and one of their subgroups, witches, have
appeared in the media and current affairs, as well as in popular television shows like
Buffy the Vampire Slayer\(^\text{22}\) and Charmed\(^\text{23}\). Since before the 1960s, spiritual traditions
which draw from pagan influence have experienced a resurgence in popularity,
particularly in Western countries. Adapting its form from various historical and fictional

\(^{22}\) Buffy is a ‘chosen’ vampire slayer, the only girl in the world ordained for this role, and her best friend
Willow starts to follow witchcraft and Wicca throughout the course of the show’s seven-year span, using
her increasing powers to assist and protect Buffy and her friends.

\(^{23}\) Charmed is the story of three sisters who have magical powers passed down to them from their mother,
a witch. The show charts their battles against various ‘evil’ forces.
sources, neopaganism is an eclectic mix which can contain, but is not limited to, Goddess worship, feminist Dianic Witchcraft, ecologically centred paganism, druidry and shamanism. Witchcraft in particular represents a type of neopaganism which is of particular interest to this study because it is one of the primary forms of ecofeminist spiritualities. Many neopagans would argue that witchcraft — or the Craft, as it is sometimes called — cannot be explained or defined, only experienced. In this context, any attempt to define neopaganism as a movement will be necessarily partial and insufficient. Yet it is this diversity and fluidity of the boundaries of what constitutes neopaganism which makes it “the perfect postmodern approach to spiritual practice” (Lebkowsky 1997, 2). This also renders it difficult to define, and therefore to explore and critique. To make the examination of this topic even more difficult is the interchangeability with which many of the terms are used. While in some circles terms such as pagan, neopagan, witch and shaman each signify a distinct group, individual or tradition of practice, for others these terms can be transposed.

Despite this interchangeability, it is useful for the purposes of this project to draw a distinction between a pagan and a neopagan. I define a pagan to be an individual within a historical context — people living hundreds, thousands, even tens of thousands of years ago in a cosmology and lifestyle which could be described as pagan. The term pagan can refer to British communities which had not yet been converted to Roman Christianity, or could refer to Vikings, ancient Roman and Greek belief systems, Ancient Egyptian religions or to Celtic traditions. A neopagan, on the other hand, can be defined as an individual who lives within contemporary culture — literally, a new pagan — who has consciously integrated historical pagan influences into their lives. The neopagan is an identity living consciously within the context of modern life,
modern technology and current cosmology, choosing to adapt and integrate ancient pagan traditions into their day-to-day lives. Neopagans recognise that elements of pagan histories no longer properly fit within late/post modernity and so embrace an adaptive and flexible approach to their worldview. Neopagans share ontological similarities with historical paganism — such as polytheistic and animistic worldviews — though they may hold vastly different views to historical paganism with regard to the use of fertility symbols or sacrifice, for example. In what follows I compare and contrast the pagan and neopagan view of technology and tools, and consider how they comprise a particular set of human-technology relations.

**Pagan Etymology**

Given the flexibility with which neopagan terms are often employed, and the interchangeability of their use, it is useful to consider the root meanings of some of the central pagan terms. A consideration of etymology reveals layers of meaning contained within pagan terms, and assists in uncovering ontological elements of neopaganism along with the negative social attitudes often accompanied with neopaganism. As Haraway suggests, investigating etymological origins uncovers the semiotic and metaphorical significance of terms, as embedded in our ways of knowing and being; they literally construct reality. I further argue etymology is important because it acknowledges the power of naming. Thus the technopagan as an identity is a consciously linguistic move which recognises this power of naming by fusing two seemingly oppositional terms — that of technology and paganism — into one identity.

The etymology of the word *pagan* is generally agreed to have derived from the Latin word *paganus*, which means a villager, rustic, or non-militant (Hume 1997, 41). In the
Dictionary of Word Origins (Ayto 1990, 379) *pagan* can be traced back to *pagus* which originally meant something stuck or fixed into the ground, such as a post or pole. In Christian terms, *pagan* means a *heathen* — one who is without religion. The word heathen originally referred to a country-dweller, literally, one who lives in the heaths. Heathen today has become a word of negative connotation due to the fact that when Christianity was being spread as the new religion throughout Europe, it tended to be the people living outside of the larger cities (living in the heaths) who were the last to be converted, if at all. Alternatively, Isaac Asimov (1968, 161) suggests, as does *The Barnhart Dictionary of Etymology* (Barnhart and Steinmetz 1988, 746) that pagan has links to the Latin meaning for *civilian*, a term used by the early Christian soldiers of the Roman Empire, who regarded themselves as ‘soldiers of Christ’ — *milites Christi*, part of a spiritual army. For Asimov, the term *pagani* was used by the *milites Christi* in the same way a person may be labelled a ‘hick’ today — they are not necessarily from the country, but the derogatory nature of the term is employed to distinguish people who were not ‘soldiers of Christ’. Further, Asimov notes that once the Christian conversion was largely complete throughout Europe, the term then came to be employed to describe foreigners of any description.

From this, it can be shown that both *pagan* and *heathen* are terms defined and understood in terms of their relationship to monotheistic religions, and particularly Christianity (Hume 1997, 42). In the Collins Dictionary (Wilkes and Krebs 1995, 1120) today, a pagan is still defined as one who is either without religion, or one who follows a religion that is not of Judeo-Christian origin. My own interpretation of neopagan broadly designates people who subscribe to an earth-based spirituality which involve some form of pantheism and/or animism. I therefore intentionally deviate from the
conventional definition with its ‘heathen’ roots, reclaiming it as a word relating to these animistic and pantheistic traditions.

Within the context of this thesis’ consideration of hybrids, it is relevant to note that neopagan is a hybrid term. Given the etymology of pagan, and its historical links to tradition, ‘old ways’ and country-dwelling, the marriage of the term ‘neo’ (new) to a word associated with tradition and the past acknowledges a boundary-transgressing identity. A new version of something very old is inherently implied in the use of neopaganism. Ontologically, neopagans take ancient beliefs and practices and adapt them to contemporary culture. I argue this merger of the ancient and the new is a conscious attempt to maintain, rather than sever connections. It articulates a desire to embrace a worldview similar to Latour’s Anthropological Matrix in which categories and boundaries dissolve into a webwork of connections where hybrids proliferate.

The word witch is generally understood to have originated from the Old English wice or wic, which means to yield or give way, bend or shape (Adler 1997, 11). This definition has been embraced by modern witches who understand it as an explanation of witches’ work in the bending of consciousness or reality with intent. ‘With intent’ implies the notion of self-knowledge and self-awareness, and it is with this awareness that witches direct their magical workings. Another definition of the word witch is from an old Germanic root word wit meaning ‘to know’ (Horne 1998, 9). Witch is also recognised as a derivative of the Old English wicce meaning female magician. Interestingly, this is also the feminine derivation of Wicca meaning sorcerer even through the use of Wicca today as one of the largest organised groups of neopaganism is a masculine word, not a feminine word. In Old English the word also has links to wiggle meaning divination
identifies the word witch to be linked to German *weihen* to consecrate, and more
distantly, to the English *victim*, which specifically referred to someone killed in
religious ritual; hence its links to *priestess*. This dictionary also notes that the Old
English masculine *wicca* was transformed into *wicked*. Today there is little doubt that
words like witch are taken primarily as negative terms, conjuring up images of a
cackling old wart-faced hag, or mean or evil women. Thus so many of the terms related
to this discussion have been fundamentally shaped by these historical and religious
factors. The witch-craze of the 15th – 17th centuries —which I attend to shortly — has
left an indelible mark on how we perceive the word witch and what it implies.

An etymological analysis of the words *witch* and *hag* also uncovers some telling
historical connections not only of each word itself, but to the ties these two words have
to each other. Etymological dictionaries identify *hag* as meaning a “very ugly old
woman, especially one who is vicious or malicious” (Barnhart and Steinmetz 1988,
460). It is noted that prior to around 1200 the word *hagge* was most likely a shortening
of the Old English *haegtesse/hegtes* meaning witch or fury. There is also an
etymological link to Old English *haga* meaning hedge rider, and as Skeat notes (1910,
257) this link may have come about because witches were supposed to be seen in and
around the bushes at night time. Onions (1966, 423) defines hag as a female evil spirit
or repulsive old woman, and his etymology also notes the links to a fury or a witch. So
it is here we begin to see the link between words which once meant simply witch or
fury, which subsequent to the witch trials became tied to the notion of an ugly old
woman. Hag did not become a common word in the English vocabulary until the 1500s
and Barnhart notes that the German word *Hexe* had similarly been rare until this period.
Hex is now intimately tied to notions about witchcraft, and specifically, in negative terms; a witch has the power to hex or curse a person or community of their choosing.

Instead of discarding these terms due to their links to a violent history and potentially negative connotations, many contemporary neopagans are eager to reclaim these words not only to restore them to their original meanings, but also as a confronting challenge to mainstream attitudes today. The strong reaction the use of a term like witch can conjure is useful for bringing the violent history of the witch-trials to light and to question the kinds of assumptions made regarding certain pagan groups, by identifying the basis of these reactions.

The act of reclaiming names and terminology is a significant one, and has been emphasised both in neopagan ontologies, as seen in Starhawk’s ‘Reclaiming’ organisation\(^2\), and in feminist reactions to patriarchy, such as the ‘Reclaim the Night’ project, or in the reclamation of derogatory terms such as ‘dyke’ for lesbians. The process of linguistic reclamation is just one example of this within the neopagan community and there is a significant link to feminist agendas in the act of reclaiming the kinds of terms dealt with here. Historical inquiries into the witch trials uncover a process whereby most women accused of witchcraft in the 15th – 17th centuries did not in fact, display behaviours which suggested they were ‘pagan’ (though this did also occur: practices such as ‘scrying’ for example, a form of divination, were frowned upon in the new religious order, and would leave a woman open to accusation of witchcraft). Rather, women were targeted for being ‘bad’ women (by displaying promiscuity or infidelity) for outliving their husbands (especially if they outlived more than one

\(^2\) http://www.reclaiming.org/ (accessed February 4 2006)
husband) or for simply being a woman who lived alone (again, the inevitable outcome for a woman whose husband died, and had no family to live with as she aged).

Historically the witch-trials targeted women for a number of reasons, not merely for practising pagan beliefs. However there is a significant link to pagan practices, because these women were often the local healers, diviners, and wise-women, which all have ties to neopagan practice today. Hence, the reclaiming project does two things, it is firstly an exercise in neopagan recovery of appropriated practices and language, and secondly a feminist project to highlight patriarchal practices which targeted ‘bad women’ for their failure to conform to ideals about what constituted decent and proper behaviour on the part of women.

**Neopagan Typology**

One of the largest branches of neopagan practice and the one most closely associated with ecofeminist spiritualities and feminist debates concerning goddesses are those of feminist witchcraft and Wicca. A consideration of the various ‘branches’ of neopagan witchcraft is made here, though it is important to keep in mind that these branches for many neopagans are not static, and identification with one tradition or another is not always considered to be of particular importance, and shifting from one tradition to another is perfectly acceptable. Probably no complete list of branches can be provided, but for a broad typography, I refer to Teresa Moorey’s introductory text *Paganism: A Beginner’s Guide* (1996) which outlines some of the various types of witchcraft traditions that exist.

One branch are ‘traditional’ witches, probably the hardest group to shift in and out of, because this group is based on the principle that the individual’s craft has been handed
down through familial lineage and initiation. The ‘legitimacy’ of these groups is therefore almost impossible to prove or disprove, and the claims to unbroken lineage of such groups is said to have been heavily compromised through the witch trials. ‘Traditionals’ can sometimes be disapproving of any form of witch other than a traditional, because they see these ‘newcomers’ as corrupting the lineage they maintain, and as not following the ‘true’ traditions, but instead picking up popular strands of neopaganism.

‘Hedge Witches’ are essentially solitary practitioners, individuals who for a variety of reasons practice their craft alone rather than in a coven — the witch’s family. While many of the rituals and traditions may remain the same, a Hedge witch usually values the autonomy of their solitary state, which allows them to create and modify rituals to their liking, and to be highly flexible in their practice. Their knowledge tends to be drawn primarily from textual sources, and processes such as initiation can be done by themselves, or not at all.

Wicca is a more organised form of neopagan practice, having its own churches across Australia and the globe, and the Wiccan church can conduct legal marriage ceremonies. Wicca contains a more structured organisational form, with a coven usually being led by a high priest and high priestess. Numbers in the coven are usually capped at 13, with 6 female members, 6 male members, and the high priestess. Typically, Wiccan traditions recognise the polarity of the god/dess and its manifestation within each individual, and this polarity is sought in most forms of Wiccan practice. For example, this polarity may be articulated in terms of gender through the initiation process where a woman is initiated by a man and a man by a woman, and so on. However, the focus tends to be on
nature-worship towards the ‘Great Goddess’ of which the male/female polarity is a part, as are the various forms of her manifestation, such as Diana, Artemis, Isis, Astarte and so on. Wiccans draw most of these goddess figures from ancient Greek and Roman myths, using them as a source of inspiration and symbolic diversity, with each goddess figure being drawn on for differing purposes and occasions. Wiccans give centrality to ‘The Triple Goddess’, the maiden, mother and crone trinity, recognising that each stage of life contains its own power and relevance. This triple aspect is mirrored in the phases of the moon, which reflect the life phases of waxing (maiden), full (mother), and waning (crone). In relation to a feminist ontology, these beliefs demonstrate a celebration of the spectrum of female lives, and the diversity, variation and elements of ‘masculinity’ and ‘femininity’ within each individual.

Feminist Witchcraft is sometimes called Dianic, drawn from anthropologist Margaret Murray’s thesis that witchcraft was a Dianic cult — worshipping Diana, the ancient Roman goddess of the hunt and the moon — and all groups which name themselves as such share a focus on the goddess as the central figure of worship (Murray 1921). Dianics identify strongly with women’s liberation and women’s spirituality, and covens within this tradition will tend to be women-only. The writings of popular witches such as Starhawk (1979; 1988) are drawn on heavily in these circles, as is ecologically inspired thinking and practice. Goddess worship grew directly out of the feminist political movements in America in the 60s and 70s and stood (and still stands) in direct opposition to patriarchy.

A central figure in feminist witchcraft is Zsuzsanna Budapest. Budapest is the creator of the Susan B. Anthony coven, and the champion of women’s empowerment through
witchcraft. For Budapest, the craft is about women tapping into an ancient source of their own power, in embracing their traditional roles as carer, nurturer and mother, but also, in claiming roles and aspects of the self traditionally reserved for men, such as the roles of leadership or practices of self-sufficiency.

The value of the feminist tradition within witchcraft was discussed in the section on women’s spirituality in Chapters One and Two. Put simply, these strands of neopagan practice afford women spaces in which to experience empowerment in ways often previously unavailable to them. They serve to present women with images of the female sex and the feminine gender in ways which are positive and central. This is not to suggest these traditions are not without their critics. The exclusion of men from Dianic witchcraft — which for Budapest is non-negotiable, while for practitioners like Starhawk it is not a hard and fast rule — is problematic and for some practitioners there has been concern that their ancient tradition is being co-opted or hijacked for political reasons. The Susan B. Anthony coven states in its manifesto that men are not welcome to share the coven’s knowledge, nor do they recognise the polarity between the goddess and the god as it risks reinforcing patriarchy. There is a problem with the women-only principle in these covens given feminist theorists like Haraway create the hybrid figure of the cyborg to look beyond gender and move towards a post-gender world. Read in this context, covens like Susan B. Anthony maintain gender divisions and fail to look beyond gender for alternative representations of human agency.

While the separatist approach is problematic and exclusionary, it remains true that we do live in a patriarchal society, and as such, there is a need, however temporary, to provide women with spaces within a patriarchal context where they can feel safe and
empowered. Further, the polarisation of a goddess and god figure, regardless of historical ties, does present a problem for feminists, particularly with regard to dualistic hierarchies as a feminist issue. Specifically, this polarity reinforces binaries of male/female, masculine/feminine, presenting them as adequate representations of human experience. As I explained in Chapter One, significant feminist critiques exist to deconstruct masculinity and femininity as patriarchally generated forms of existence, and therefore dangerous and insufficient.

An examination of the etymology and typography of paganism and neopaganism reveals the layers of meaning which reside within these traditions, and the diversity of groups who occupy its definitional space. At this stage it is useful to examine the history associated with neopagan revivals. These investigations track the growth in neopagan practice in recent history, demonstrating its increasing power and appeal as a spiritual tradition.

**Pagan Histories**

Whilst an overview of pagan histories is useful and informative, it must be noted that this discussion raises yet another fracture amongst neopagans. The ‘traditional’ witches I described who claim an unbroken link to ancient paganism are often eager to support and emphasise the historical links to neopaganism today. For other neopagans, the ‘proving’ or ‘disproving’ of historical links to ancient paganism would do little to alter their worldview. Historical links add legitimacy to neopagan worldviews and reveal a masked history which existed prior to the Christianisation of old Europe, reminding us of our shared pagan histories in the Western world, and the sustainable environmental practices and relational ontologies embedded within these histories. However, these
histories are not required by neopagans to validate their own practices today, which they embrace within contemporary culture.

The neopagan movement is marked by several significant eras. These are:
- archaeological and anthropological studies which suggest paganism was the dominant religion throughout pre-Christian Europe; the emergence of neopaganism and witchcraft from occult traditions such as the Hermetic Order of the Golden Dawn in the early 20th century; and the direct link between paganism and the feminist and activist movements of the 1960s through to today. I trace each of these in order to enrich the understanding of paganism and neopaganism as both theory and practice, and along the way I highlight significant historical influences, such as the witch trials of the 15th to 17th centuries.

**Archaeological and anthropological history**

Firstly, I draw attention to the work of archaeologist Marija Gimbutas (1982) who dedicated her entire life to exploring the pre-patriarchal societies of Old Europe. Gimbutas is significant because she brought historical and archaeological legitimacy to the view of the existence of matriarchal or goddess-worshipping cultures. Gimbutas’ work is drawn on most heavily by feminist or Dianic practitioners, as her work focussed on the existence of matrifocal cultures, and the fertility worship of these societies.

Gimbutas studied artefacts from Neolithic cultures around Europe to present a picture of societies which had their own unique cosmology, centred on a great mother — the goddess — illustrated on vases, wall art and other archaeological artefacts. Gimbutas used her archaeological work to interpret and then insert an ideology into these societies — something often frowned upon within archaeology — and yet today she is regarded as ground-breaking in her field, heavily influencing the way these societies are viewed.
today. Various archaeological discoveries such as the Venus of Laussel, a sculpture found inside a cave in France dating back to 19,000 BC, or the Venus of Willendorf, a figurine found in Austria sculpted in around 22,000 BC, exemplify Gimbutas’ case for woman-centred cultures. We see in these representations an honouring of the female body, usually with large breasts, swollen belly, and often holding a horn-like symbol thought to represent the moon and its phases, most likely linked to menstrual cycles. Her work drew not simply on artefacts, but on language, symbolism and history to draw together a picture of these cultures: an interdisciplinary practice she called archaeomythology. Gimbutas’ work has provided rich material for those interested in goddess worship in ancient pagan cultures. The evidence she gathered has presented a strong case for the existence of cultures which respected and honoured the female body prior to Christianity.

Anthropologist Margaret Murray’s *The Witch-Cult in Western Europe* (1921) is widely attributed to the revival of paganism and Wicca today (Adler 1997). While much of the content of her assertions are now regarded as historically and anthropologically inaccurate, her work — drawn from the documentation of The Inquisition — suggested that witchcraft was the pre-Christian religion of Western Europe. Murray’s work argues that all the evidence used in the witch-trials were derived from some level of truth, and that it was the interpretation of the evidence which was twisted by the inquisitors; for example, the transformation of the god of the witches (the horned god) into the devil known in Christianity today. Adler further notes that “[w]itchcraft could not be examined in isolation from the comparative history of religions or from the study of anthropology and folklore” (Adler 1997, 48-49). As Adler (1997, 48) notes, an important aspect of Murray’s work was her recognition that many traits of pagan
customs persist in modern Britain. The link between pagan dates of significance and popular modern holidays for example, can be seen in the crossover between Easter\(^{25}\) and the pagan holiday of Ostara, Halloween and Samhain (the pagan day of the dead), and the winter solstice and Christmas. It is widely recognised that the dominant Christian holidays today were superimposed onto existing pagan holidays in order to make conversion to Christianity more appealing and simpler for pre-Christian peoples.

Another text influential in the pagan revival was Robert Graves’ *The White Goddess* (1968). The text is highly poetic, and Graves claimed he wrote it as a myth, but many witches read the text as anthropology, and take its message as literal. Other much older texts said to have had a heavy influence on the shape of witchcraft today are *Aradia* by Charles G. Leland (Leland 1974) originally published in 1899 and *The Golden Ass* (Apuleius and Adlington 1927) originally written around 200 AD. There are significant similarities in *Aradia* to modern witchcraft, the most significant being “The Charge of the Goddess” which, as Adler (1997, 56-58) notes, remains almost unchanged today in the modern witchcraft as it appeared in *Aradia* over one hundred years ago. I provide a full version of the charge in Appendix 2, but include a few lines here to convey a sense of the text. The version from which these excerpts come was written by Starhawk (1979, 76-77). Many versions exist, but the flavour remains the same:

The Charge of the Goddess

Listen to the words of the Great Mother, Who of old was called Artemis, Astarte, Dione, Melusine, Aphrodite, Cerridwen, Diana, Arionrhod, Brigid, and by many other names:
Whenever you have need of anything, once a month, and better it be when the moon is full, you shall assemble in some secret place and adore the spirit of Me Who is Queen of all the Wise.
You shall be free from slavery, and as a sign that you be free you shall be naked in your rites.

\(^{25}\) Easter falls each year on the first full moon after spring equinox, strong evidence for the pagan roots of this holiday, given no other Christian events follow lunar cycles.
Sing, feast, dance, make music and love, all in My Presence, for Mine is the ecstasy of the spirit and Mine also is joy on earth.

...Nor do I demand aught of sacrifice, for behold, I am the Mother of all things and My love is poured out upon the earth.

...I Who am the beauty of the green earth and the white moon among the stars and the mysteries of the waters,

...Let My worship be in the heart that rejoices, for behold, all acts of love and pleasure are My rituals.

...And you who seek to know Me, know that the seeking and yearning will avail you not, unless you know the Mystery: for if that which you seek, you find not within yourself, you will never find it without.

For behold, I have been with you from the beginning, and I am That which is attained at the end of desire.

Contained within the charge are some of the central themes which run through neopaganism and witchcraft specifically. Namely, the charge that all acts of sex and play are part of worship, not something to be ashamed of or repressed; the adherence to the lunar cycle as a core element of neopagan strength and power; and the notion that individuals ultimately search within themselves for knowledge and enlightenment. This element of the charge emphasises that revelations will not come ‘from above’ or from outside, but that instead, immanence is the guiding principle, that one must ‘know thyself’ and seek self-responsibility in all pursuits. These themes highlight that responsibility and immanence as core principles of contemporary agency.

Witch-trials and witch-hunts

The influence of the witch trials of the 15th-17th centuries — though reports suggest witch-trials ranged as long as 1300-1800, and stories continue today of women tried for witchcraft in countries where it remains a crime — effected an incalculable influence on the etymological and cultural understandings of terms and identities related to
neopaganism and witchcraft. I offer this examination of the trials here as they illustrate the remnant pre-modern ideologies towards witches which persist today, and expose ongoing attitudes towards women and their bodies.

The witch-trials occurred at a time when great religious change was occurring throughout Europe. In the 15th Century Christianity was spreading and changing, and in particular, shifting into a hierarchical structure where the primacy of the priests and clergy as conduits to God were emphasised (Davies 1997, 437). Common people could no longer access God directly, but must instead access Him through the clergy and the church. During the middle ages, mainstream religious belief was deeply connected to superstition and mystical belief that verged on the irrational. It is not surprising then, that belief in witches and the hysteria associated with them was easily believed by the general populace. This is not to suggest that the existence of witches was without basis, as “[w]itches…were undoubtedly a hangover from the pagan animism of the pre-Christian countryside, as was the firm belief in pixies, elves, spirits and hobgoblins” (Davies 1997, 437).

In 1484 a papal bull\textsuperscript{26} was issued, the \textit{Summis Desiderantes}, constituting the church’s response to witchcraft. Two years later in 1486 the Dominicans published the \textit{Malleus Maleficarum} or the ‘Hammer of the Witches’ (Institoris 1971) — the official handbook for witch-hunters. These actions effected a shift where once people may have been reticent about the existence of witches, but now the bull and the \textit{Malleus} meant that witchcraft could no longer be ignored. This sentiment was echoed in the statement that

\textsuperscript{26} A ‘bull’ gets its name from the Latin \textit{bulla} which means a stamp or seal. As all edicts from the pope carried his official seal, they came to be known as ‘bulls’. 
“to disbelieve witchcraft is the greatest of heresies” (cited in Starhawk 1979, 2) written on the cover page of the Malleus. This idea held that witchcraft was undoubtedly true, and to be vigilant against its spread and the work if the devil was of key importance. The effect was that “[h]enceforth all Christendom knew that the legions of the Devil were led by evil women who anointed themselves with grease from the flesh of unbaptised children, who rode stark naked on flying broomsticks or on the backs of rams and goats, and who attended their nocturnal ‘sabbaths’ to work their spells and copulate with demons” (Davies 1997, 437). Attitudes towards women at this time considered them weak and inferior beings that were unable to resist the temptation offered to them by the devil. He appealed to their weak sexuality, drawing them into a binding pact which was sealed through sexual acts. After the release of the papal bull, “for 300 years and more, witchcraft and witch-hunting were endemic to most parts of Europe” (Davies 1997, 437).

Women could be accused of witchcraft due to the reasons mentioned previously — outliving their husbands, living alone, or being marked as ‘bad’ women — or accusation could occur because a neighbour’s crops failed, a child died, or a miscarriage took place. These ‘bad’ women were the first point of suspicion when bad fortune befell communities: “woman was both virgin and witch: the Renaissance courtly lover placed her on a pedestal; the inquisitor burned her at the stake. The witch, symbol of the violence of nature, raised storms, caused illness, destroyed crops, obstructed generation, and killed infants. Disorderly women, like chaotic nature, needed to be controlled” (Merchant 1980, 127). In rural communities the villagers often took matters into their own hands, conducting their own ‘trials’. One common form of trial was the ‘dunking’ of suspected witches, where a woman who drowned from dunking was proved innocent
of witchcraft, but a woman who survived the dunking was deemed a witch and then executed (Davies 1997, 566). The absurdity of such trials demonstrates the inescapable hysteria associated with witchcraft and pagan belief. Once a woman was accused of witchcraft it was virtually impossible for her to clear her name without first naming another suspect. At a time when the scientific revolution and humanism were on the rise, so too were superstitious, discriminatory and hysterical witch-hunts (Davies 1997, 567).

Another tool used in witch-hunting was torture. Torture was acknowledged to extract many false confessions, but was still strongly advocated as a tool for identifying witches (Davies 1997, 566). Davies (1997, 566) notes one account of the interrogation of a witch who under torture insisted she merely bathed sick people with herbs to heal their ailments. It is these accounts which witches today draw from to show how the witch-hunts amounted to the persecution of local women healers and midwives in a frenzy of misogyny and conquest over traditional methods of healing. Women accused of witchcraft such as this were shaved ‘above and below’, placed on the rack, dunked in water, burned with candles, pressed and suspended to extract their confessions. Their bodies were searched for the ‘devil’s mark’, usually some kind of ‘third nipple’ from which it was assumed the incubus suckled from the witch. Moles and skin growths could count as these suckling points, and given that as people age, their bodies develop more and more of these growths, old women under suspicion stood little chance against the accusation of being an agent of the devil. As a result of their confessions or their guilt deemed by trial, they were burned at the stake, though predominantly were hanged.
From a feminist perspective this process reveals an intriguing and disturbing view of the body. The witch trials mark a time when the material surface of the body was a reliable and telling source of information. In this context, the body was viewed as a signifier which could ‘speak to’ inquisitors and witch-hunters. The inspection of bodies for signs of devil-related activities shows these forms of articulation or ‘speech’. The body could ‘betray’ itself through the exposure and interpretation of these marks. In this way the body was ‘read’ to reveal truths that could not be proven otherwise. The process of ‘reading’ the body as a conveyor of meaning exposes a worldview in which ‘inner’ corruption reveals itself on the surface of the body. As a result, the body becomes understood as a marker, a sign which can semiotically deliver meanings which are referred to through the understanding and interpretation of bodily marks.

Feminist accounts of the witch-hunts have estimated that as many as nine million people, some 80% of them women, were executed for being witches (Starhawk 1979, 5) and this statistic has been used by many feminist theorists, including Andrea Dworkin in her well-known text *Pornography: Men possessing Women* (1981, 18). Historians deem this number to be excessive, and their accounts suggest somewhere around 60,000 people were executed for witchcraft (Levack 1995, 24-25). Among this number were high profile figures like Joan of Arc, who was once considered a hero by the French for leading them to victory, and was burned at the stake for witchcraft and heresy by the English (Starhawk 1979, 5). Even this more conservative figure shows a period of excessive killings, extreme violence and suspicion towards women in particular.

The witch-hunts were the result of a complex set of social and cultural contexts which converged to produce the hysteria towards the existence and activities of witches.
Whilst witches in this historical context were largely a production of attitudes towards ‘bad’ women and shifting religious views, it is also true that to some degree, the witch-trials were directed toward agrarian, female centred, pagan belief systems which ran against the rise of Christianity. Local wise women, who were consulted for assistance with ailments, the birthing of children, or for divining the future, were often the targets of these witch-hunts. It is for this reason that elements of neopaganism today, particularly feminist versions of witchcraft, seek to reclaim and re-value these aspects of pagan life in centuries past.

I suggest a sound understanding of the witch-trials is critical to any comprehensive study concerned with neopaganism, feminism and the history of women’s oppression. These trials reveal a general distrust of the body, especially the female body, and of women’s sexual weakness and perversion. Attitudes towards women’s corruptibility and weakness of flesh persist today, and rose out of this period of persecution. I suggest these ideas carry over into the cyborg identity discussed in Chapter Two as it manifests in popular culture. For example, I suggest that representations of female cyborgs in cinema embody these same sexual dangers residing within the female body, as seen in films like *Lady El*.

**Pagan revival of the early 20th century**

The late 1800s and early to mid 1900s saw the publication of a series of fiction and non-fiction works focussed on the occult, specifically paganism and witchcraft. These texts, and the individuals behind them, have had an immeasurable influence on the shape of neopaganism and witchcraft today. Many of the individuals in question and the works they produced are highly contentious, but their impact on neopaganism cannot be
denied. I trace some of the central characters and publications to demonstrate some of the roots of neopagan practice as it exists now. The individuals I trace articulate forms of human-technology relation, invoking a theoretical consideration of existence and agency in the more-than-human world, and in particular the interconnection between the body, praxis and material artefacts.

The first figure who emerges in this period is Aleister Crowley (1875-1947). His significance lies in popularising interest in the occult, and according to some, in creating many of the rituals which remain at the heart of neopaganism today. Aleister Crowley was not a witch, but he was a pagan — as well as a poet, mountaineer, and eager participant in experimentation with hallucinogenic drugs — and it is his influence on witch Gerald Gardner, who will be considered after this discussion of Crowley, which is of particular significance.

Crowley became involved in the Hermetic Order of the Golden Dawn (HOOTGD) in 1898 and his writings influenced the popularisation of the occult of the time. The HOOTGD has had a history of attracting many interesting individuals to its order, such as the poet W.B. Yeats (who became the leader of the English branch of the Golden Dawn), and Arthur Edward Waite, a Rosicrucian27 scholar knowledgeable in the areas of Kabbalah, Rosicrucianism and the legends of the Holy Grail (Drury 2004, 127). The HOOTGD has links to freemasonry, and despite this patriarchal association, it also attracted women to the order. In around 1904 Crowley had a spiritual revelation while visiting Cairo, marking the beginning of his journey towards a spiritual freedom, which

27 Rosicrucianism (literally, rose cross) is another occult/mystical organisation which uses ancient philosophies and mysteries in the search for wisdom, dating back to at least the 1600s.
he maintained could be achieved through sexual union. He also believed he had been appointed in his vision as the leader of the Golden Dawn. In 1907 he established a new magical order, the *Argenteum Astrum* (Silver Star/AA) using amended and rewritten forms of Golden Dawn rituals and structure. As the years passed Crowley’s rituals became increasingly ‘perverse’ and developed towards accommodating his growing bisexuality and sadism in his sexual rituals. Crowley was becoming better known in the public eye, and some of the more unorthodox elements of the rituals he oversaw, coupled with his self-assigned title as ‘The Great Beast 666’, attracted great attention from the media (Drury 2004, 149). It was around this time Crowley met Gerald Gardner, and assisted him in developing practical approaches to witchcraft, and the pair shared a fascination with sex magic28.

Crowley’s influence on the occult consisted of the promotion of practical ritual work and visualisation, and the principles of the individual search for spiritual enlightenment journeys. He also coined one of the central tenets of Wiccan practice which came from his *Book of the Law*: ‘Do what thou wilt shall be the whole of the law; Love is the Law, Love under Will’ (Drury 2004, 149). This rede celebrates the liberal ideal of freedom of the individual will, so long as that will does not impinge upon the will of others, and that love should be the guiding force to action. He published numerous books on ‘magick’ (as he called it, and has now become the popular spelling, to differentiate it from ‘sleight of hand’ magic) and the occult, proving to be a progressive and creative thinker in his time. He made an indelible mark on the occult world, and has featured in the work of David Bowie, Jimmy Page (of Led Zeppelin), and Timothy Leary (Drury

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28 Sex magic is based on the principle that the heightened energy raised through sexual intercourse, and particularly through orgasm can be directed toward magical purposes.
2004, 161), to name a few. On the other hand, he was hungry for publicity and attention, maintained power within his orders that was not extended to any other members, and saw women’s role as basically sex objects. He could negatively be described as something of a petulant child, whose ultimate motivation was rebellion. Crowley undermined the agency of women in his beliefs, often using them merely as ritual ‘tools’. At the same time, he recognised the power contained within the body, understanding it to be a powerful tool within magical practice. Despite Crowley’s many flaws, he believed in a form of individualistic libertarianism (Suster 1989) and was a staunch defender of freedom and personal empowerment. His influence on the occult and neopaganism is indisputable, and he was a fascinating figure for his time.

A key successor of Crowley’s was Gerald Gardner (1884-1964). Gardner’s influence on neopaganism was so strong that one branch of witchcraft today is called ‘Gardnerian’, and he is widely credited as one of the movement’s most influential figures. Doreen Valiente, another figure in the pagan revival, was a personal friend of Gardner’s in his later years, and provides a comprehensive account of his life in *An ABC of Witchcraft Past and Present* (Valiente 1973). Having made a significant fortune as a rubber planter in Malaya in the 1930s, Gardner and his wife retired to Hampshire in England where he was able to indulge his interest in the occult, and became involved with a theatrical group who claimed to be Rosicrucian. Gardner helped the group occasionally stage plays of an occult nature. Gardner sensed that certain members of the group were involved in something other than Rosicrucian or Masonry connections, and over time he came to understand these members were secretly involved with a group in New Forest who claimed to be the remnants of an ancient witch coven. It was through these members and this coven, that Gardner was initiated into the Craft. He was sworn to
Gardner claimed that modern witchcraft was a surviving remnant of the paganism that had been the target of the medieval witch trials. This claim is highly disputed today; in fact it is believed that many of the rituals presented by Gardner as passed down through the ancient tradition were actually written by Crowley, who was hired by Gardner to create the rituals. Gardner is recognised as the proponent of sky-clad (naked) rituals — a common practice in neopaganism — and was said to have been a long-time naturist. While evidence suggests that some pagans did indeed practice rituals naked, many neopagans and historians have questioned the practicality of naked ritual in climates like those in Britain. For Gardner, nudity offered humility to individuals, and helped people open up to each other more freely through the dissolution of boundaries marked by clothing. The Gardnerian tradition remains one of the most common branches of Wicca today, demonstrating the depth of his influence on branches of neopaganism.

Like Crowley, Gardner invested significant agency and power in embodiment, understanding the human body to be a conduit to sacred knowledge and empowerment.
He also recognised the agency of nonhumans, seeing a harmonious relationship to nature as central to a balanced and happy life. These worldviews echo the ontologies discussed in Chapter Three, wherein the agency of nonhuman animals are key components in Actor-Network Theory and material-semiotic actor readings of existence, as is the role of the body and the material in the composition of agency. Crowley and Gardner both contributed to the modern neopagan view of agency within the nonhuman world, and of celebratory relations to the human body.

From an academic and feminist perspective, Gardner and Crowley present a dilemma. Their influence on these occult movements cannot be denied, and so require attention and respect. On the other hand, they could easily be viewed as ‘dirty old men’ who liked getting their clothes off around groups of young impressionable women. Despite their own healthy embodiments, they disregard women’s embodiment and ultimately, their neopagan praxis replicates patriarchal objectifications of the female body. Dis-ease with some elements of these traditions may account for the popularity of feminist traditions of witchcraft and Wicca among women.

If Gardner had so much influence that a branch of neopagan witchcraft was named after him, so too was Alex Sanders (1916-1988), who is honoured with the Alexandrian tradition, a Wiccan path derived from his name. Sanders claimed to have been initiated into the craft by his grandmother when he was a child of seven. Sanders’ grandmother claimed to be descended from a line of witches dating back to the 14th century, though this is heavily disputed, and many writings today suggest Sanders in fact drew his version of the Craft from Gardner’s teachings (Adler 1997, 95). Sanders was most notable as something of a celebrity witch, featuring on radio interviews, television, and
was the subject of a biography. His public persona greatly raised the status of witchcraft as a legitimate practice, but also angered many practitioners for the breach of the secrecy code. Known by his followers as the ‘King of the Witches’, Sanders pursued ‘selfish’ magic in his early years of occult practice, wishing for wealth and prosperity in his magical workings. He later sought to right this selfishness by using his magic only to help others.

In the late 1900s, Janet and Stewart Farrar met through their coven, run by Sanders and his wife Maxine. Both were initiated into the craft by Alex and Maxine Sanders — Janet came to the craft by visiting the Sanders’ coven in Notting Hill Gate, while Stewart was invited to view the workings of the coven through his work as a writer and journalist. Stewart was something of a sympathetic sceptic at the time of his introduction to the coven, but after viewing the workings of the group, became deeply interested in the tradition and was initiated into Sanders’ coven in 1970 by Maxine Sanders (Drury 2004, 175). The pair were drawn to each other and not long after their initiation into the coven, left to form their own. After several years successfully running a coven in Ireland, they responded to the increasing requests they were receiving for information on how to get involved in the Craft, publishing several books, including *Eight Sabbats for Witches* (1981) and *The Witches’ Way* (Farrar and Farrar 1984). As a result of these publications, they became something of a celebrity witchcraft couple, attracting media attention for their work. Again, the attention this attracted has been criticised by some neopagans who feel the publicity and divulging of secrets is damaging to the craft.
Janet and Stewart Farrar’s tradition has been referred to by some as ‘reformed Alexandrian’ though they themselves resisted the trend to categorise one tradition or another, and instead preferred to refer to themselves simply as ‘witches’. The Farrar’s remained together until early 2000, when Stewart died. Janet continues her work today, and has remarried a fellow Wiccan, Gavin Bone. Janet Farrar’s international work today focuses on the empowerment of women through the craft, and on emphasising the polarity of the male and female balance through an honouring of the feminine which she feels has been neglected in the last 2000 years. The Farrants’ work and Janet Farrar’s in particular, focussed on the celebration of the ‘sacred feminine’, emphasising the need to reintegrate these traditionally feminine aspects of the self into the human framework. The female body, in all its forms and functions, is celebrated as a source of power, and as a tool for magical practice. Thus the female body can become essentialised in somewhat problematic ways. Later versions of neopaganism, and especially technopaganism, circumvent these essentialisms through more fractured, mutable understandings of gendered bodies.

All of these contributors reveal a particular relation occurring between the body and technology in these 20th Century movements. They offer a kind of human-technology relation wherein the body is recognised and used as a medium which has a direct ontological relationship with objects. Crowley, Gardner, Sanders and Farrar all saw the body as a tool or conduit through which knowledge and wisdom could be gained. Ontologically then, the body becomes a substance able to receive tools, for example in allowing a sword to pass over and ‘interface’ with, the body. Reading this bodily interaction as a form of human-technology relation offers an interesting twist to Ihde’s formations of humans and technologies. In this figuration, the technology is the human,
and so the relation is a relation to oneself. Perhaps it presents another kind of relation which is distinct from Ihde’s figurations. I suggest Ihde would find this an appropriate manifestation of human-technology relations, because it embeds technology inextricably to the experience of being human. It further recognises the mediating position of the body, whereby all worldly experiences occur through the material body, which necessarily alters and frames those experiences.

The final figure I look at, and probably the most influential contemporary within neopaganism and feminism is Starhawk, possibly the most well-known witch in the world. A witch of Jewish origin — a coupling with which she has no dilemmas — Starhawk is a high profile peace activist and ecofeminist advocate. In 1979 she published *The Spiral Dance: a rebirth of the ancient religion of the goddess* (1979) which remains one of the most well-known and used texts in witchcraft today. Her work is popularly used in Dianic traditions (Adler 1997, 121) and she writes passionately and comprehensively on the power of witchcraft as an ecological, female-empowering peace movement. A later text *Dreaming the Dark: magic, sex and politics* (1988) made important connections between the magical and the political. She endorsed magical acts as subversive, inherently political acts which could produce change: “[i]f magic is ‘the art of causing change in accordance with will’, then political acts, acts of protest and resistance, acts that speak truth to power, that push for change, are acts of magic” (Starhawk 1988, 169). Her reference here is to Crowley, who made the statement that “Magic is the Science and Art of causing change to occur in conformity with Will” (1976, xii). Starhawk was a key organiser at the Seattle World Trade Organisation protests in 1999, coordinating large groups of neopagan activists who used magical actions to intervene and protest the conference. Starhawk’s emphasis on the female
empowerment to be derived from neopagan practice, and the political power and relevance of magic, is another instance of the way that neopagan spirituality is a feminist political project of empowerment. It is a conscious political statement from a marginalised space.

In a similar vein to my comments on Crowley and Gardner, there is a difficulty in academia to talk with any great authority about neopaganism, and especially someone with a name like Starhawk. I argue this should not be the case; however, the raising of a name such as this immediately challenges the authority with which we can enter academic debate. Exclusionary practices in academia operate to delegitimise certain positions or perspectives, especially when those approaches are alternative, or spiritual in nature. This creates a divide where academia ‘leaves out’ chief considerations because they are not ‘rational’ enough. Indeed, some of the positions I have discussed here were problematic, and so my aim is to confront the messy complexity of this issue, and to challenge the oppositional status of rationality and spirituality in academia.

Traditional positions sanction ‘what counts’ as worthwhile in academia, and within feminism too, spirituality is excluded from these figurations, thus my task in this thesis is to tease out which elements of neopagan practice can be regarded as useful in legitimate theoretical investigations, and which should be avoided.

It is interesting to note the highly contested nature of almost all of these historical accounts of the ‘history of witchcraft’. Texts which are presented as historical texts of anthropology and archaeology are hotly debated as inaccurate, misleading, or as metaphorical works of fiction which have been misinterpreted by their readers. As I discussed, none of these accusations seem to derail or even anger members of the
neopagan community. The line between myth and reality and indeed the recognition that all history is partial in its account demonstrates the comfort neopagans have with folklore and myth, and their lack of a need for ‘accurate truths’ to ground their spirituality in. This provides an ontological clue to neopagan belief. Neopagans are not driven by ‘truth’ in the classical sense, and derive as much knowledge and direction from myth as from reality, and as such already acknowledge Haraway’s proposition of ‘partial truths’. Further, despite debates around unbroken ancient lineages to pre-witch trial covens, through the biographies presented here, at the very least there is a lineage of the craft which emerged in the early 1900s and continues today through covens which operate from these traditions with direct links to the figures mentioned here.

Each element through history I have described contributes to and shapes neopaganism. They offer relations to the world and to tools — tools of the body, or nature, or ritual — which deviate from the traditional worldly relations common in late-modern cultures. As a result, they challenge traditional conceptions relating to existence, being and agency, and re-enchant the world as magical and sacred. They also offer a new and unique form of human-technology relation, which extends beyond the categories offered by Ihde. As humans inextricably embedded within this world, they similarly infuse the concept of the human with sacredness and immanence.

The resurgence taking place under the umbrella of neopaganism during the last fifty or so years is so large and diverse it would be virtually impossible to review and define how each new ‘fracture’ of the movement fits into the larger whole (Adler 1997). It is more realistic to attempt to characterise rather than define neopaganism, to convey a sense of the shared ontologies common to neopaganism. In Chapter Three I explored
the ontology of the human-technology relation and modes of existence as they relate to
the material and semiotic. I now apply these relations to the neopagan worldview and
examine the neopagan identity as it can be understood against these theories of being. I
pluralise ontology here to challenge the concept of a centralised worldview and suggest
existence can be considered in multiple, and even competing ways within one broad
group. In the next section I begin by outlining the alignment between feminist
ontologies and neopagan ontologies, exploring what they share, and detail further why
ontology is important to this study.

**Neopagan ontology**

To understand what is encompassed within neopaganism and its subsets — witch, druid,
shaman, goddess worshipper, Wiccan, to name a few — it is useful to consider what
could be called neopagan ontology or ontologies. Ontologies are centrally about some
kind of consensus as to what constitutes existence and reality — and indeed what can
exist, and what objects and practices constitute existence — to a particular group of
people. It is a ‘way of being’ in the world. Looking at neopagan ontology is key to
understanding and developing agency.

Neopagan ontologies intersect with feminist ontologies, and because feminist ontology
is about deploying agency across broader landscapes and overcoming dualist ontology,
it is important to discuss their shared positions. In order to address the threefold issue at
the heart of this thesis — the rise of digital cultures and secular spiritualities, coupled
with the global ecological crisis — contemplating theories of existence which are shared
across neopagan and feminist praxes form a vital way to consider being-in-the-world. I
begin with an overview of feminist ontologies which align with neopagan ones. These
feminist ontologies are resonant with the theories of being and existence in feminism which I discussed in Chapters One and Two.

Feminist ways of being in the ontological model I put forward are complex and difficult to define and contain. They propose destabilised theories of truth and reality in favour of situated ways of knowing and being. Multiplicity of voices and ideologies is sought amidst a world of enforced categories and boundaries. This approach is embraced by a variety of feminisms, specifically corporeal feminism, through its appraisal and incorporation of embodiment into ways of knowing and being; and Haraway’s proposal for a post-gender, post-human form of existence, where boundaries are resolutely trespassed and collapsed.

This feminist theory of existence rejects the Cartesian dualisms which divide the ‘being’ of the mind and body along gender lines. These feminist analyses do not merely challenge dualisms between ‘men’ and ‘women’ but also refute the “oppositional notions of the ‘self’ and its relationship to ‘the body’ and ‘mind’ and ‘emotions’. [They] further reject[s] the “notion of ‘self and Other’ that the self supposedly defines itself against and in opposition to” (Stanley and Wise 1993, 195). In rejecting this exclusionary divide, a divide I have discussed in Chapters One and Two, feminist ontologies instead integrate “the body, the mind and emotions” (Stanley and Wise 1993, 194) and some approaches might even seek to place spirit into that equation, as I do in this thesis. Feminist ontologies seek connection, but are comfortable with differences and fractures, understanding them as complementary, not competitive or conflicting.
Some recent feminist ontologies which focus on embodiment understand the self to be neither an essential, immutable self which pre-exists social context, nor to be an entirely socially constructed entity (Stanley and Wise 1993, 194). Instead, the self can be understood through the feminist and neopagan lens as constituted in relationship, as dynamic, located and contextual in its composition. Yet this does not exclude the material or the biological from considerations of being, but rather that differences between men and women are not essential, but cultural, and ideologically constructed and biased. Corporeal feminisms too have shown the ways in which the body, through its association with the female, has been cast in opposition to the mind and its correlated spheres of reason and logic, see for example Kirby (1997), Grosz (1994) and Gatens (1996). The dualistic worldviews of traditional philosophy “have surreptitiously excluded femininity, and ultimately women, from its practices through its usually implicit coding of femininity with the unreason associated with the body” (Grosz 1994, 4). Masculinity and femininity are bio-cultural productions which do not innately reside in male and female bodies respectively, but are complex cultural constructions, which represent only partial formation of the self as a whole. As a result, cultural construction and the material conditions of existence must be drawn together to create a responsible appraisal of being and agency.

Neopagan ontologies are also concerned with recognising and valuing the body. These positions shift the consideration from the body to the concept of embodiment and are endorsed here as viable approaches to more balanced ways of being-in-the-world. The body can be seen as both a fixed entity, and also as mutable in the way it changes, ages, and ails, and in the diverse ways it is considered and constructed in various cultures and theoretical standpoints. As I discussed in Chapter One, feminist theorists like Irigaray
and Cixous present possibilities for invoking the body in non-essentialist ways. These approaches remind us that we can talk about the category ‘woman’ without essentialising women, and show how within a patriarchal framework, it is crucial to consider the subordinate status of women and their sexuality (Stanley and Wise 1993, 197-199). Tackling embodiment in this fashion draws in Haraway’s material-semiotic actor as a viable figure in merging meaning and materiality. The material-semiotic actor embodies the signs and signifiers of the cultural, constructed body, while remaining faithful to material manifestations of being, recognised as embodiment. This outlook resonates with neopagan worldviews which are embedded in practice and experience, in the enacting of being in material ways.

I now shift this ontological discussion to focus specifically on neopagan ontologies, to show the consonance between neopagan and feminist worldviews. Despite variations within neopaganism, there are shared ontological elements within the movement. In this context, we might ask: what is existence to a neopagan? What constitutes reality to a neopagan? What kinds of entities and agents exist to a neopagan? How is time structured within a neopagan worldview?

Through exploration of elements of the neopagan worldview I map their ontologies, tracing a variable, shifting agency. To develop the neopagan worldview it is useful to begin with an examination of what neopaganism is not. Contrasting neopaganism against traditional religions and spiritualities assists in conveying a picture of neopagan worldviews. I present three central tenets here: that neopaganism is not dogmatic, it does not attempt to convert, and it is not monotheistic.
Firstly, in contrast to ‘traditional’ religions, neopaganism is not dogmatic. Clearly, not all religious traditions are dogmatic — such as Buddhism for example — but this is an important distinction from the dynamics of large-scale religious traditions, such as Christianity, Judaism and Islam. Philosophically, dogma is highly problematic because of its inflexibility and refusal to be challenged and critiqued, hence its undesirability within a worldview which values reflexivity, sustainability and progressive vision. Another inherent weakness of dogma, according to anthropologist and neopagan researcher Lyn Hume is that “[c]reeds and dogma try to explain that which is inexplicable, to rationalise that which is irrational, to give form to that which is formless” (Hume 1997, 51). Worldviews which incorporate mystical and symbolic belief systems — which I argue all worldviews do at some level — are essentially untenable within this dogmatic, rationalising process. Neopaganism is eager to avoid dogmatism. One explanation for this is the absence of a central text such as the Bible or Koran to prescribe and define neopagan belief and behaviour. The absence of doctrine allows for a freedom within neopaganism which is unique, encouraging individuals to follow their own path, to pursue the avenues of neopagan practice most appropriate to them. Outside of neopaganism, this doctrinal absence acts to demonstrate that the ‘neopagan path’ may not be the path for everyone, and that there is little spiritual purpose in asserting an ‘I am right, you are wrong’ mentality. Where traditional religions stratify the world, neopagans view the world as a network, as a webwork of non-hierarchical structure.

The worldview of neopaganism then is not defined or derived from a central text. As I reiterate in Chapter Five, where religious people are sometimes referred to as ‘people of the book’, neopagans could be more suitably described as ‘people of the library’
Neopagans draw inspiration and ideas from science fiction, evolutionary biology, poetry and physics to build their ontological framework. The result is a diverse, tolerant, informed, inquisitive and sometimes contradictory and ironic approach to the world. This worldview is open-ended rather than closed in its approach to the incorporation and influence of text. In regards to the human-technology relation, this decentralisation of text is significant. Ihde considers text to be a form of technology, and in this sense, the human-technology relation in neopaganism is dispersed across a variety of sources as opposed to the concentrated relation of humans to one particular text in traditional religions, such as the Bible. While neopagans have some ‘key’ influential texts, their use and adherence is non-prescriptive.

Secondly, neopaganism is unique in its assertion that it is not a spiritual tradition of ‘converts’. This is significant in two ways: firstly, it assumes that rather than neopagans ‘converting’ to neopaganism, instead they experience a sense of ‘coming home’. Neopagans often describe the experience of ‘discovering’ neopaganism as encountering a body of work which put into words something they have always known, always sensed. Secondly, neopagans do not proselytise. The intense and highly personal nature of the path of neopaganism means that neopagans do not believe that someone can be convinced that paganism is ‘the way’, nor do they even believe that it is the way. Hence they have little motivation to convert people, whereas in other religious traditions, conversion forms a cornerstone of each follower’s duty. In her seminal text on neopaganism Drawing Down the Moon Margot Adler echoes this sentiment through this 384 A.D. quote by Symmachus (cited in Adler, 1997, 24):

We gaze up at the same stars, the sky covers us all, the same universe encompasses us. What does it matter what practical system we adopt in our search for truth? Not by one avenue only can we arrive at so tremendous a secret
When it comes to conversion, neopaganism contains little leverage for ‘scaring’ people towards neopaganism: there is no doctrine of retribution, no offer of reward at the end of a life well-lived, no concept of sin, no obligation to attend church on Sunday, and no prescribed norms which determine or dictate behaviour.

The ontological significance of this worldview is that it acknowledges each individual’s autonomy and agency to make their own choices and to ‘know’ their own world more expertly than any outsider ever could. It does not assume that someone else ‘knows best’ what is good for another, nor does it seek to impose its worldview onto others, especially in an unsolicited fashion. This resonates with feminist arguments against knowledge projects which ‘explain’ the world to their research subjects, rather than learn from them. From an ethnographic and standpoint theoretical position, Actor-Network Theory can be applied to neopaganism to show their desire to ‘learn from actors’ rather than social scientists telling actors about their worlds. This function in neopaganism embraces a partial interpretation of being-in-the-world. Neopagans then are comfortable with a located, incomplete, and partial view in place of a totalising ontology.

The third aspect neopaganism does not contain as part of its ontology is monotheism. Neopagans generally follow a form of polytheism. How this polytheism is interpreted differs between neopagans, with some believing that ultimately there is one deity — pantheism manifested in the great goddess — but that she is diverse in her forms and representations; others believe that there are multiple deities which exist in and of themselves. Still other neopagans understand these deities to be psychological aspects of the self, manifesting and making themselves accessible within each individual.
Polytheism is not unique to neopaganism, however it is unique in the sense that the ‘philosophy of polytheism’ applies not simply to an understanding that there are/can be many god/esses, but that polytheism is an attitude which reflects more than an attitude towards spirituality. This position is comfortable with the concept that different ideas and perspectives co-exist, whereas monotheistic approaches are bound to acknowledge and tolerate the existence of only one, true ‘god’. Polytheism subscribes to the view that reality functions on many different levels: it is diverse and varied. The plurality of polytheism encourages moving away from a linear, homogenised worldview which could be viewed as traditionally ‘Western’ and embraces multiplicity, difference and harmony in divergence.

From a polytheistic viewpoint the paths are many, and the quilt of reality is broad and brilliant — allowing us to see a world not split down the middle of good and evil, but rather intimately bound up in contradiction and complexity. This approach recognises that people make mistakes and judge badly, but that hopefully with each bad decision a lesson is learned, and this cannot be said for strictly prescribed behaviour. Only when stepping from the prescribed path, open to mistakes, can people truly learn: both about themselves and their environment. This worldview of polytheism is the hybrid sensibility I have offered. Hybridity similarly emphasises change, multiplicity, the breakdown of solid binaries and a challenge to authority. Neopagan ontology conforms to hybridity in its refusal to draw sharp distinctions between good and evil, right and wrong, instead preferring to dwell in complexity and diversity.

Despite the immense heterogeneity amongst and between neopagan communities, most neopagans would agree on these preceding points: that neopaganism is not dogmatic; it
avoids evangelical, proselytising practices; and is not monotheistic. If these three elements help to clarify what neopaganism is not, then what could be agreed that neopaganism is? We could begin by asserting that neopaganism encourages sex and play as avenues for exploring the human experience, and does not regard them as invalid, impractical, irrational or as elements that cannot be properly employed within the realms of morality, academia or politics. Nor does it regard sex and play as wicked or invalid within spheres of philosophical inquiry. This reflects the hybrid ontology which resides in blasphemy and irony as constituting valid realms of being. As Haraway argues for her cyborg, there is a powerful statement which can be made in endorsing playfulness and irony as viable political manoeuvres. Healthy attitudes towards our human state as sexual creatures who gain pleasure from sexual activity and not just the function of reproduction encourage neopagans to feel empowered about their embodied selves. This is a particularly powerful tool for women to embrace within the Western framework which constructs female bodies as wicked, imperfect and corrupting. With regard to play, most neopagans, while deeply serious about their commitment to neopagan practice, are free to laugh at themselves and their spirituality, to make jokes, to be silly, and most of all to play and be playful. This playfulness provides neopagans with a resilience that offers them sustenance. I take this final point further and suggest that even more than play, neopagans have a strong sense of irony, and this feeds an outlook which avoids righteousness and encourages exploration and humility. It also spirals back to the hybrid figure of the cyborg, embedded in humour and irony. Again, Haraway’s blasphemous cyborg aligns with this approach. ‘Unfaithful’ to its origins, witty and playful, these hybrid figures reside in partial, contested categories, open to mutability and corruption.
I suggest another shared feature of neopaganism is the notion that praxis forms the core of being-in-the-world. What neopagans do, the tools they engage, the events they mark and celebrate, reveal the ontological dynamics of neopagan, and by extension technopagan, being-in-the-world. The deliberation on the centrality of praxis is now elaborated on.

**Practice**

Whilst the details of magical ritual vary from group to group, all neopagans tend to view practice as the cornerstone of their worldview. Practice is about the embodying and enacting of neopagan worldviews, as a way to articulate their relationship to the more-than-human-world. It is in the physical engagement with signs and symbols that neopagans manifest their spirituality. Praxis is the idea of knowledge and theories embodied through action. With regards to spirituality, praxis emphasises first-hand experiential knowledge. Given Ihde suggests that “virtually every area of praxis implicate a technology” (Ihde 1990, 20) it is useful to consider neopagan practice in this light. Neopaganism is fundamentally materialist through its use of tools and artefacts. Athames (the witch’s ritual knife), ropes used in cord magic, cups, candles, robes, circles and herbs are all employed in their praxis. Tools of time measurement are similarly employed to mark the shifting seasons. As I have argued, through Ihde’s analysis of human-technology relations, the neopagan worldview as it is embodied through praxis is one resolutely embedded within a technological context. Broadly it could be said that neopagans use ‘tool’ technologies, while technopagans, as I illustrate in Chapter Five, also incorporate ‘digital’ technologies in their praxis. In what follows I detail the forms this practice can take to demonstrate the praxes involved in the neopagan mode of being-in-the-world.
Neopagans understand time in a spiralling as opposed to linear fashion. An individual’s time on the planet is viewed not as building towards some kind of apocalyptic judgement day; rather it is understood in circular terms, spiralling from the microscopic sense of time that humans experience, for example, to the grand scale of geological time. The significance of neopagan symbols like the spiral suggests ontological variations from traditional linear frameworks. Spirals occur across the universe in a variety of forms from DNA to seashells to galaxies. This mirroring of material form represents links between the infinitely large and the infinitely small as part of one great interconnected web for neopagans. The spiral also represents neopagan understandings of the cycle of organic life to be of birth, growth, death and decay, feeding new life to begin the cycle anew. This worldview recognises these processes as crucial to the flourishing of the ecological community as a whole, and as intimately connected: the death of one thing provides for the life of another. The triple aspect of the goddess, which I explain later in this chapter, reflected in the phases of the moon, is another example of this.

Neopagan practice generally, and witchcraft and Wicca specifically, centre on the cycle of life, death and rebirth reflected in the changing seasons. This ‘story’ is told through one of the key elements of witchcraft, ‘The Wheel of the Year’. The wheel is not used by all neopagans, and is far more common in Wicca and witchcraft, though most neopagans incorporate some set of cyclical yearly celebrations into their practice and ontology. As the wheel turns, neopagans celebrate the coming and going of the seasons and the significance of each. The meanings of such festivals have certainly changed greatly over time — the celebration of the harvest season is heavily diluted today, due
to factory farming, GM crops, global food markets and our separation as communities from direct involvement in food production — however the impact of the seasonal and cosmic cycles remains, however changed. Acknowledging the movement of the wheel helps to reconnect to processes from which people have become alienated and reminds them that their reliance on these cycles remains.

Typically Wiccans and witches (as a general rule, it can be said that all Wiccans are witches, but not all witches are Wiccans) celebrate eight major festivals throughout the year, which are based around solar cycles, of which four are known as ‘lesser sabbats’ and four are the ‘greater sabbats’. The lesser sabbats consist of two equinoxes\(^{29}\), spring and autumn, and the two solstices\(^{30}\) of summer and winter. The greater sabbats relate to larger events of times gone by, and are generally Celtic in origin. They are Imbolc, Beltane, Lammas and Samhain — though each can be known by many different names, depending on the tradition/region a person follows — and occur halfway between each of the solstices and equinoxes. This means there is a major neopagan celebration roughly every six weeks. Covens and solitary witches will also gather at the esbats (usually at the full moon or the new moon — as the moon is the earth’s celestial body — though any regular meeting can qualify as an esbat) to celebrate and focus intent at a time of heightened mystical power and synchronicity. The story of the Wheel of the Year is told as a myth about the union of the goddess and the god through a process of birth, growth, death and renewal — which is essentially a representation of the fertility of nature, with god representing the sun/son, and the goddess representing the wheel itself, the cycle of life.

\(^{29}\) Equinoxes are days and nights of equal length
\(^{30}\) Solstices celebrate the longest night and the shortest day (Winter solstice) and the longest day and shortest night (Summer solstice)
A simple representation of the Wheel of the Year is presented above. The wheel represents the cyclical viewpoint of neopagans, wherein the shifting of the stars in the sky, the path of the sun, the changes of the seasons, and the cycles of the moon are celebrated. For witches and Wiccans, the wheel’s cycle is “played out anthropomorphically by the tale of the interplay of the goddess and god and their birth, life and death, symbolic of the changing nature of the seasons” (Hume 1997, 67). A description of the story of the wheel of the year is included in Appendix 3 and offers another practical link to nature that neopagans express. They actively engage and comprehend nature as tied intimately to their experience of being and enact this knowledge praxisically.

Observing the turning of the wheel is an act of ecological awareness and sustainability, which seeks to respect life in all its forms. Ontologically, the wheel articulates an alternative view of the passage of time, as cyclical rather than linear, and in recognising

the role of all living things in the cycle of life, not merely humans. Thus the wheel reflects a relationship to technologies, such as the technology of time, and can be understood in the context of Ihde’s exploration of human-technology relations. For example, the following of the wheel of the year expresses a hermeneutic relation wherein the visual representation of the wheel refers *beyond* itself to events in the world, and then transforms into an embodiment relation when the wheel is incorporated into neopagan praxis. The neopagan view is also particularly conducive to an Actor-Network Theory analysis because it incorporates agency broadly, and perceives agency to be shifting. Neopagans recognise the agentic roles of artefacts, symbols, nature and metaphor as constitutive of reality. Following the turning of the wheel is a practice and a tool of *relations to others*. The Wheel of the Year is an ecologically embedded myth. It acknowledges the location of the individual within an ecological community, and articulates the balance required for sustainable living. The worldview of the wheel sees life as cyclical as opposed to the linear trajectory of traditional perceptions of the passage of time and life. The wheel acknowledges the community of actors who constitute life on the planet and the importance of respecting and maintaining the diversity of this community as a pathway to sustainability and sustenance. It is also about the merging of people who gather together to celebrate and (re)enact the myth of the wheel.

To draw the praxical out even further, I now present a description of a ritual within neopaganism which expresses these practical elements of existence, and neopagan relations with nonhumans. A structure for a ritual within the Craft (though the variation and freedom within and between covens and individual practitioners must at all times be emphasised) generally involves some form of purification, such as taking a bath, or
consecrating ones’ magical tools with salt, and setting up an altar. Purification clears away residual negative energy which may build up over time both in the body and in the tools of practice. It also acts as a psychological process of focussing on the task about to be undertaken. The contents of the altar can vary greatly, but will often contain a representation of the god/dess such as a sun and a moon, a coloured candle or piece of cloth to represent the ritual being performed; and items from nature which represent the purpose of the ritual, such as new flowers at springtime, or a halved apple whose core represents the pentagram sacred to witches.

The pentagram is the symbol most commonly associated with witches and Wiccans and is a five-pointed star which can represent the four elements of earth, air, fire and water, along with the fifth element, the spirit. It can also symbolise the human body or the planet of Venus, and therefore worship of the goddess Venus. A sacred circle is then cast, which is really a sphere encompassing all participants in the ritual, and can be marked by a rope, salt, or the tracing of a finger.

The four corners are then called, invoking symbolic guardians to represent each elemental corner of earth, air, fire and water and their corresponding cardinal points; and invoking a particular god/dess depending on what they represent and the purpose of the ritual. Power is then raised through chanting, singing, dancing or meditation and that power is then directed toward the focus of the ritual, which might be a person, the planet, or an event, and then that power is grounded back into the earth. Thanks are bid and the guardians invoked for the purpose of the ritual are farewelled. The circle is opened, often with the saying ‘the circle is open but unbroken’ (each circle contains a ‘doorway’ through which participants can enter and exit), and the participants ‘ground’
themselves through the sharing of ‘cakes and ale’, which is simply the sharing of food and drink to re-earth individuals after the workings of the ritual.

As I show throughout this chapter, the flexible dispersal of the human-technology relation is not limited to technologies of textual communication. Relations also occur through neopagan association with other technologies of communication, as occurs in communities and social groups, or the flexible way in which they engage their technologies of tools, used by neopagans in ritual and in the observation of seasonal and cyclical change. The multi-functionality of objects within neopagan practice expresses an ‘ontic’ status wherein the status of tools shifts, rendering objects unstable and immutable. The result is a dynamic, expansive, and vibrant ‘quotidian’ enactment of human-technology relations within the context of spirituality.

Ontologically, these rituals draw on the power of the individuals in the circle and from the earth itself in order to conduct their purposes and then that energy is returned to the earth from whence it came. The rituals draws from the energy of all participants in the group, directs that energy to its purpose, and returns any ‘excess’ energy back to the earth, thus the earth itself becomes a tool of sorts. Further, objects ‘of the earth’ can also become magical tools, for example a stick could be co-opted for a magical purpose and the returned to the earth. Where Ihde states that tools have a kind of ‘stability’, neopagans challenge this by understanding the agency of tools to be shifting. Some neopagans consider their rituals to tap into scientifically proven waves and lines of energy, and magnetic fields which circulate around and permeate the earth. They understand their practice to be deeply practical in nature, and not necessarily esoteric. In the same way that the energy of a crowd can be felt at a large gathering like a concert,
neopagan ontologies simply operate from this principle of the energies bodies produce, and attempt to manipulate and direct those energies. For other neopagans their ontology is about a psychological directing of energy, entering into a focussed state of intent towards a person or issue, while for others, they are quite literally communing with the god/desses and asking for their presence and guidance.

There is a final ritual I consider in the neopagan context. I have discussed Burning Man previously in Chapter Three, and will do so again in Chapter Five. Here, I want to interpret Burning Man in the context of the ontologies I have just discussed. In Chapter Five I discuss the identity of the technopagan as a figure capable of embodying appropriate human-technology relations through a worldview based in neopaganism. Thus it is useful to think about an event considered neopagan in form. At once technophilic and ecologically responsible, Burning Man embodies the exciting possibilities contained in a worldview which refuses to draw hard boundaries between nature and culture, humans and technology, and spirituality and politics. Burning Man manifests neopagan principles and origins, but is far from a folk-style neopagan festival, and has transformed into a dynamic, contemporary cultural event. I describe Burning Man here to define this event as manifesting neopagan ontology and praxis, and I will return to it a final time as representing a nexus between neopaganism and technopaganism, in Chapter Five.

Burning Man started out as an event on a beach in San Francisco in 1986 by two men who built a wooden figure, took it to the beach on the summer solstice and burned it to the ground. It captured the imagination of the creative San Francisco underground and grew exponentially each year until 1991 when the event was moved to ‘Black Rock
Desert’ in Nevada. From 20 participants to over 35,000 who now make the pilgrimage each year, Burning Man has come to represent a worldview on nature, spirituality, art and creativity that now expands out to touch the lives of the participants outside of the confines of that one magical week in August, and can be exemplified here as the creation of neopagan ritual.

Each year in August over 35,000 people converge on a massive salt flat in the Arizona desert to form a community which spontaneously materialises and then is dismantled at the end of seven days in one of the most unique, dynamic events the world over: it is Burning Man. Burning Man is described as an experiment in ‘radical self-reliance’, where each participant is expected to bring every single supply they will require for their seven day odyssey with them. This includes all food, water, shelter, power and so on. In addition, they are expected to ‘leave no trace’: every piece of waste (including toilet waste) every cigarette butt, each bag of rubbish must be taken home again — no dumpsters are provided. After the event a diligent group of volunteers stay behind to pluck the parched surface clean of every feather detached from its boa, each burned out glow stick, every displaced item — also known as MOOP (Matter Out Of Place).

Burning Man is so committed to removing MOOP that it painstakingly catalogues on a map where densities of MOOP are collected from across the playa. The following year, they are able to use the map to alert specific groups and areas of their MOOP record, thereby targeting and reducing MOOP. An example of this MOOP map is included in Chapter Five on page 348.

From an ontological perspective this is especially interesting because it regards MOOP not as rubbish pure and simple, but rather understands MOOP to be matter which is yet
to be located in it ‘right’ place in the universe. Given that matter never truly disappears but only moves or changes form — into energy for example — this is an appropriate worldview in an ecologically compromised environment.

The event itself is a frantic synergy of artwork displayed across the ‘playa’ which can be clambered upon, played with and explored; mixed with the ‘theme camps’ which intersperse the immense tent land where the participants live. Theme camps include the famous Hookah Dome, The Barbie Death Camp, the Panty Camp or the Java and Massage tent. One of the (many) unique elements of the event is that there is no cash commerce: the only things which can be purchased at the event are ice and coffee, and no money can be charged for any services offered in the theme camps, instead, the event operates on a gifting system, where people exchange services and gifts — they may be massages, cocktails or cigarettes — though no gifting exchange is assumed. Instead the importance of gifting as an act of generosity without expectation of reciprocity is encouraged. Each car which arrives at the entry gates is greeted by an official welcomer who meets them with the Burning Man phrase ‘welcome home’. Each ‘first-timer’ is welcomed to ring a bell at the entrance to announce their arrival ‘home’. Each year Burning Man has a ‘theme’ and in 2007 that theme was ‘The Green Man’. A well-known figure of neopagan mythology, usually represented as a face made up of leaves, he is regarded as the ‘man of the forest’ who represents life and rebirth, demonstrating Burning Man’s ties to neopagan views.

Burning Man, which I described through an Actor-Network Theory analysis in Chapter Three as a space in which a variety of agents, human and nonhuman, converge into a complex synergy, is described as an event in which one can only be a participant, not an
observer. Rather than a structured series of events to which people may choose to
attend, the experience is a dynamic mix of unprompted, organic happenings which are
shaped by the participants. Spontaneous performance is encouraged at the event.
Burning Man displays a quirky and attractive mix of alternative, hippie-influenced
individuals who bring along thumping sound systems, dramatic light shows and laptops
equipped to produce entrancing psychedelic displays. ‘Burners’ can be found meditating
on the playa at dawn, or dancing to a deep-trance rave beat, dressing up in their feathers
and finery for the ‘burn’ or stripping off their tops for the (women only) ‘critical tits’
bicycle ride32. Burning Man derives its name from the climactic event of the week
where an enormous effigy of a human figure which towers above the camp all week is
burnt to the ground in a frenzied display of destruction and renewal. Participants
contribute to ‘the burn’ by burning much of their camps on the final day (the ecological
implications of this could certainly be questioned) in an act of phoenix-like proportions
in preparation to go home and begin planning for the following year.

Burning Man offers just one example of the way neopagan ontologies can crystallise
into unexpected, creative and positive events which articulate connection to other
humans and to the nonhuman world in a sustainable and subversive manner. In
particular, Burning Man embodies the principles of neopagan ontology and locates them
firmly within contemporary culture, demonstrating neopaganism’s mutability, flexibility
and dynamism. Burning Man’s conceptualisation of the agency of humans and tools and
its metaphysical approach to rubbish, as enacted through MOOP are particularly key. I

32 Critical Tits is a play on the Critical Mass bike events held around the globe where cyclists invade
traffic-filled city streets to overpower the all-pervasive car.
unpack the significance of this event to this thesis once more in the final chapter, exploring Burning Man’s implication as a technopagan event.

**Reflections on the neopagan worldview**

Through the analysis of neopaganism, some of the limitations and sites of debates are revealed regarding neopagan and earth-based spiritualities more generally. These contentions do not, for the purposes of this thesis constitute reasons for the potentialities of this movement to be abandoned. Instead, these conflicts signpost aspects and elements of the movement which require further exploration and explanation. They offer rich sites for fleshing out threads of neopagan ontology which need to be clarified, specifically in the context of feminism and technology. The contentions of earth-based spiritualities were considered in Chapters One and Two, and I now look at neopagan critiques specifically.

Approaching neopaganism from a feminist, specifically ecofeminist perspective, provides rich material for exploring the strengths and limitations of the embrace of neopaganism, which is a part of the earth-based spiritualities I discussed in Chapter One. Probably the key critique levelled at neopaganism from within feminism is that it could be labelled essentialist. While the centrality of female roles and the respect and honouring of embodiment which is characteristic of neopaganism is in many ways positive, it is not without its dangers or legitimate concerns from feminist scholarship. By embracing the female body, by encouraging a celebratory approach to aspects of the female body which are unique —such as child birthing — there is simultaneously the risk that women become once again defined wholly and solely by those characteristics, relegating and reinforcing perceptions of women as ‘only mothers’ or as ‘of the body’
and so on. It is this risk of reinforcing essentialism that raises concern from some areas within feminism. Chapter One on ecofeminism provided a consideration of the ways that attempts to celebrate that which had been denigrated, to lift up that which has been put down, can be an overly simplistic approach to inequity and imbalance. Practices which explicitly emphasise elements of ‘femaleness’ which Western society has historically rendered shameful, weak, primitive or simply unimportant can unintentionally but simultaneously reinforce the very inequity these approaches seek to rectify. I argue that neopagans employ praxes which subvert these essentialisms because they emphasise partiality and location. The potential misogyny of practitioners like Crowley can be overcome because neopaganism in not prescriptive or fixed and can thus adapt to critique. Throughout this thesis, I attempt to negotiate spaces and identities which avoid essentialism without ignoring the relevant and significant elements which make up the female experience in its various forms. This allows for forms of variable and strategic essentialisms which operate to subvert patriarchy without simplistic approaches to this project. Neopagans embody a form of strategic essentialism given their flexibility of movement and positioning.

I addressed in Chapter One the criticism within feminism as to the validity of promoting a movement which relies so heavily on myth. Janet Biehl (1990) launched a critique at spiritual ecofeminists for the tendency within witchcraft and goddess religions to fail to distinguish between myth and fact and their reliance on metaphor within their ontological engagement with the world. As I have previously stated, a number of theorists central to my thesis, including Donna Haraway, present compelling arguments for answering the criticism of reliance on myth and metaphor and for demonstrating the role metaphor plays in constructing reality. Neopagan use of myth and metaphor speak
to Haraway’s positioning of metaphor as a critical element for understanding the world, and as a realistic and useful component of ontology.

In this chapter I have deliberated on neopaganism as a viable worldview in contemporary culture. A nebulous group which is difficult to define, I characterised neopaganism through an examination of some key elements. I began by deliberating on the etymology of the central terms associated with neopaganism and witchcraft. This allowed me to demonstrate the power of semiosis, and the legacy these etymological roots carry into contemporary understandings of neopaganism. I explored the diversity of neopagan groups by introducing some of the typographical branches which exist under the neopagan umbrella. Not only did this convey the breadth of neopaganism, it also revealed some of the detail in the various beliefs and practices amongst these groups. Neopaganism’s historical roots are highly contentious; disputed by some as non-existent and by others as continuous for tens of thousands of years. To unpack these debates I presented a three-stage history of neopaganism, beginning with the ancient historical roots of pre-Christian Europe, presented through archaeological and anthropological evidence. These histories are almost always coloured by a landmark event in neopagan histories —the witch-trials. To understand the events of this period and the ongoing influence it has on notions about neopagans and witches today, I discussed some key elements relating to the trials. This examination exposed the misogynist attitudes which prevailed at the time, and the attacks levelled upon women’s healing practices, and their bodies. I then looked at the neopagan revival of the early 20th century, where much of the details of neopaganism today gained their form. Finally, I discussed some key contributors to the neopaganism of feminist influence which emerged in the 1960s
Having established the more historical, factual elements of neopaganism, I then defined neopaganism in ontological terms. I outlined forms of feminist ontologies which align with neopagan worldviews and argued these views offer a suitable challenge to Western hegemonic power structures and dualistic processes. I then offered a characterisation of some broad beliefs and practices shared amongst neopagans. I then explored an element central to most forms of neopaganism, practice. What neopagans do conveys much about what they believe and how they view existence. Understanding this practice as really a form of praxis, and one embedded within human-technology relations, deepened the understanding of neopaganism. To begin to move towards the final chapter of this thesis and its endorsement of the technopagan, I introduced the event Burning Man as a neopagan event of ritual practice. In discussing this unique festival I was able to explore the neopagan worldview and its relationship to technology and nature as enacted in this ritualistic event. The broad application of agency at Burning Man is significant to this investigation as cognitive of the relations which constitute worldly experience. At the beginning of this section, I raised some of the contentions which circulate around neopaganism, especially as they relate to feminist critiques of essentialism. Cognisant of feminist alerts to the dangers in elements of neopagan spirituality which may locate women in inadequate gender frameworks, I argued that the embodiment emphasised within these spiritualities should still be recognised as subversive and potentially liberating.

Neopagan ontologies include a dispersed application of agency, from humans, to nonhuman animals, to nonhuman nonanimal organisms, to inanimate objects. Neopagans emphasise self-direction of will — tied to the Ancient Greek axiom ‘know
thyself" — but understand that self to be deeply embedded in a shared context.

Neopagan reverence toward, and acknowledgement of reliance on, natural systems to survive, reflects an ontology appropriate to contemporary culture’s grappling with the ecological crisis.

The emphasis of the reverence of nature within neopaganism often lends itself to a wariness towards practices which circumvent this reverence, and so the rise of high technology in the last 30 years has led to many neopagans distancing themselves from this trend. The principles of neopaganism — the honouring of the cyclical movements of the seasons, the recognition of immanence in the world, and the sacredness of natural processes — generate an awareness that all too often in late modern society we tend to look to innovation and technology to ‘save us’ from social and ecological problems. This approach, fully realised during the scientific and industrial revolutions, has led us into a world which reifies technology, and which believes that human innovation can always better natural processes. Part of the neopagan approach is to seek ways which avoid this worldview, and instead attempt to recognise the wisdom of the earth’s processes to maintain itself and flourish, and to find humility in this recognition.

Ecologists too, would agree that if humanity were to approach ‘problems’ with the mindset that there is much we do not/can not know, we may find better solutions and inflict less damage on the planet and its inhabitants.

However, this wariness of technology and the avoidance of the technophilic trend of modern times often render neopaganism and its followers as overly regressive in their approach to contemporary life. Neopagans can appear overly nostalgic in their understandings of a simpler, agrarian lifestyle of the past and in wishing for a world
which is ultimately unachievable and unrealistic. They also risk failing to acknowledge the many astonishing innovations of technological progress and their potential for change, growth and greater prosperity. Of course, for whom this growth and prosperity will be achieved is a discussion for another context.

In order to address this technological suspicion, while remaining faithful to the ecological guiding principles of neopaganism, a new kind of neopagan has emerged. The technopagan figure, to which this thesis turns, offers such an ontology faithful to neopaganism, and yet deeply engaged in digital culture. It operates both as a metaphorical and material figure of hybrid ontology — of neopaganism, ecofeminism, cyborg agency, and the goddess — with an additional critical literacy of digital communion. So embodied, it is capable of entering scholarly debates concerning agency, ontology and technology. In the final chapter of this thesis, I explore the technopagan across its practical and metaphorical manifestations, demonstrating its suitability to ecological, feminist and spiritual principles in a technological world.
Chapter Five
Neopagans in Cyberspace: Hybrids on the New Edge

The logic of technology has become invisible — literally, occult.
(Davis 2004, 216)
Any sufficiently advanced technology is indistinguishable from magic.
(Clarke 1973)
She's a technopagan, right? Ask her to bless your laptop.
(Green 1997)

To find relevant ways to incorporate neopagan worldviews into a digital world, I present the technopagan as an agency which acknowledges its organic roots amidst the network society. This agency recognises its dependence on natural systems to survive and flourish, and values the inherent right of nonhumans to likewise survive and flourish. Technopagans carry this neopagan ontology into the digital world with equal enthusiasm. The networks of communication in the digital age, and the interlinking webs of connection which are generated through networked technologies are a mirror of this natural cycle for technopagans. The need to distinguish between natural and artificial becomes obsolete within the technopagan ontological framework, and is replaced by a worldview which sees a matrix of interwoven entities mutually informing and influencing each other in a great synergy of interdependence. Technopagan agencies — such as cybershamans and technowitches — incorporate the supposed poles of natural and technical into one grand sphere of interconnection. Partly a product of their ‘age’ — familiar with, and often deep participants in, the digital age — and partly due to the neopagan concept of immanent divinity, technopagans embrace technology and the information age of the internet in particular as another tendril of worldly possibility, creativity and connection.
In this thesis, the technologies to which I most explicitly attend are those digital networks associated with the internet, especially the new generations of web technologies defined as Web 2.0, where user-generated content is a defining feature. Web 2.0 websites allow for both download and upload of information, resulting in more dynamic participatory networks. Users can add content to websites, as well as download content and transfer it to other websites. Web 2.0 conceives of the internet as a participatory platform and allows web-based applications to be used, as opposed to desktop applications, and results in websites which are quicker to load and navigate.

While I consider other forms of technologies, such as material tools and texts, the network technologies of the Web are the most significant for exploring technopaganism. They treat cyberspace as a real space which can be visited and dwelt in, and a space which can be shaped and defined by its participants. Internet technologies then, do not pose a threat to technopagans, who instead see this form of technology as infused with potential and creativity.

Technopagans could be described as technophiles rather than technophobes, revelling in the new levels of community, information-sharing and role-playing that the world of the internet offers. When Margot Adler wrote her seminal text on pagans in 1979 she noted that a significant percentage of the people she spoke to worked in the emerging field of information technology (Adler 1997, 385). In fact, many of these individuals were heavily involved in the programming and code-writing of early web development to the extent that their indelible mark has been left on the web today and on many of the IT-related fields that we are now familiar with. The names, job titles and structures of the ‘net’ permanently denote the neopagan and geek influences of the individuals who contributed to the IT industry as we know it today. The controller of a website is called
a webmaster; a MUD typically stands for a Multi User Dungeon, named after Dungeons and Dragons (D&D)\textsuperscript{33}. Programmers often carry titles of wizards or demons; applications which run in the background of computer operations are called daemons; while other programming actions and objects in the computer world are referred to as swords, trolls and sorcery\textsuperscript{34}.

Moreover, the influences of an adolescence spent playing Dungeons and Dragons has shaped the metaphors which convey the concept of the internet to a broader audience. Dungeons and Dragons has appeal for neopagans for its diverse world of fantastical creatures, sorcery and magic. Conversely, D&D players are often drawn to the neopagan worldviews of shifting realities, practices through ritual, love of knowledge and immersive community. As Adler asked in 1979, and I am interested to explore now, what makes these two seemingly disparate worlds of earth-based spiritual pursuits and the digital revolution converge in such a way? What can be said about the significance of such a merging of practice and interest? These questions produce an added insight into neopagan worldviews and point to the emergence of the technopagan ontology. It is through the dynamic synergy between the digital and the neopagan, which I will show emerged in the kernels of countercultural and cybercultural movements, that the technopagan materialises. In what follows, I will argue that the technopagan is a digital native, and as a result, the technopagan becomes a useful identity to locate in philosophical investigations into agency within contemporary technoculture. In what

\textsuperscript{33} Dungeons and Dragons is a dice-based table-top role-playing game (RPG) originating in the mid-1970s which constitutes the basis for most RPGs today.
\textsuperscript{34} An interesting link is relevant here: in the now cult-status film \textit{The Revenge of the Nerds} Kanew, J. (1984). The Fraternity and Sorority run by our heroic nerds are called Lambda and Mu (pronounced ‘moo’) respectively. LambdaMOO is one of the first MOO’s (Multi-User Dungeon, Object Oriented) to ever be created. The MOO emerged after the movie, and so the MOO title may have been created as homage to nerd culture. I suggest there is a link here between popular culture and cybercultural development. If it is pure coincidence, it is a fascinating one.
follows, I will apply Ihde, Latour and Haraway’s foregrounding of materiality and nonhuman agency in the context of the human-technology relation as it applies to technopagan agency and practice.

The aim at the outset of this chapter is to offer an introduction to the technopagan in order to broaden understandings of what elements, ideas and practices surround individuals and groups who see themselves as distinctly technopagan. I introduce a series of online spaces which give rise to and continue to inform technopagan identities, namely the virtual environments of Role-Playing Games and some countercultural communities including the publication *Mondo 2000* and the WELL. I also make an argument for the links which exist between the technopagan identity and geek and gamer culture, followed by a more detailed discussion of the technopagan. I then return to the Burning Man case study introduced as a neopagan event in Chapter Four, to explore the kinds of technopagan praxes which define this event. The case study demonstrates a manifestation of neopagan and technopagan principles removed from a distinctly digital context, that is, technopagan agency operating and practising outside of cyberspace, yet still fully imbricated in high technology.

Following this discussion of the Burning Man event, I offer two overlapping and intersecting approaches toward the internet employed by technopagans. I firstly explore the technopagan notion of the internet as ‘tool’ — the most conventional approach to cyber-interaction. At this level, websites, online neopagan groups, *LiveJournals* and bulletin board systems, form around the notion of neopagan fusion with digital technology. Other relevant spaces — such as the online version of Burning Man, *Burning Life* — are described as inherently technopagan.
Secondly I explore technopagan engagement with the technology of the web as an actual space, as a form of reality, in the section titled ‘Cyberspace and technopagans: an ontological affinity’. This position regards the material as a key component of existence, and comprehends cyberspace as a world. Seeing the webs of connection through digital networks inspires technopagans to enter and configure cyberspace as a distinct and divine space. In this environment technopagans form magical circles in virtual spaces and are inspired by network technologies to conceive of new ways of enacting the neopagan worldview. Within this formation of technopaganism can be found cyber covens, erisian and discordian groups, and digital rituals. Examination of these groups unpacks the worldviews and practices of technopagans. Throughout this chapter I read the technopagan against the philosophical perspectives I have introduced in this thesis. Specifically, Ihde, Haraway and Latour’s exploration of human-technology relations are used to position the technopagan as a hybrid identity in technoculture. I explore the notion of the technopagan as a material-semiotic identity: that is, how the concept of the technopagan, as a distinctly hybridised agency, can be more fully understood through the philosophy of technology, the value of metaphor, and as a development of hybridised agencies such as Haraway’s cyborg and the posthuman. This analysis draws together the material and the semiotic, the human and the technological, the human and the nonhuman, into the collaborative agency of the technopagan.

Part One of this thesis resulted in the foregrounding of several critical identities. Hybrids, cyborgs and goddesses emerged as useful, but conflicting characters central to deliberations on digital culture, ecological activism and spiritual and ontological
considerations. The incongruities and the discord which lies between these agencies are drawn together in the technopagan agent in the final section of this chapter, ‘Technopagans: hybrid agency in the more-than-human world’. This figure embodies both the cyborg and the goddess, reinforcing the oppositional tension which has emerged between the two figures. The technopagan is inherently hybridised, in name and ontology, as a creature of natural and technical origins and worship. Ihde’s insights into the human-technology relation can be usefully applied to the technopagan, as the ‘primitive’ elements of neopagan ontology are redefined as in fact significantly technological. I show how the technopagan can be better understood through the application of Actor-Network Theory to demonstrate the communion of people and things and to highlight the significance of this dynamic interaction. These elements drawn together illustrate the role of the technopagan as an embodiment of the human — and indeed, the more-than-human — condition of being in technoculture.

There exist online other spaces which similarly embody technopagan principles and which demonstrate the way that fusion of the occult and the digital are harmonious. In what follows I examine several spaces notable for their occult influences and which speak to technopagan worldviews. These spaces include the immersive worlds of online Role-Playing Games, the expanding space of the internet itself, conceptualised as the New Edge, and community spaces which foster the convergence of countercultural principles with network societies. I explore each of these spaces to demonstrate the hybridised nature of technopagans within contemporary culture. This discussion demonstrates the kinds of communities and spaces which actually gave rise to the technopagan identity, and which explain its emergence in current societies.
Technopagan spaces online: Role-Playing Games, the New Edge, and the WELL community

In what follows I begin with an examination of the online spaces of Role-Playing Games and their neopagan influences. I then discuss the notion of the New Edge, the frontier concept of the ‘exploration’ of cyberspace. Finally I examine the way countercultural influences have been at the forefront of cybercultural development and vision through the publication of *Mondo 2000* and the ongoing online community of The WELL. The WELL reveals a thread which can be traced from counterculture to cyberculture (Turner 2006), revealing that there are important connections between cybernetics, environmental politics, and alternative spiritualities. In tracing these spaces I weave an intricate web of interconnections between digital culture, occult spirituality and subversive yet sustainable and responsible worldviews. These connections constitute the ground from which technopaganism emerges.

Cyberspace abounds with occult influences, particularly in the gaming sphere. At the outset of this chapter I mentioned that Dungeon & Dragons has influenced online spaces such as MUDs, MOOs35 and MMORPGs36. Themes in popular MMORPGs are generally styled on *Dungeons & Dragons, Star Trek*, the world of Tolkien and occult themes. The largest MMORPG, *World of Warcraft (WoW)* claims to have around nine million subscribers, and is heavily designed around *D&D* themes. Avatars in the game fall into races including elves, gnomes, orcs, trolls and the undead, to name a few. Game-play involves casting spells, fighting monsters, gaining skills, completing quests and forming groups with other online players. The class of each character includes sets

35 MOO stands for MUD Object-Oriented. Moos are text-based MUDs which allow users to modify or manipulate the environment by creating/adding new rooms, objects or interfaces for the environment.
36 MMORPG stands for Massively Multiplayer Online Role-Playing Game. The MMO indicates the game is played via a network in which you are interacting with real players across the globe.
of abilities unique to each race, and classes include rogues, shamans, druids, hunters, mages and warlocks. Outside of the immersion of the game environment — and these environments are highly immersive and addictive — players build communities through online forums, the construction of fan art, film clips and storytelling (fan fiction).

In 2007 *WoW* encountered an incident involving a dungeon quest which contained a demon who hit players with a debuff called Corrupted Blood. A debuff is a spell which causes a negative affect on a character, by slowing their movement, decreasing their spell-casting ability, or reducing their resistance to spells. This is the opposite of a buff which is a spell cast to bolster or strengthen a character. Infected with the Corrupted Blood debuff, the small group of players left the dungeon and unwittingly spread the infection to other players in-game. Within mere hours this plague had raced through the major cities of *WoW*, infecting characters and killing low-level players. Researchers found the event to be useful for studying real-world epidemics — such as Avian Influenza — because Corrupted Blood offered a glimpse into unpredictable human behaviour during epidemic events which researchers claimed to be difficult to account for in laboratory environments and simulations. For example, people entered infected areas out of curiosity, and accidentally infected themselves in the process, thereby increasing the spread of the disease. Events like Corrupted Blood demonstrate not only the ways in which online communities are evolving to reflect real-world community dynamics, but also show the relevance of online gaming to real-world problems. This is illustrative of the way that technopagans believe that practice can be legitimately enacted in online spaces.
An event such as this is particularly interesting for its metaphorical resonances, especially in terms of viruses. The event demonstrates the links between biological and computer viruses, which in the case of Corrupted Blood, was actually both these things. It was a simulated biological virus which spread through the Wow community, incapacitating and killing many of its inhabitants. It was also a computer virus in the way that it caused chaos for Wow servers, with people trying to log off to get to safety, large amounts of people reviving after death and so on, putting massive strain on the functions of the Wow environment. What eventuates is that nonhuman and network agencies have the ability to significantly shape and affect the game, because as Ihde points out, the unintended effects of technology manifest in many ways. Acting in unanticipated and unplanned ways, these nonhumans are demonstrating their agentic power. Blizzard Entertainment, the Wow developers, did not anticipate this effect of the virus, as it was never intended to leave the original quest dungeon. As a result, when it was released among the general population, the virus infected people and their ‘pets’ in ways they could not have expected. Quarantines were attempted to stem the spread of the virus, with little success. Eventually they reprogrammed the quest, altering the effects of Corrupted Blood to prevent its spread outside the dungeon.

Another example of an online game with technopagan traits is the First Person Shooter Shadowrun. Shadowrun originated as a table-top dice game, like traditional D&D. The game is set in a not-too-distant cyberpunk future. After a catastrophic event, magic has been drawn into the world alongside the rise of cyberspace. Again, characters in Shadowrun include elves, dwarves and orcs, who interface with The Matrix — cyberspace — through ‘decks’ like the ones seen in Gibson’s worlds; terminals which allow direct neural interface with The Matrix. Cybermages and deck hackers call
writing code ‘spellcasting’. Significantly, this concept has been embraced by
technopagans who liken the casting of spells to computer programming. In
programming, lines of code are written which enact an effect, in much the same way as
the words of a spell or ritual are incanted to effect an outcome. Technopagans
understand then that they can literally cast spells through coding. This can be
interpreted according to Ihde’s human-technology relation of a hermeneutic technics,
where “writing is a technologically embedded form of language” (Ihde 1990, 81).
Ontologically this shifts some of the mysticism associated with neopagan ritual and
plants it in a manifestly practical sphere wherein ritual or magical acts are deliberately
coded in a highly technical form of writing. The link between coding and spell-casting
can also be read through a material-semiotic lens. Coding and spellcasting as mutually
reinforcing and interchangeable concepts demonstrates the role of the material and the
semiotic in the composition of agency. The act of writing down words for a ritual, for
example, recognises both the physical, embodied act of writing the words and the
meaning and symbolism those words contain and communicate. Conversely, writing
code for a computer programme is a praxis wherein change can be enacted in reciting
and recording particular signs and symbols. Writing the words of a virtual ritual and the
writing of code are both meaning-making practices.

Examining online RPGs reveals a level of ‘reality’ in operation which is appropriate as
a viable form of community, blurring the boundary between Real Life (RL) and Virtual
Reality (VR). They connect people across vast geographical boundaries and remove
traditional identity cues, especially those of gender, in potentially liberating ways for
feminism because they allow us to ‘play’ with identity and explore sexual diversity. On
a philosophical level they expose the constructed nature of identity, and open pathways
of communication and community which have the potential to escape and critique oppressive gender constructions. These spaces present our RL worlds to us in new ways, rendering visible their constructed qualities. At the same time, they re-enchant the world through the positioning of online reality in mystical and occult modes. In these modes, the world of the hacker, the neopagan, the weaver and the spell caster converge into the identity of the technopagan: a coder, caster, and magician. The functions of our networked machines become magical and boundless in their offerings of reality — whether through the performance of ritual, or the programming of code.

I assert that RPGs and online gaming play a significant role in technopagan agency. They represent an ontology in which ‘virtuality’ signifies a legitimate space or place for meaning and praxis, such that technopagan praxes share an ontological affinity with cyberspaces. These spaces online are regarded as spaces, they are locations which can be visited, containing communities which grow and develop over time, to which individuals become invested and attached, in the same way a technopagan envisions mystical ritual worlds as equivalent spaces of inhabitation. RPGs acknowledge the mutable nature of identity, engaging a variety of agents, from other players, to the equipment of the computer including the hardware and the software of the game, NPCs (Non-Player Characters) who issue quests, information and combat, and the game developers themselves who communicate with the community. RPGs have especially transformed through their online status and their imbrication in the emergence of cyberspace. In what follows I consider in more detail the conceptualisation of cyberspace as a new space which is sometimes labelled the ‘New Edge’.
Cyberspace has in many ways been shaped and guided by counterculture and New Age movements of the 1960s and onwards, which are principally concerned with ecological sustainability and spiritual centrality. The way these interests intersect and inform one another is of central importance to this thesis because they are implicit within technopagan agency. At its heart technopaganism is hybridised, convergent and contradictory, and cyberspace offers the place in which this hybridity thrives. Particular locations in cyberspace, such as the WELL, which is discussed later in this section, are especially important. Specifically, they resist the disconnection which feeds fears of technology and digital communication articulated by ecofeminism and feminist technophobic analyses, as outlined in Chapters One and Two. Amidst the possibility of a detached future in which isolation and individualism reign, these communities instead relate, ally, connect and join. They are spaces and places which approach high technology with great optimism, a sense of unbounded creativity, and yet which do not abandon worldly concerns and context. I will also show how these approaches to networked technology were in fact some of the driving sentiments at the birth of cyberculture. Virtual communities then, are a critical element of technopagan ways of being-in-the-world.

The community-building in digital culture was developed around the concept of The New Edge. The New Edge — a playful turn on the growth of New Age movements in the 1970s and 1980s, is an articulation of the world we increasingly inhabit. It is “a rich array of virtual realities, bio/nano/cyber-technologies, personal computing, electronic communications and global marketing opportunities afforded by the digital revolution” (Graham 2002, 158).
The New Edge can be understood to constitute a liminal zone (Moulthrop 2003, 256), to the extent that it crosses the boundaries between material and immaterial being-in-the-world such that our journeying takes us to ‘places’ which confuse the distinction between the material and the virtual. The role of cyberspace as a ‘frontier’ is an uncomfortable one. The colonial underpinning of frontier travel, discovery and even conquest is a concept best left behind in cyberspace. Critical theory has successfully highlighted the dangers in the ‘frontier’ mentality which colonises, invades, and assimilates. However whilst I wish to avoid ‘colonising’ sentiments, it is relevant to consider cyberspace as a form of ‘new terrain’, as a landscape which is only gradually coming into view. The concept of cyberspace as a ‘new’ terrain must be considered within this ontological study, because within the re-worked understanding of ontology discussed in this thesis, the perception of the New Edge as a ‘space’ composes part of this re-worked existence. New spaces are being created and discovered, and for this reason the New Edge may capture a more playful, less hierarchical approach to new space divested of the baggage of conquest. These discussions also lead toward the exploration later in this chapter of the ‘Ontological affinities of technopagans and cyberspaces’, in which cyberspace is perceived as a location, as a place which ‘exists’.

When we travel through cyberspace, we may follow a path no other has taken before — much of this is due to HTML 37 and the way that hyperlinking creates a ‘choose your own adventure’ style to our travels, handing the navigation of our journey to each individual user, enabling them to carve a path which most suits their own interests. We may start at a web page of a favourite blogger, and follow a link to another blog site, which presents a link to a photography site, which links to a political site, which leads

37 HTML: Hyper Text Markup Language
to another blog, and so on. The process of hyperlinking presents a kind of ontology of cyberspace concerning the ways we can move, navigate and ‘discover’ spaces online. The apparent ‘newness’ of cyberspace licenses us with a freedom to create and imagine worlds we may have previously thought impossible. For those who regard cyberspace in this fashion, anything can happen, creativity is boundless and possibility waits at every corner (or over every edge). As I critiqued in Chapter Two, cyberfeminists were overly optimistic in their uncritical embrace of cyberspaces, ignoring the potential drawbacks of virtual worlds. Mindful of the shortcomings of utopian approaches to cyberspace, I briefly consider several instances of the New Edge movement and its links to technopagan agency.

From the late 1980s to the late 1990s a cyberpunk magazine, *Mondo 2000*, hit circulation, and soon became notorious for its glossy, evocative pictures, and its convergence of cyberculture, virtual reality, body art, smart drugs and cybersex which typifies the New Edge. The emergence and growth of this publication fostered a cyber-subculture which resonated with hackers, geeks and cyber-dreamers navigating the terrain of the digital world. *Mondo*'s links to the New Edge and technopaganism are explicit. They identified this emerging identity early in digital culture, reiterated in their compilation publication *Mondo 2000: A User’s Guide to the New Edge: Cyberpunk, Virtual Reality, Wetware, Designer Aphrodisiacs, Artificial Life, Techno-Erotic Paganism and More* (1993). Created by R.U. Sirius, Queen Mu & joined later on by St Jude, they successfully articulated an emerging mash of interests being cultivated through computer culture. As Sirius explains, an ‘edge’ assumes that if you go past that edge, you will fall off — and if you do, you fall off into new territory, somewhere off the map: the New Edge is “unmapped, and we’ve only begun the exploration” (Sirius
These early figurations in publications like *Mondo 2000* of cyberspace as a landscape or terrain are what facilitate the notion of cyberspace.

Sirius left *Mondo* in 1993, the year when *Mondo* had ‘made it’ to the cover of *Time* magazine and right around the time *Wired* came into existence. The executive editor of *Wired*, Kevin Kelly, was also an editor of the Whole Earth Catalogue (WEC) and a key figure in the creation of the Whole Earth ‘Lectronic Link (WELL) which was one of the first significant online communities, and which still runs today. The WELL comprises internet forums, email accounts and web pages and the content can range from the highly intellectual to the playful and irreverent. The WELL was introduced in 1985 and continues on with over 4000 members today and has been described by *Wired* magazine as “[t]he most influential online community in the world”39. The links which can be followed “from counterculture to cyberculture” (Turner 2006) in the emergence of the WELL demonstrate that there are significant connections between ‘green’ politics, cyber-subcultures, and spirituality; these links embody technopagan spiritualities and the concept of worldly interconnection which is emphasised throughout ecofeminist philosophy.

The WELL is by no means an explicitly technopagan space though it does contain conferences (the WELL term for discussion threads) on technopaganism. What I suggest instead is that the hybridised, eclectic mix of interests created in virtual space is

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38 It is suggested that the emergence of *Wired*, which broke out of the starting blocks with corporate advertising and a marketing based, cashed-up focus had put the magazine out of the race. Despite *Mondo’s* ability to titillate a growing audience, the magazine probably proved a little too anarchistic for many a would-be corporate contributor. Their emphasis on drug-taking, their erratic publication schedule and personal rifts forming amongst the central figures signalled that the end was nigh. *Wired* had received the benefit of bearing witness to *Mondo’s* impact on the magazine world, and was compared heavily to *Mondo* in its early days, but over time became far more mainstream and ‘palatable’ for potential advertisers, while *Mondo* maintained a subversive flavour.

where the technopagan materialises. The significance of virtual communities like the WELL lie in their location at the New Edge — they map, and are part of the map, of the terrain of an emerging world. The WELL’s rich conferencing system of discussion, and its links and loyalty to the principles of Whole Earth movements and principles demonstrate technopagan sentiment that ‘online’ does not mean ‘away from nature, or ‘free of the body’ and does not mean that environmentalism somehow becomes irrelevant in the wired world. Contrarily, the WELL demonstrates how its creators anticipated an online world which would not be ‘freed’ of the shackles of the earthly world, but instead would be better equipped to share information, to activate their politics and to find motivation and sustenance within each other online. In this context, the WELL is the historical backbone upon which technopagan worldviews are generated.

The WELL is significant to charting the emergence of the technopagan on two important levels. Firstly, the functions of the WELL offer forms and models for online community which are conducive to technopagan worldviews; secondly, the origins of the WELL demonstrate its links to and emergence from, the countercultural and occult movements in the 1960s and 1970s in the United States of America. In considering these two factors, I suggest that the WELL can be understood in terms of a Latourian approach to knowledge and community. In forms which can be read in the context of Latour’s Anthropological Matrix — the pre-modern ideology of intersecting, interdisciplinary, boundary-less thought as contrasted against the precincts of binarised thought — WELL participants consider spirituality alongside politics, car repairs next to women’s rights. Unlike the Great Divide which Latour frames as an Enlightenment trait, the Anthropological Matrix collapses knowledge borders, discipline, interests and
artefacts into a complex web. In so doing, WELL members understand themselves to be networked individuals, refusing to compartmentalise knowledge, and instead find sustenance in the way that broad interests overlap and inform each other, constructing a sense of human ways of knowing which do not purify aspects of knowledge from each other, but instead dwell in networks of connection.

The WELL refers to membership as finding a great coffee shop to hang out at. It is about located community, a sense of place in cyberspace. In contrast to the vast openness of cyberspace, where we can lurk, pass through and observe ‘unseen’ the WELL emphasises ‘actual identity’, place and location. This sense is about connecting in cyberspace, not encouraging floating, amorphous communities without meaning. The anchoring in place encourages allegiance and responsibility to place which can be visited, attended, and dwelt in contrast with the array of rapidly forming and dissolving online communities.

The view which seeks ‘concrete’ communities online however is problematic, as is the very distinction between a ‘disconnected’ online space and an ‘anchored’ offline one. In posing the technopagan as a useful formation of agency in the cyber-present, the ‘reality’ of the material and the ‘fantasy’ of the virtual must be challenged. In putting forward a hybridised form of identity such as the technopagan, it is imperative to incorporate the virtual, the hidden, and the ghostly, as components of reality. Haraway’s material-semiotic actor exemplifies this hybridised incorporation of the virtual and the tangible. Latour too, via Actor-Network Theory (ANT) demonstrates the equal roles of a broad range of actors, which may be material or nonmaterial, in the construction of the world. The technopagan in this analysis then, is an evolutionary product of WELL
origins, but like the cyborg, is unfaithful to those origins, which maintain the split
between the virtual and the real.

The WELL was co-founded by Stewart Brand following his successful Whole Earth
Review and Whole Earth Catalog publications which began in the 1960s. Brand
successfully forged connections between ‘bohemian San Francisco’ and Silicon Valley
(Turner 2006, 3) creating the foundations of the computer culture as we know it today.
Along with Howard Rheingold, Kevin Kelly, Esther Dyson and John Perry Barlow,
Brand became one of the most referenced spokespeople for the notion of a
countercultural vision for the emerging net (Turner 2006, 3).

The Whole Earth Catalog was first released in 1968, designed to give the ‘back to the
trees’ hippies a manual which they could employ in their treks to the wilderness. Brand
wanted to create a publication that would provide them with “access to tools” (1971)
designed in a network structure, providing the reader with a manual that could be
accessed via a set of subject topics — communication, nomadics, sustainability and
computing are a few examples — which contained information, relevant texts on the
subject and references for further study. The Catalog placed nature and science, high
technology and backpacking side by side, elegantly tracing connections between
seemingly dispersed subjects. It encompassed an ideal that a ‘back to nature’ movement
would be interested in systems theory, cybernetics and new technologies. The Catalog
emphasised the notion of ‘Whole Systems’ in which smaller, distinct categories are
resolved into a larger whole (Turner 2006, 85), clearly influenced by Brand’s earlier
interest in systems theory. The Catalog invites the reader to transverse through these
categories to the extent that two categories “do not merely rub shoulders; they make
possible the exchange of legitimacy across conceptual and community boundaries” (Turner 2006, 85). Theoretically, this view is consonant with the Anthropological Matrix of Latour’s hybrid theory. Pre-modern worldviews which do not operate along the lines of disciplinary or binarised divides comprise this Anthropological Matrix. Physics and poetry, gardening and geometry, or meditation and mathematics can ‘speak the same language’ within this Matrix, they are not considered separate, distinct entities. This ontology is reflected in the technopagan worldview of overlapping, intersecting interest, and the collapse of traditional binaries.

Brand’s own history as a participant in 1960s counterculture and psychedelia contributed heavily to his ‘Whole Earth’ visions. The San Francisco hippies of the 1960s were taking up redefined and liberated forms of sexuality, along with the embrace of ‘small-scale technologies’, that is, psychedelia (states of heightened sensory perception, euphoria, trance-like states, induced by drugs, meditation or other psychic states) and music (Turner 2006, 33). These hippies have been defined as ‘New Communalists’ by Fred Turner (2006, 33), distinguishing them from the ‘New Left’ which was a more political movement operating within the existing power structures.

For the ‘New Communalists’, politics was obsolete, and they instead focussed on the project of transforming the mind. While interested in back-to-the-land projects, they also retained an interest in technology, particularly new technologies. For the New Communalists, of whom Brand was one, if the mind was the key site for social change, then information would most certainly have to become a part of the counterculture seeking transformation (Turner 2006, 36). The New Communalists were deeply interested in cybernetics and systems theory, drawing on the work of Norbert Wiener
(Wiener 1965; Wiener 1968) and Buckminster Fuller (Fuller and Marks 1969).

Following Wiener's lead, they saw cybernetics as potentially subverting hierarchy in the way that it demonstrated circulating power (Turner 2006, 38) within information feedback systems. These projects focussed on a reconceptualised notion of the mind and of the complexity and interconnection of natural and social systems. Significantly, technopagans also draw from the field of cybernetics into their ways of being-in-the-world, understanding the operations of the computer and the human mind to be equivalent. The countercultural views of the New Communalists can be understood to provide the ground for technopagan identities, positing a networked, dispersed field of knowledge. These cybernetic visions can also be understood through the lens of ANT in the way that technological systems are assigned with agency and technohuman systems disperse agency. That is, cybernetic worldviews recognise the ability of technologies to act, to have agency which shapes and defines systems. It is not merely human agents which have the ability to effect and affect change within systems. Thus, cybernetics, the New Communalists and technopagans recognise the agentic role that objects and technologies play in the shaping of reality, and acknowledges that reality materialises through the dynamic interaction of the agents through networks.

I have examined a series of spaces online which display technopagan properties and ways of being. I discussed the rapidly expanding worlds of online games, their occult influences and the way in which they operate as spaces and places, and the close links which exist between game worlds and technopagan worldviews. I then discussed the notion of the New Edge as a concept shaped by the New Age movements and alternative spiritualities. This approach to new spaces in the digital world diverges from mainstream internet culture which is often based in practices of consumption, mass-
marketing, and commercialism. The New Edge promises new possibilities and a transformation from traditional spaces, power structures and ways of being-in-the-world. Finally, by examining the New Edge manifestations of *Mondo 2000* and The WELL, I argued that their roots in countercultural movements further demonstrate the logic of merging neopaganism and technology. These roots run counter to assumptions about the dissonance between earth-based spiritualities and technological engagement. Technopaganism, so located, embodies the immersion of countercultural identity in the emerging technosphere. In addition, I argued that the merging of cybernetic systems theory alongside earth-based spiritual practices, which are subversive and ecologically active, formed another key connection to the emergence of technopagan agency as a deeply appropriate agent in contemporary culture. I assert that these elements of online histories and spaces are the ground upon which technopaganism has formed. I now introduce the technopagan as it has surfaced from these histories and spaces, charting its defining features, practices and its relationship to technoscience, and how it can be distinguished from neopaganism.

**Technopaganism**

Giles: Uh...You don't seem exactly surprised by...Who are you?
Ms. Calendar: I teach computer science at the local high school.
Giles: A profession that hardly lends itself to the casting of bones.
Ms. Calendar: Wrong and wrong, snobby. *You think the realm of the mystical is limited to ancient texts and relics? That bad old science made the magic go away? The divine exists in cyberspace same as out here.*
Giles: Are you a witch?
Ms. Calendar: Mm. I don't have that kinda power. “Technopagan” is the term. There are more of us than you think.

(Posey 1997 emphasis mine).

In this section I turn my focus directly to technopaganism, and draw from a range of theoretical approaches to humans and technology to consider the significance of
technopagan agency. This thesis uses a material-semiotic (Haraway 1991a) figure to deliberate on a number of issues pertinent to feminism, environmental philosophy, philosophies of technology and cyberspace. Further, I apply Ihde’s appraisal of human-technology relations to technopagan praxes (1990), and assess the ways in which Latourian theory (1999) can be deployed to further demonstrate the technopagan’s promising agency. Technopagan agencies foreground the body, rendering corporeality and materiality vital components of being. Ontologically, technopagans dwell in a world of lively agency, enacted by a diverse range of actors in dynamic interaction. These elements reveal the technopagan useful as a philosophical method for considerations of being-in-the-world, and also as a model of being and living in contemporary Western culture. In this way, the technopagan is a material reality, an identity assumed by growing numbers of individuals in the digital age, as echoed in the above quote from the popular television series *Buffy the Vampire Slayer*.

Technopagan figures can subvert both essentialist claims to pure goddess figures in spiritual traditions, and present a challenge to cyborg feminisms which disregard these goddess figures as hazardous to feminism. In place of the pure ‘earth mother’ found in some forms of ecofeminist spiritualities, I submit the technopagan into the debate as demonstrative of the ways that subjectivities are far more complex than these polar claims suggest. Instead, technopagans are multifaceted, versatile and adaptable. These are qualities I argue render the technopagan the perfect identity for a dynamic, shifting and radically changing digital age. Technopagan ontologies are highly flexible in their ability to alter and adjust to changing social dynamics. The technopagan identity, formed from neopagan roots and inspired to shift and change through the influences of internet technologies and science fiction demonstrate the potential of this figure for
formulating moral frameworks in an increasingly unstable world. As opposed to the fixed and rigid ontologies as can be found in more traditional spiritual religions, the technopagan and its counterparts provide a more suitable way to incorporate ontologies within rapidly shifting frameworks of human societies and knowledge.

Technopagans, like neopagans, are an amorphous group, defying explanations of a hard-and-fast technopagan worldview: some technopagans ‘believe’ in the literal reality of the god/desses offered up through neopaganism, while others remain essentially atheists. The atheism carried by many technopagans is often a form of healthy scepticism, tied into their non-dogmatic worldview. Erik Davis notes that how much “Pagans believe in the lusty wine-swilling gods of yore is a complex question. Most Pagans embrace these entities with a combination of conviction and levity, superstition, psychology, and hard-core-materialism. Some think the gods are as real as rocks, some remain sceptical atheists, some think the beings have no more or less actuality than Captain Kirk” (Davis 1995, 6). They are open to changing their minds, and shifting and varying their worldviews. They adapt their beliefs to allow for the shifting role that deity might fill in their lives — from symbol, to metaphor, to self, to earth.

Technopagans align themselves with the earth-based spiritualities of neopaganism and translate that spirituality into a digital world. In doing so, they enact an ontological shift in what they understand to be divine, in how they practice ritual, and in their everyday engagements with the world. For example, they carry out ritual online, making neopagan sacred circles in cyberspace through their modems and wireless connections. They observe the changing of the seasons with mathematical precision, sourcing their moon-phase charts from NASA websites, building conscious connections between their
earthly bodies and the earth’s celestial body, the moon, through the technologies of the web. They treat their computers as lively objects endowed with agency, whose functions and operations shift and change while cyberspace is understood as the gateway to the mystical planes of psychic transformation. For example, a technopagan may use crystals both on their own body for purification and focus, and may similarly use that crystal on their computer to clear up glitches and ‘align’ the agency of the machine with their own. Thus the body and the computer are treated as equivalent in this view. The technopagan is a figure of materiality and semiosis, a metaphor of social reality which communicates the sense in which agency is increasingly hybridised in technoculture. Claiming the agency of the technopagan — or any number of similar forms such as technoshaman or cybermage — is an attempt to articulate agency which is an amalgam of the natural and the cultural, the playful and the solemn, and the technological and the ecological. These identifications demonstrate the ways in which the human subject is truly a networked being. Incorporating insights from feminist theory, postmodern deconstruction and the field of science and technology studies, I describe the connections and interconnections that exist between various agents, be they human or nonhuman, and argue for an embedded, located self.

In his book *Escape Velocity: Cyberculture at the End of the Century* (1996) cultural critic Mark Dery defines technopaganism as “the convergence of neopaganism (the umbrella term for a host of contemporary polytheistic nature religions) and the New Age with digital technology and fringe computer culture” (Dery 1996, 50). Technopagans take the neopagan praxes described in Chapter Four and apply, adapt and dynamically project them into cyberspace. They practice their rituals in virtual circles, and employ digital technologies to enhance their workings. This might include the use
of digitally generated imagery — known as sigils — to be used in ritual or meditation. Technopagans are playful in their approach to magical practice, evidenced by a well-known internet list titled “You know you’re a technopagan if…” which accurately describes technopagan practices, such as hitting the ‘ctrl+alt+del’ keys to close a ritual circle, using a laser pointer instead of a traditional ritual wand, calling a ritual a ‘macro’, or if your Yule ritual involves defragmentation. For a more complete list, see Appendix 4. This humorous list is accurate in its depiction of technopagan praxes, indicating their wry, ironic and practical approach to technologies and being-in-the-world. For technopagans, magic, mysticism, and technoscience converge into sustainable, responsible ways of being.

Individuals who identify with technopaganism are actively embedded in the 21st century, using the opportunities of this age to explore synergies between ancient spiritual movements and newly emerging cyberspace technologies (Drury 2003, 222). The growth of technological interaction in our world is often one of apparent contradiction and paradox. As we socially unite without physical interface, as we connect virtually and simultaneously disconnect from the physical world, as the supposed ‘egalitarian’ nature of the internet is shown to be far from open to equal access, and we witness the perpetuation of sexism and misogyny online, a complex and conflicting picture of contemporary life in digital culture emerges. For technopagans these paradoxes are deeply appealing. But as cyberculture writer Erik Davis (1995, 6) explains, there are some clear sociological reasons for the overlap between computer culture and the occult, the largest of these being science fiction/fantasy fandom. The link between these two interest groups is a strong force in the formation of the technopagan identity, and I explore these links throughout this chapter.
Dery explores the phenomenon of technopaganism and its significance for our understandings of our changing relationships with high technology:

Psychologically, technopaganism represents an attempt to come to existential terms with the philosophical changes wrought by twentieth century science. Philosophically, it bespeaks a popular desire to contest the scientific authorities whose “objective” consensus is the final, irrefutable verdict, in our culture, on what is true and what is not, despite the fact that most of us accept such pronouncements on faith. Finally, it evidences a widespread yearning to find a place for the sacred in our ever more secular, technological society (Dery 1996, 50)

Dery posits that our era of scientific rationalism provokes a desire on the part of many individuals to find ways of “legitimating spiritual beliefs in scientific terms” (Dery 1996, 51) and technopaganism stands as an exemplar of this desire. The technopagan in Dery’s positioning is an identity which is passionately interested in, yet not reverent of, scientific authority. The technopagan embodies an ontological reconfiguration of the self and the world amidst rapid and significant change — change in our ecologies, communications and spiritual pursuits. This identity incorporates feminist challenges to scientific authority and objectivity in the way that it is suspicious of the outright authority of scientific knowledge production, whilst remaining interested in contributing to technoscience. Technopagan ontologies tie science and spirituality together, in opposition to the usual tension between traditional religion and science.

Technopaganism manifests online and through digital technology in groups like Thee Temple Ov Psychick Youth (TOPY) an occult group formed to generate mystical experiences in and through cyberspace, and in games like Myst, which according to Erik Davis is “a metafiction that blends technology and magic, tips its hat to Jules Verne, Edgar Rice Burroughs, and Umberto Eco” (Dery 1996, 54). Myst was actually created

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For a more detailed discussion of TOPY, see Appendix 5.
by a pair of church-going brothers whose father was a preacher. *Myst* is significant because it dramatically changed the shape of computer games, presenting an alternative, style of game-play sometimes referred to as a more ‘feminine’ style of gaming. Replete with breathtaking graphical landscapes, nature-based sound effects, and very few vocal cues or even plots to follow, the game instead relied on discovery and journeying through the *Myst* landscape, allowing the user to piece together the narrative-less mystery of the game. The game featured almost no violence and focussed instead on complex puzzle and problem solving, which was a stark departure from the dominant games on the market at the time like *Doom* 41. Games like *Myst*, the influence of acid-house and rave culture, and groups like TOPY all display the “technopagan tendency to relocate the sacred in the technosphere, to populate cyberspace with superhuman agencies” (Dery 1996, 55). In this world, technopagans inhabit a dynamic landscape in which the mystical, the scientific and the visceral converge in harmony.

For technopagans, cyberspace and magical space share much in common. As technopagan Mark Pesce points out in an interview with Erik Davis: “both cyberspace and magical space are purely manifest in the imagination…both spaces are entirely constructed by your thoughts and beliefs” (cited in Davis 1995, 2). Pesce may not be entirely correct here. It is indeed true that a critical factor in the building of certain kinds of worlds is their manifestation within the mind. However, I suggest the variety of objects and agents which constitute both cyberspace and magical space render these spaces more than purely imaginative manifestations. As I illustrated in describing neopagan ritual in Chapter Four, there are a number of actors who converge into the

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41 *Doom*, a first person shooter (FPS), was the first computer game I properly played, in the early 1990s. It was highly violent, even scary, extremely addictive (and enjoyable) and was the most popular game at the time. It remains a marker in the development of FPS games.
network of a ritual, and these actors include tools and technologies. These agents then suggest that these spaces occupy a material reality which exceeds the projections of the imagination. I suggest Pesce was emphasising the degree to which participants ‘project’ in cyberspace and magical space. Thus insofar as interactions are significantly ‘imagined’ and formulated in these exchanges, Pesce’s assertion holds some validity.

Technopaganism has also been shaped by psychedelic\textsuperscript{42} explorers such as Terence McKenna and Timothy Leary who have influenced the movement, with McKenna approaching the ancient and the modern as actually synergistic rather than oppositional. McKenna believed that the World Wide Web had the potential to lead us into a global collective consciousness, and that the emerging cyberculture actually compels us to re-examine our linear approach to thinking and our relationship to the cosmos (Drury 2003, 222). This position suggests that the existence of cyberspace and the culture that emerges in tandem with it, forces us to reconceptualise the way we construct and manifest forms of knowledge. It entices us to reconsider our grasp of notions of time and place and at a fundamental level, poses a challenge to ontological engagements with the world in ways I have explored throughout this thesis. For Leary, the computer would become the LSD of the 90s. Indeed, according to Dery (1996, 28), Leary considered the explosion of digital culture as something of a vindication of countercultural experimentation.

\textsuperscript{42} Psychadelia as a term was popularised by Leary. The word derives from the greek word for ‘mind’ (\textit{psyche}) and ‘manifest’ (\textit{delos}) (Barnhart 1988, 858). Broadly speaking psychadelia suggested a newly perceived understanding of the mind, drugs and drug-like altered states of consciousness, hallucinations and synaesthesia, and the mindset of the counter-culture. Today the word tends to refer more to visual objects of bright colours, usually involving fractal geometry.
Similarly, Terence McKenna argued that in prehistory, all forms of religion were experientially based — in particular, in the quest for ecstasy through the ingesting of psychedelic plants — and that at some point in history “a group interposed itself between people and the direct experience of the ‘Other’” (McKenna cited in Drury 2003, 223). As a result of this imposition, hierarchies were created, with a series of ‘intermediaries’ such as priests, rites and rituals. This transformation takes spiritual practice from an experiential one, to a mediated engagement wherein spiritual encounters occur through another. For McKenna, this created a separation and disassociation between the experiencer and the experienced. According to McKenna, cyberculture, the new age and the re-enchantment of ancient mystery religions held the key for a return to the experiential state. Ontologically this position comprehends the immediacy and intimacy of spiritual practice. Where traditional religions ‘mediate’ between God and the worshipper, these forms of spirituality require no church and no text — access to divinity is direct and egalitarian. This ties in to challenges to the authority of knowledge productions, drawing lofty knowledge down to an accessible plane, charging each individual with the ability (and responsibility) to make their own discoveries and follow their own paths. This further disputes binaries of thought which separate the knower and the known, self and other, science and spirituality. Instead, these standpoints encourage their dissolution as science and spirituality are opened up to each other through the transgression of traditionally mediated boundaries.

In particular, the technopagan can attend to technoscience in way that the neopagan does not. Technopagans form in the context of a world of technoscience; they emerge in the networks of the scientific and the technological, the theoretical and the instrumental. The attention within technoscience to the role of tools in the work of science is viably
incorporated within the technopagan worldview. Technopagans value and see agency within both the virtual and the real, the material and the semiotic; hence for example, the role of computer technology in the construction of knowledge by technopagans is emphasised in this viewpoint. They understand the equal roles of the hardware and the software, so to speak, in the composition of existence. Software cannot function or act without the hardware platform upon which to operate, because the software lacks the material quality of the hardware. Conversely, hardware serves no purpose without software programmes to run upon it, giving the nonmaterial quality of the software a vital agentic role. Meaning and materiality are intersecting, overlapping elements within the technopagan ontology, and technoscience is appropriated into this worldview.

It could be argued that the technopagan engagement of tools, terms and techniques which are technoscientific seek validation through their relevance to the almighty authority of science and in doing so, reaffirm the very authority that neopagans may sometimes challenge (Dery 1996, 59). Technopagans, for example, could be seen to employ scientific theories and technological instruments as devices to give credence and legitimacy to their otherwise esoteric beliefs. Dery suggests that links of this kind probably have less to do with a need for acceptance within scientific discourse and more to do with the line used in William Gibson’s *Burning Chrome* that “the street finds its own uses for things” (1989, 215). What Dery is suggesting is that technopagan referral to scientific discourse is — at least in part — an ironic ‘wilful misuse’ of technology, in the same way that hackers wilfully misuse technology. These actions display playfulness and creativity, and challenge authoritarian approaches to new technology.
This misuse, for Dery, also speaks to the need for neopagan belief and practice to find its own footing in a society so deeply embedded in the pursuits of technological progress and scientific knowledge, and embodies the vision of the “holistic healing of the breach between religion and science, the sacred and the mundane. These impulses are at the heart of technopaganism” (Dery 1996, 59). Technopagans draw from programming language to construct their rituals, for example. They employ binary code in mantras or chants, drawing the mystical and the rational together. Another element of this ‘wilful misuse’ is raised by Erik Davis who positions ‘poaching’ as a typical technopagan practice: an action which involves ‘plucking’ strands from elements of popular or mainstream culture and incorporating them into your own worldview (Davis 2004, 222). It is a resourceful approach which involves taking what one needs from a thing, and leaving behind the elements which might be deemed useless, uninteresting, or even dangerous. The result for Davis is a highly pragmatic spirituality, a philosophy to ‘use what works’ and to discard what does not work. Both poaching and neopaganism involve practices which advocate self-styled, experimental, organic forms of practice.

Linked to the importance of the pragmatic element of technopaganism, is the attention to the material. Technopagans foreground the body in their conception of self, drawing the materiality of embodiment into the cyberverses of projected, virtual realities. The agency of keyboards, LEDs\(^{43}\), and router switches all compose the world in a material way for technopagans. The convergence of objects, agents and symbols expose a world of meaning which is produced through networks of agents. ANT can be applied as a way to deeply understand this interpretation of the world. In particular, in reading these practices through the ANT lens, what is revealed is a view in which an array of

\(^{43}\text{Light-Emitting Diode (LED)}\)
agencies, human and nonhuman, converges to compose the world. Nonhumans can be organic and inorganic, and each acts within networks constituting complex relations. These realities further demonstrate the functions of Ihde’s human-technology relations, wherein we can observe an inextricable bond between technopagans’ sense of self and the objects, tools and technologies which enact, articulate and challenge this self. The relation between the neopagan and the lunar calendar, for example, one wherein the neopagans’ knowledge and interpretation of lunar cycles is mediated and interpreted through the technologies associated with the calendar, such as time measurement. Technopagans also enact this relation, but do so through more advanced technoscientific digital technologies of time measurement.

The technopagan methods of engagement with technoscience discussed here “act out a subconscious resentment engendered by science’s unquestioned cultural authority and give voice to the desire to democratize that endeavor — to make the stitching together of cultural explanations of the nature of the universe a more communal enterprise” (Dery 1996, 62). Technopagan poaching can be seen as linked to philosophical challenges to the construction of knowledge, particularly in the sciences, such as those employed by feminist philosophers of science in order to highlight social constructionism (Dery 1996, 63) as a force which forms and shapes the world not through essences but through cultural assertions of what is ‘natural’ and what exists.

Whatever critiques exist within modern pagan belief of the discipline of science and the pursuit of scientific ‘truth’, it should be remembered that neopagans and technopagans tend to have great respect for science. As Starhawk’s colleague and co-founder of the Reclaiming organisation, pagan author and witch M Macha NightMare suggests,
“[w]itchcraft has always respected scientific pursuit, scientific thought, and the technologies that have been realized by science. Witches are rational. We appreciate the Internet as a scientific construct” (NightMare 2001, 54). Witchcraft has a love and respect for science and the rational, alongside the emotional and the intuitive and “[t]his makes it especially welcoming to modern technology and computer culture” (NightMare 2001, 55). These sentiments express a key element of neopagan and especially technopagan worldviews. Technopagans incorporate the seemingly oppositional into their ways of being-in-the-world: the pragmatic, the material and the logical are harmonious with the esoteric, the semiotic and the intuitive.

The technopagan poaching project can also be interpreted against Latour’s analysis of the dynamics between the Anthropological Matrix and the Great Divide. That is, these technopagan practices embody ontologies not unlike those which reflect those framed within the Anthropological Matrix, where disciplinary boundaries dissolve and varied interests converge into fuller — more ‘objective’ in Haraway’s re-worked sense of the word — forms of knowledge. Technopagan use of computer algorithms in a ritual for example, confounds the separation between the scientific and the mystical, by drawing ‘oppositional’ praxes into a complimentary framework. These technopagan practices are contrary to the Great Divide, for the latter is the position “[t]hat a delicate shuttle should have woven together the heavens, industry, texts, souls, and moral law — this remains uncanny, unthinkable, unseemly” (Latour 1993, 5) It simultaneously challenges the authority of knowledge production and takes that knowledge and re-positions it within networks to give it new form, new function, and new application.
The challenge to scientific authority is also one found within scientific scholarship so that “like both their own ancestors and the most current mathematicians and physicists, [neopagans] have abandoned organized rules of logic in favour of reality hacking — riding the waves, watching for trends, keeping an open mind, and staying connected to the flow” (Rushkoff 1994, 187). Rushkoff is alluding here to cutting-edge physicists who search for patterns in strange, unconventional places, like listening to the rhythms of the washing machine or the static on the radio. These methods approach scientific unknowns with creative, unpredictable applications of knowledge. As such, this kind of New Edge science itself finds the pursuit of absolutes and objective truth to be one of ever-increasing inaccuracy: theories such as the uncertainty principle — the principle, similar to the observer effect, that the more specifically we attempt to locate the position of a particle the less reliable that position becomes — and the incompleteness theorem — which holds that any single mathematical principle cannot be sufficient to answer all mathematical problems — all conspire to show that the age of absolutes is over (Dery 1996, 63). This observation is consonant with postmodern projects which deconstruct absolutes, authority, and the ‘meta-narratives’ of firm, immovable truths in favour of partiality, uncertainty and the deconstruction of dominant knowledges.

Technopagans revel in these shifts in knowledge-production because they are dynamic and lateral in their incorporation of possibilities. They also constitute challenges to the authority of technoscience which come from the ‘belly of the monster’, to use Haraway’s term. These transitions in technoscience demonstrate that knowledge is always incomplete and partial. In place of dominant modes of knowing, diverse epistemologies flourish in the technopagan worldview — including alternative
approaches to sexuality, community, consumption and existence — contributing to a re-
imagined version of robust and substantial knowledge.

The technopagan forms the core of my position in this thesis because it offers a viable
alternative to technophobias in neopaganism and related ecofeminist spiritualities. Yet it
is a relatively uncharted area, particularly within academia. Nevertheless, as I have
suggested, it is usefully interpreted and understood through the application of the
material-semiotic actor. In applying Haraway’s material-semiotic actor to the
technopagan, I emphasise the overlap between lived individuals and their metaphorical
and theoretical signification. In so doing, I explore the manifestation of technopaganism
and its relevance to theoretical investigations of agency and identity. As a result, I show
how the overlap between the spaces and communities occupied by technopagans,
technopagan practices, and the metaphorical significance of this identity converge and
collapse into an agency which can be described as both material and semiotic.

Technopagans embody the physical, material elements of being, whilst simultaneously
communicating semiotic messages through cyberspace, for example, in preparing for a
ritual a technopagan might set up an altar space around their computer which requires a
bodily ‘attitude’ to the process of setting up the altar, alongside the digital components
of the ritual, permeating the semiotic and material elements of practice. In drawing the
worship of nature into the same sphere as digital technology, technopagans transgress
the dualistic boundaries of purity and embody hybridity as a state of being-in-the-world.

Claims to purity, atomism and hierarchy become obsolete within technopagan practice
and are replaced by a demonstration of agency which traverses dualism and
subsequently collapses claims to polarity. Technopagan embodiment is closely aligned
with feminist interpretations of embodiment. The following quote from Haraway shows a description of agency which could be read as technopagan, where embodiment “is not about fixed location within a reified body, female or otherwise, but about nodes in fields, inflections in orientations, and responsibility for difference in material-semiotic fields of meaning” (Haraway 1991a 195). The technopagan then is cyborgian in form, a creature of biological and technological components: a bastard in Haraway’s sense. Indeed, musings upon occult, hybridised, neopagan engagements in the digital age suggest fruitful outcomes for feminism, environmental philosophy and considerations of the human-technology relation. Thus, the technopagan offers promising ways to move forward in a prosperous technological age which is simultaneously plagued by the degradation of our planetary ecosystem. It also presents ways for thinking through gender which simultaneously empower women whilst taking care not to abandon elements of the gendered self which contribute to human flourishing. In the way I have indicated, the technopagan offers creative possibilities, promising futures and playful solutions.

Having offered this discussion of the technopagan identity and praxis, I now extend the case study of the Burning Man event as explicitly technopagan. Already introduced in Chapter Four, Burning Man can be interpreted as a highly technological event and therefore offers a useful characterisation of technopagan agency outside of the spaces of the cyberversus. In this way, it demonstrates the viability of the technopagan agency online and off, further exemplifying its adaptable, transferable features across the spaces of various worlds.
Burning Man: a case study

In Chapter Four I introduced Burning Man as a neopagan event. I described the shape of the event, its philosophy of no commerce and no waste and emphasis on radical self-reliance. I now consider the significance of Burning Man in relation to technopaganism in both literal and metaphorical ways. In the following section of ‘internet as ontological affinity’ I will then discuss ‘Burning Life’, a replication of Burning Man which takes place in the online world of Second Life. The principles of Burning Man cohere with neopagan and technopagan ontologies regarding appropriate ways to behave in finite ecosystems, and in communities of interconnected agents. On a more metaphorical level Burning Man articulates the material-semiotic agency which is conceptually key to the articulation of hybrid agency in this thesis: the formulation of identity through connection and affinity with others, our reliance on both natural and ‘technical’ systems which constitute our experience and mediation of the world, and the importance of spiritual elements of existence and their role in generating responsible and sustaining worldviews.

To briefly recap the event, Burning Man is held each year in August in the Nevada desert in the United States of America. The event runs for seven days and is attended by over 35,000 people who populate a temporary city named ‘Black Rock City’. Over the first few days of the event people arrive to set up camp at their allocated spaces across the ‘playa’, the desert flat. Over the course of the week a mass of events takes place, though few occur in a typically organised fashion. Most camps are set up under some kind of ‘theme’ and participants travel across the playa visiting each other’s camps and sharing experiences, food and friendships. There are also art installations placed across the open spaces of the playa, which can be clambered upon, played with and
contemplated. The days are generally low-key, as the desert becomes very hot, and the winds create dust storms which can make the environment difficult to move through. At night, as the weather cools and the camps literally ‘light up’ there is an array of activity, dancing and music. At the end of the week, the event climaxes to the much-anticipated ‘burn’. The ninety foot effigy of the ‘man’ is set on fire and burned to the ground. Many camps also participate in the burn, destroying their camps, artwork and equipment. The following day, as participants pack up and prepare to return to ‘real life’, the clean-up begins where campers meticulously gather every piece of waste in order to return the playa to its pre-burn state. The event is about creating an alternative form of community based on participation, independence and sustainability. It is hoped that the event functions as a spark for deeper change in day-to-day life.

Burning Man’s guiding principle is ‘leave no trace’. This code requires that all participants must bring everything they need to get through the week, including water, food, fuel and waste facilities, and must then take all their waste with them upon departure. Burning Man organisers do not supply dumpsters, bins or large amounts of portable toilet facilities, though a few ‘port-a-loos’ are provided. This principle emphasises that people must become aware of the resources they require to sustain themselves for a week, and the waste they produce in that same time. It is a radical act of sustainability, which few of us have experienced; it is rare in contemporary Western cultures to have a tangible sense of the resources we consume in a week, and the corollary waste that is produced in that time also. To apply Ihde’s analysis of human-technology relations to such an event exposes the role and centrality of tools and materials, their use-value, and the interdependence of the elements at Burning Man. The event operates to tie people to the material goods which sustain them, and on a
fundamental level, these goods compose and constitute their existence. That is, in
following Burning Man’s principles, people are made aware of the intimate and critical
relations the share with the goods, materials and technologies which maintain their day-
to-day lives. We require these things to function and are hence profoundly dependent
upon them. Burning Man is an embodied, visceral experience, which actively
emphasises and respects these material aspects of the self. Out on the playa people are
perhaps rarely so aware of their profound relations to and reliance on water, shelter and
the various other technologies which enable their day-to-day activities.

While for some Burning Man is not explicitly technopagan, I assert that it constitutes a
technopagan event because it shares many elements which could be called technopagan.
Burning Man has been called the “Technopagan Bacchanal” (Brown 1997) and using
this notion as a starting point, it is useful to consider the ways in which this unique
event constitutes technopaganism in practice. In what follows I outline the dynamics of
Burning Man, describing its guiding principles, before going on to draw parallels
between Burning Man culture and ‘geek’ or ‘gamer’ culture, and the way in which the
sci-fi influences of those cultures resonates with practices at Burning Man. I then
discuss the links which exist between Burning Man and cyberspace, that is, as ‘spaces’
which share ontological similarities. I will show the ways that a material-semiotic
analysis can be applied to Burning Man to reveal its significance as a contemporary
space for transformation and sustainability. Through its principles and practices, I argue
Burning Man can be read as consciously constructed of both the material, tangible,
embodied elements of existence, alongside meaning, symbols and signifiers to compose
a fuller sense of being. I will further apply an Actor-Network (ANT) analysis to the
event to demonstrate that at Burning Man, agency is dispersed and radical. That is,
Burning Man operates in ways that recognise the agency of a broad range of actors, and the way that all these actors form the network that makes Burning Man possible.

For all its hippie-influenced free love, drug experimentation and camping out Burning Man does not look like an attempt to recreate Woodstock. Very little about the event resembles an endeavour to ‘go back’ to any previous kind of event or festival, and instead seems to strive for quite the opposite. Burning Man revels in its uniqueness, its being difficult to define, its extreme embracing of subcultures and alternative lifestyles, and most particularly, its emphasis on the event not enacting the performer/audience dynamics usually encountered at festivals. ‘Burners’ appear at ease with both lefty-green sentiment and the thumping embrace of afro-dub fusion sounds beaming from a sound system hooked into a Linux-run laptop. Activities witnessed across the playa include a dawn yoga session, the offering of head massages to strangers and the sharing of vegetarian organic food. Simultaneously, Burners can be seen setting up a bewildering variety of laser-lights, synthesisers, live-blogging facilities or partying in the techno-stone henge — a tribute to the ancient druid structure manifested in neon lights and strobes.

All elements of lived experience are welcomed at Burning Man; even the darker elements of life are afforded space: a huge temple, The Temple of Honour, is erected each year in honour of those who have died in the past year since the last burn. Participants come to pay tribute to those passed — both known and unknown. Mothers come to honour their sons, in recognition of their lost children’s love of this event; they make the journey to Burning Man to honour their loss and to reflect on the cycle of life.
So too, at the end of the week, is the temple burnt to the ground and the cycle beings anew.

The principles of Burning Man encourage practices which enact neopagan worldviews: living in a sustainable manner, minimising all waste; communal living arrangements, recognising that community approaches to living spaces and food preparation make the most efficient solutions; and the bolstering of community, approaching the experience as an open stream of new friendships to be formed, the awareness of living close-knit with a large number of people, mostly strangers, and attending to that community in caring, thoughtful ways. Burning Man has ten guiding principles which give the event its shape and philosophy44. They are 1) Radical Inclusion, the principle that all people are welcome; 2) Gifting, the notion that generosity and giving without the assumption of receiving should be encouraged; 3) Decommodification, as a way to discourage materialism, commercialisation and Western over-consumption; 4) Radical Self-reliance, as a method for encouraging participants to explore a new form of independence; 5) Radical Self-expression, to promote the creativity and freedom of Burning Man; 6) Communal Effort, to highlight that many actors converge to make such a large event possible; 7) Civic Responsibility, to implore participants to act in a way mindful of their status as part of a community; 8) Leave No Trace, the key Burning Man principle which requires participants to take all waste home with them, hence becoming more aware of personal waste production and reduction; 9) Participation, which emphasises that Burners cannot be observers, for the event is explicitly focussed on co-involvement and 10) Immediacy, which emphasises spontaneity, and encourages

the spirit of experience in-the-moment. Each of these principles aligns with neopagan and technopagan ontologies of reverence for the planet, self-responsibility and the radical re-imagining of human experience and human interaction. Elements of hedonism in Burning Man are countered by principles which encourage civic responsibility and communal effort.

The interconnectivity of events like Burning Man exemplifies the technopagan ontology of convergence. At an event like Burning Man there is a distinct confluence of interests: technopagans who are interested in neopagan practices, pursue the goals of sustainability, revel in the immersion of high technology and give credence to the pursuit of altered states of consciousness, by default share much with a burner — they are connected through a series of ontological, philosophical commonalities. Another element which could be said to be shared amongst technopagans and burners is their embrace of states of radical-ness and full immersion, in both the experience and environment.

Technopagans’ and burners’ embrace of immersive experience speak to practices which are playful and impudent, yet deeply thoughtful, intelligent and engaged. In a similar fashion, gamers are attracted to the full immersion of their virtual worlds — as discussed earlier, part of the appeal of the sci-fi fantasy genre is that it offers up a whole universe, not simply a story to follow. Trekkers45 for example, revel in their full engagement with the Star Trek universe, taking deep pleasure from their expansive knowledge of a created world. As I have suggested, there are fundamental and

45 Trekkers are fervent fans of Star Trek in any of its incarnations over the last four decades. There are also Trekkies, however attempting to define the difference may require another thesis!
significant connections between technopagans and geeks and gamers. I posit that they share a worldview, an ontology, which apportions agency to a broad delegation of actors. Their computers, their virtual worlds and related technologies constitute a significant element of their realities, and they recognise this fact. They share a creative and playful approach to their worlds, embodied in a shifting, mutable sense of being. Technopagans and geeks, trekkers and gamers, overlap in identity, ontology, epistemology and philosophy. In fact, I suggest it is the synergy between neopagan and gamer positions which gives rise to the technopagan identity. This may be partly due to their shared active enthusiasm for their overlapping interests. They like to get involved, “pagans like to do things — to make mead, to publish zines, to wield swords during gatherings for the Society for Creative Anachronism. And many like to hack code” (Davis 1995, 6). Each identity of hacker, geek, trekker, burner, neopagan, inhabits realities in search of alternate worlds and more creative ways to live and think. These intersections between technopagan and geek culture reveal links between Burning Man and cyberspace which I now explore further.

It is the vibrant fusion of life and death, the eco and the techno, the new and the old which come together to comprise the synergistic flux which constitutes the technopagan experience at Burning Man. The annual pilgrimage to eagerly embrace a form of society which strays so far from most of the communities with which we are so familiar in our day-to-day lives, speaks volumes about a technopagan yearning to re-enchant one’s life, to reconstruct community experience and creativity in ever more radical ways. Burning Man has over the years come to be an act of sustenance which invigorates burners for the year ahead. It is the spark they draw in to carry with them into their ‘real lives’ to motivate them to imagine different, more sustainable ways of living. Almost as soon as
the event is over, burners meet in their local communities to plan for the next year, and in so doing, are participating in a sustaining practice which they can engage in throughout the year. Burners seek an environment which is welcoming, counter-cultural, divested of day-to-day comforts and which emphasises individual participation in the active creation of a space and an experience which is fulfilling, unconventional and derived from motivations of love and passion.

These elements of the Burning Man experience, this unique convergence of nature-based occultism fused with electro rave-influenced culture, speak to the technopagan identity through the formation of an environment and an event which can be seen as simultaneously pagan and technophilic, thus inherently technopagan. Burners fuse an extreme ‘back to nature’ experience with high technology; a typical neopagan event would be likely to abound with folk music, traditional arts and crafts and a more simplistic, agrarian structure, whereas Burning Man on the other hand draws together the neopagan ideals of nature worship with cybercultural attraction to gadgets, connections and community, such as communication and visual technologies. The technologies of cyberspace in particular, are an element I am interested to explore for their role at Burning Man. Specifically, I suggest that cyberspace is a space consonant with Burning Man, and that the ontological role of Black Rock City resonates with the ontology of cyberspace.

Burning Man director Larry Harvey clearly articulates the link between Burning Man and cyberspace (1997, 1):
It [Burning Man] is, like cyberspace, a frontier in which individuals can exercise remarkable freedoms. Our desert world and the blank expanse of its playa form a decontextualized arena of action. Here it is possible to reinvent oneself and one’s world aided only by a few modest props and an active imagination. Burning Man, then, is a compelling physical analog for cyberspace, and, unsurprisingly, we have attracted many people who regard the experience as the equivalent of a cyber-based reality.

On a philosophical level, the dynamic of Burning Man reverberates as a technopagan experience in the way that it celebrates the flux of life and death, of the organic and the synthetic, the practical and the esoteric, the spiralling of time and the converging dynamism of high technology and ancient mysticism. Like neopagans and technopagans, Burning Man too resists the erection of stark boundaries of dualism and embraces collapsing, convergent categories. This can be seen in its principles of openness towards alternative forms of relationships and sexualities, its passion for digital evolution along with sustainable, simplified modes of living, and in its radical approaches to forming community while remaining part of the larger communities of mainstream culture.

Burning Man is just one example of the way that ‘high’ technology can be incorporated as a sustaining way to reconnect in times of ecological crisis. For example, there is a network operations team at Burning Man, building an ‘Internet at Burning Man’ project, fondly titled ‘IBM’ which provides high speed internet access for burners to use. Being out in the playa, participating in a radical experiment of community, does not preclude sophisticated technologies forming a part of that community. As Harvey states, the internet and Burning Man “make it possible to regather the tribe of mankind, to talk to millions of dispersed individuals [i]n the great diaspora of our mass society. Living as we do, without sustaining traditions in time and ungrounded in a shared experience of place, it is yet possible to transcend these deficiencies. We must use technology to create space stations here on planet Earth, islands of intense and living contact” (1997,
2). I suggest technopaganism has captured these principles in the search for communal tribalised connection. Technopagans hold together the possibility for a digital future which is about embodied, immediate and connected experiences that are explicitly sustainable — sustaining for the self and for the planet. As an event, Burning Man captures and enacts these principles.

In Chapter Three I introduced Burning Man through an Actor-Network Theory (ANT) analysis. I suggest that an event like Burning Man can be more deeply understood when examined against the ANT interpretation of agency and networks. Through this lens Burning Man is read as the creation of a complex network of actors whose convergence is what brings Burning Man into existence. Along with the tens of thousands of human participants who attend there is an array of agents which are critical to the materialisation of the event. These agents include art installations, tents, bikes, art cars, fire, sculptures, food, ice, playa dust, the heat of the sun, the light of the moon, and the enormous man, towering above the city. Each of these elements expresses agency through their role in the formation of the Burning Man network. The bicycles act to transport people across the relatively large area across which the city sprawls. The moon lights up the darkness of the desert evenings, aiding navigation through the city. Tarpaulins are strung together in complex structures to create shelter from the dust and the heat. In Chapter Three I also introduced MOOP (Matter Out Of Place), and here provide a version of the MOOP Map from 2006 below.
This map meticulously catalogues the amount of MOOP, rubbish, junk, playa burn scars, stake holes, and so on left behind by burners in various segments of the city. Volunteers remain behind after the event and collect MOOP in zip-lock bags which are catalogued according to the camps allocated to those areas. The bags contain glitter, feathers, cigarette butts and burnt playa. These contents are then charted onto the MOOP map, with red indicating a high impact trace, yellow moderate impact, and green low or no trace. The map is then publicly displayed and distributed to let people know which camps are failing to ‘leave no trace’ and which ones succeed. This allows both a ‘naming and shaming’ function, so that ‘dirty’ burners can be identified, and it also allows the organisers to target and communicate with these dirty camps. The MOOP map then enacts a kind of agency through its communication of various states of
cleanliness across the playa. It is an actor that speaks to the ‘leave no trace’ principle and fuels actions which encourage ‘MOOPing’, the practice of collecting MOOP. Some camps operate on the principle of maintaining their excellent MOOP record, and are motivated by their record to continue to ‘leave no trace’. Joining these camps on the playa involves agreeing to participate in this project of minimising MOOP. Finally, MOOPing could be understood in ontological terms. It treats matter as not only as ‘rubbish’ or ‘waste’ but instead regards matter as defined by its location. A weed for example, is only so when it is out of its right place in an ecosystem. Glass is out of place on the playa, damaging the surface of the flat, and hence needs to be relocated to its ‘proper’ place, such as a recycling depot. This relation to materiality ontologically understands objects to exist in context, and it is their location within a specific geographical space which is important. Applying ANT analysis to this idea, it is not the actors (matter) themselves which require definition, but what they do and what they are (for example organic or inorganic), and where they are located in a network. For example, the organisers described that carpets or rugs left behind on the playa actually cause the formation of dunes as a result of the wind blowing sand and dust up against the (now) foreign object. In the MOOP sense, the carpet had a function during Burning Man, but at the end of the event, the agency of the carpet changes and the carpet becomes MOOP with the potential to cause significant ecological damage.

Exploring networks in this way also reveals the material quality of Burning Man, and the embodied and visceral nature of existence. The traditional ‘comforts’ of modern life are stripped away, and the body is exposed to the harsh environment of the desert. The embodied experience also carries through many of the playa activities, which particularly at night involve electronic dance, itself a trance-like experience of the body.
Finally, because Burning Man seeks to radically re-imagine the experience of self and community, the traditional Western relationship of disassociation from the body in favour of the mind are recast in search of an embodied sense of self in which location and materiality are valued. In this sense the material and the semiotic are drawn together as components of existence which must be equally recognised. If burners are read through Haraway’s construction of the material-semiotic actor, we can similarly see their hybridised composition as embodied and metaphorical, made up of the corporeal and the relations and influences which circulate around and through this corporeality, and the ways that contextual meanings are attributed to objects. They experience the extreme environment through their bodies while relating to and through other agents, thus agency is exemplified through the intimate and interconnected relations between objects, meaning and substance at Burning Man.

The Burning Man case study reveals the way that technopagan praxis can manifest outside of the digital realms of internet space. It is an embodied, ecologically responsible event which carries out technopagan ideals. This case study brings me to the end of the ‘technopaganism’ section of this chapter. Throughout this section I have presented a general characterisation of the technopagan to develop the significance of this identity as a material and metaphorical reality. I have revealed its roots in neopaganism, counter-cultural movements from the 1960s, its embeddedness in cyberculture, and its ironic respect of technoscience. In what follows, I focus on expressions of technopaganism in online contexts, by exploring technopagan uses of the ‘internet as tool’, followed by the technopagan view of the ‘internet as ontological affinity’. I then explore various technopagan spaces online before discussing the
significance of the technopagan in relation to the theoretical interpretations offered by Ihde, Latour and Haraway.

**Internet as tool**

Technopagans integrate their spirituality with technology in a variety of ways. I suggest that technopagan engagement with digital technologies could be loosely formed into two areas: practices in which technology is a communicative tool for spiritual belief and does not necessarily have any kind of metaphysical reality of its own (Jenkins, Siegloff et al. 1999), and practices where cyberspace becomes a fully immersive experience — a space which has value in its own right, and exists quite differently and separately from physical, geographical space. There are many interconnections and overlaps between the two forms of engagement, but the distinction is worth making for the purposes of this analysis. This suggests a varied ontology towards cyberspace between the two forms of technopagan practice, and I explore them here beginning with the internet as tool.

At the first level of engagement with technology technopagans use the internet as simply a library (a source of information) and meeting place (as a means of communication). This engagement with cyberspace reflects the way most people use the internet. It is a resource centre, a means by which to move, upload, and download content, and to access information, people, and products. It is a space where they can share information with fellow neopagans and technopagans; they can gather information from numerous sources, get information about events in their area, join discussion groups to chat about the next sabbat, or seek advice on which kind of ritual to use for cleansing a new house. Understood in this way, technopagan engagement with technology takes place at the level of ‘internet-as-bulletin-board’. Technopagans use the
internet as a form of communication and connection, as a means to collect and share the plethora of information relating to neopaganism. Alyssa Beall notes that neopagans value community, and the internet allows pagans instant connection to community (Beall 2001, 4).

The internet is a particularly useful tool for information-sharing among neopagans. As neopagans were some of the first spiritual interest groups to ‘get online’ and to fully embrace the possibilities of the net for dispersing information, their numbers are so plentiful in cyberspace that pagan priestess Lunea Weatherstone comments to Beall that “[y]ou can’t swing a sacred temple cat without hitting a pagan online” (Beall 2001, 4). Despite neopagans constituting a relatively tiny proportion of the population compared to other spiritual/religious groups, discussion on the net relating to neopagan interests is consistently profuse and passionate: the usenet group alt.pagan — a news group where people can go to post discussions loosely based on pagan interests in a bulletin board style — is consistently in the top 5 newsgroups on religion and spirituality (Davis 2004, 221).

Neopagans are often secretive about their occult status, due to negative mainstream attitudes towards these traditions. This secretiveness, coupled with the fear of being ‘outed’ from the broom closet in the workplace or non-pagan social milieu, renders the internet a suitable space for like-minded people to connect through the safety of anonymity that the internet offers. This secrecy makes the internet an ideal medium for laying the foundations for connecting face-to-face with fellow neopagans in one’s geographical area: Australia has a country-wide ‘pagans in the pub’ event held in major cities every month, publicly advertised through sites such as witchvox.com which invite
anyone who is interested to come along to the pub and meet in a casual environment to talk with like-minded folk. It could be said that at this level of engagement, a technopagan who interacts with cyberspace in these ways does not significantly shift their pre-digital cosmology or ontology: their worldview remains ostensibly the same, and instead they are able to extend their existing practices and neopagan engagements through this new form of technology. This renders the internet useful, efficient, and accessible but ultimately, an extension of the non-internet world of communication and information-sharing.

Through these practices, it can be seen how technopagans interface with cyberspace at a ‘tool-ic’ level. Read against Ihde’s analysis of human-technology relations, these practices reveal the way that technopagans draw a technology into their experience of the world, and through which they experience that world. The technology, in this case the internet, extends and expands the existing human-technology relations of telephone communication and writing for example, out to a world of digital networks. We can further surmise that the internet is of particular appeal to neopagans and technopagans because of its profuse informative properties and anonymity. These practices speak to a human-tool relation which regards these technologies as ‘assistive’ and informative in their roles. This kind of practical or pragmatic engagement with tools forms a legitimate and substantial part of modern technopagan practice.

Engagement with the internet at the ‘tool’ level is hardly an unusual practice. The vast majority of users on the internet do exactly that, gathering information, sharing stories and ideas, meeting people of similar interests and even building communities which assemble online or off. Neopagan groups are appealing because they were some of the
first groups — and most certainly one of the first spiritualist traditions — to ‘get online’ and understand the significance of the internet. The internet also offers these neopagan groups particular sanctuaries and safety nets which are especially suited to people coming from spiritual interests often associated negatively with witchcraft, satanic worship, alternative sexualities and nature worship. In what follows I offer some examples of groups which have formed online to assist with identifying this tool-ic interaction with the internet. Offering information, networks and contacts, these communities present neopagans and technopagans a means of networking and exploring.

Neopagan online communion is not a substitute for other types of connection, but operates as a legitimate way to connect through technology. Ihde deftly reminds us that human engagement with technology is not new, nor is it old, rather it is a case of ‘always’, confluent with human evolution. Technologies surround us in physical embodiment and ways of knowing, rendering this embeddedness with technology the very condition of human existence. In these terms these neopagan and technopagan groups understand the ‘technology of tools’ to be a significant element of existence. The tools of internet communication form a fundamental part of their spiritual relations, not an obstacle to those relations. For example, like the embodiment relation between humans and telephones, wherein the telephone handset becomes an extension of the hand and the ear, similarly, the technology of the internet extends the human senses of hearing, sight and immersion in even more powerful ways than telephone relations have. This relation can also be interpreted as hermeneutic in the way that our network interactions allow us to read and interpret web pages for example, involve interpretation, and indeed rely on us becoming conversant with the interface in order to
understand it. The ‘internet as tool’ is finally an alterity relation, which recognises the agency of nonhuman machines as distinctly ‘other’ and as active participants in and contributors to, communities and spiritual journeys.

In what follows I provide an analysis of four examples of use of the ‘internet as tool’, Witchvox, the Church of All Worlds, and two discussion groups on LiveJournal and Yahoo Groups. In detailing these groups I demonstrate the technopagan view of technology and cyberspace, and the ways in which they connect and communicate. These interactions with technology speak to the way that technopagan practices incorporate network technologies into their lives. Network spaces can exist as the basis for community, and provide efficient, useful and meaningful tools for practice.

Founded in 1995 and boasting a bewildering average of 100,000 pages viewed each week, The Witches Voice (TWV) or Witchvox, is the most popular pagan site on the World Wide Web (NightMare 2001, 61). Three years after its initial launch, Witchvox added a ‘Groups and Covens’ section, offering users the ability to search and locate local covens and neopagan groups in their area: at the time of writing, the site offered links to over 6,250 covens and groups worldwide47. Witchvox offers essays, stories and poetry, all contributed by members of the neopagan community. The site operators themselves contribute minimally to actual content and instead encourage the community to build and shape the site. This approach to content is not unlike wikipedia and Web 2.0 functions of user-generated content without overarching authority. Witchvox explicitly does not offer spells and rituals in its site (with the exception of occasional special circumstances), largely due to their belief that spell-working and rituals need to

come from the person wanting to practice the Craft, and that a person requiring a spell
to be offered to them, perhaps is not ready to do one. In place of these services, many
of the sites which are linked to Witchvox offer rituals and spells, and Witchvox asserts
that the individual should seek out for themselves the information they need. Witchvox
instead focuses on people and community, and in fostering a place for an online
community of neopagans to write, talk and connect. The site does not accept paid
advertising, and does not sell anything through the site. Witchvox is ultimately a space
for information sharing, connecting people through their various networks on the web.

From 1996 to 1997 TWV offered a chat room set up on its site — Magick Beans Coffee
House — and they claim it was one of the busiest chat rooms in the ‘pagan internet’. As
technologies improved and more groups got online to create chat rooms, TWV was
happy to allow better equipped sites and groups to take over this growing practice. In
place of the chat rooms, TWV now offers information about religious legal rights, local
occult shops and bookstores and presents its own code of ethics by which visitors and
users and encouraged to abide.

Witchvox is a notably neutral facilitator for neopagan information sharing. They do not
promote particular traditions, nor prioritise the opinion of individuals based on the
length of time they have been involved in the Craft, instead promoting the idea that
everyone has something valuable to say, and it is the contribution and participation that
matters. The creators of TWV claim three reasons lay behind their desire to create their
site. They felt firstly that there was a need for clear, well-developed information and
educational materials for both pagans and non-pagans. Secondly, they believed the site

would help to reduce discrimination against pagans, and thirdly they hoped to develop TWV as a networking tool, allowing for members of the neopagan community to meet, exchange details and information (NightMare 2001, 61).

*Witchvox* is a prime example of the way neopagans use the internet as a ‘tool’. The immense site is a phenomenal resource for neopagans, offering reliable and diverse information supplies. TWV began as something of a database of information, but through its use by various participants across the globe, it dynamically evolved into a hub for neopagan activity. The parties who visit and search the site in turn often contribute material to the databanks which can circulate with an agency of their own, feeding and nurturing the resource as a changing and evolving sociotechnical space into which the shifting neopagan worldview is projected. Neopagans engage these sites not merely as technologies which function for ‘secondary’ purposes, but the sites become ‘extractive’ spaces which can be drawn upon to visit to ‘see what is happening’ and to ‘connect’ with the neopagan community. The key distinction here is that chat rooms for example, rarely offer the sense of a space or place which is inhabited, but rather they exist as two-dimensional spaces which often contain even less dynamism than a telephone call. Chat rooms reduce and strip away the social interactions of other online spaces where the ‘place-ness’ is enhanced, *adding* to experiences such that these places become *worlds*. This understanding of enhanced place applies to all of the groups discussed here. Not unlike other online communities, TWV is also distinguished by its long history on the web, its egalitarian principles, and legitimate, straight-forward approach to an alternative community.
In contrast to the more impartial, information-sharing approach of Witchvox, other sites exist which take a less neutral angle. The Church of All Worlds (CAW) emerged in 1962 from a group of young people inspired to develop a spirituality based on the novel Stranger in a Strange Land (Heinlein 1977). The book tells the story of a human raised by Martians on Mars (after a failed human attempt at colonisation) and who returns to earth. He brings with him advanced Martian skills like teleportation and struggles to understand the nature of human life, seeing institutions and doctrines as an outsider and questioning what humans take for granted as ‘truth’. He decides to begin a “Church of all worlds” which teaches people to overcome suffering, pain and conflict. The story aims to challenge the absurdity of all institutionalised knowledge, and traditional religion in particular is highlighted as ridiculous. The book contains a word coined by Heinlein, Grok, which means to understand or to know. This word is widely used in cyberspace, especially in hacker and geek culture. Grok is distinct from the mere concept of ‘knowledge’ because grokking is about ‘getting it’. It concerns the full incorporation and absorption of knowledge to such an extent that it could be said to be embodied knowledge, the ‘gut instinct’ of tangible knowing. In the Martian language, Grok means in a literal sense ‘to drink’, and in the metaphorical sense, it means ‘to be one with’. Grokking then, is not about rote learning, or intellectual knowledge, but instead about being one with the knowledge. Grok reflects the praxical, self-reliant

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50 CAW grew out of an earlier group Atl, which again drew its form from Heinlen’s landscape developed in the book, including the nine circle structure of initiation and advancement in the novel (Adler 1997, 292). They announced themselves to be a neopagan religion “dedicated to the celebration of Life, the maximal actualization of Human potential, and the realization of ultimate individual freedom and personal responsibility in harmonious eco-psychic relationship with the total Biosphere of Holy Mother Earth” (Adler 1997, 293).

Atl began in the early 1960s with a group of high school students who were reading Ayn Rand. In time they transformed from Atl to CAW. The irony of a group inspired toward left politics and occult religion being driven initially by the right wing Objectivism of Rand is just one of the joyful contradictions of a group like CAW.
ridicule of colonised knowledge, and thus reflects a neopagan and technopagan desire to challenge dominant knowledges.

*CAW* is particularly interesting because unlike the ‘typical’ neopagan tendency to look to the past for inspiration, they instead adopt what may be regarded as a more technopagan practice in reading a piece of science fiction about the future and deciding to base their spirituality around that (Adler 1997, 285). Yet Margot Adler notes how this is actually an unsurprising move for neopagans too, because “science fiction and fantasy probably come closer than any other literature to systematically exploring the central concerns of Neo-Pagans and Witches” (Adler 1997, 285). For *CAW*, science fiction forms the emerging mythology of our time (Adler 1997, 286) and paganism is a “religion from the future” (Adler 1997, 283). It is significant that *CAW’s* foundational mythology is based on a work of science fiction, as this practice articulates an appraisal of knowledge which does not restrict possible realities to the realms of the scientific or the historical. Science fiction worlds too, can be rich sources for imagining ways to live, ways to think, and ways to imagine existence. Haraway similarly acknowledged this potential when she discussed Octavia Butler’s *Xenogenesis* series in the *Cyborg Manifesto*. As I detailed in Chapter Two, Haraway noted these (especially feminist) science fiction explorations as promising avenues for visioning present and future worlds. Science fiction in particular, because it is imaginative and set free from the ‘realities’ of our contemporary worlds, holds within it possibilities which are radical, creative, and often optimistic. The worlds which emerge in these contexts then, subvert contemporary Western culture, conventional religions, and patriarchal hegemony because like the cyborg, they have no ‘pure’ origin story to appeal to. They materialise from hybridised beginnings which are diverse, impure and complex.
The *Church of All Worlds* is credited with being one of the very first modern groups to use the term ‘pagan’ to describe themselves (Davis 1995) and is today one of the oldest pagan organisations in the USA (NightMare 2001, 59). Margot Adler (1997) provides an informative investigation into the transformation of the word pagan in the 1960s, from its use as a term to describe ancient cultures and indigenous spiritualities, to its application to emerging nature-based spiritualities like witchcraft. Whilst *CAW* was not the first neopagan group in the USA, they are counted among the first, and were successful in communicating the sense that a collective paganism was emerging at that particular time of the 1960s. *CAW* succeeded in conveying a collectivity between the emerging occult and new age spiritual groups and in drawing them together under the umbrella of paganism or neopaganism (Adler 1997, 295). *CAW* is significant to this discussion because they are elemental to the rise of neopagan spiritualities in the contemporary West, and more importantly for their perspective towards the internet which I outline later in this section. In brief, they viewed the emergence of the net as a vast resource and tool through which people could connect and learn from one another. With regards to magical practice in particular, their embrace of science fiction narrative indicates their verve towards new technologies as potentially liberating and sustaining.

*CAW* considers ecology to be the apex of all religious focus, and that achieving harmony between humans and the non-human ‘natural’ world is the primary priority (Adler 1997, 288). As *CAW* developed in its initial years, it began to strengthen its links to the environmental movements, and focussed on emphasising harmony and reverence toward nature. *CAW* founder Tim Zell’s (aka Oberon Zell-Ravenheart) writings affirmed that the ‘central myth’ of *CAW* was an understanding of “the planet Earth as
deity, as a single living organism” (Adler 1997, 298). These elements of CAW resonate particularly well with my own positioning of neopaganism and technopaganism as valuable practices in a world facing environmental crises. The neopagan concept of the sacred nature of the planet offers a useful and practical ontology in an age of ecological finitude and subverts the traditional positioning of the planet as an instrumental resource for human use. Instead, neopagan and technopagan worldviews regard the planet as sacred, valuable in its own right and worthy of reverence. What is significant about this position is that it affirms and respects ecological sustainability, but does so through and with technology, not in spite of it. I argue that this productive use of technology, as with the technopagan view, works towards a sustainable future in a way that understands technology to be a part of the human and earthly experience, not an aberration from practices of ecological awareness and responsibility. I argue that these practices hold the key to more sustainable, egalitarian relations between humans and their environment.

Members of CAW greet each other with the catchphrase used by CAW followers in Heinlen’s novel, ‘Thou Art God’, in affirmation of the belief that divinity is immanent in nature and humanity. They emphasised the importance of subjective truths, firm in the view that each person’s belief is in some sense true, insofar as it is true to them (Adler 1997, 299). Zell believed that it is only when people come together and share their subjective truths that we can begin to construct some sense of collective reality, a theory which resonates with Haraway’s reconstructed objectivity configured from partial truths and contexts, and indeed many other theories, such as the standpoint epistemologies discussed in Chapters One and Two. Whilst many strong ideas were circulated around CAW, including founding member Tim Zell’s proposition of the planet as a single organism, predating James Lovelock’s Gaia Hypothesis, ultimately
the Church contained no dogma. This was prompted by CAW’s strong aversion to all religions — except for one central dogma: “its belief that it has no beliefs” (Adler 1997, 304). Broadly speaking, members of CAW could be described to understand neopaganism as “religious philosophy that combines intuitive and rational modes of thought” (Adler 1997, 309). The tension between the CAW rejection of religious dogma whilst embracing religious terminology, is one not lost on its members; but contradiction is not something regarded as problematic. Providing dogma is avoided, anything goes. This group articulates the playful irony which surfaces so regularly in neopagan and technopagan ontologies.

CAW moved on to the internet in 1995, relatively early in internet terms. They see the internet as a “Magickal Tool”\(^{51}\) and believe it has great potential to allow people to meet across geographical distances, and to cultivate potentially long-lasting and intimate relationships. In the same way that they were inspired by a work of science fiction, the similarly regard the ‘new frontier’ of the internet and its ability to connect people with excitement. The CAW web site contains lists of events, information about how to become a member of the church, a bibliography for relevant reading, and lists of regional ‘nests’ (the Heinlen-inspired CAW terminology for groups or cells) which can be accessed. It also contains links to CAW’s famous e-zine\(^{52}\) — possibly, I contend, more high-profile in some circles than the church itself — Green Egg.

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\(^{52}\) A Zine is short for magazine and fanzine. It is usually a publication of small distribution, often printed and compiled by hand, in private homes. They usually cater to non-mainstream interests and cults of fandom. An e-zine is a zine distributed and accessed by electronic means.
Witchvox and CAW are significant examples of technopagan engagement with the ‘internet as tool’. Each organisation has been deft at recognising the significance of the internet in its potential to connect people, allowing for efficient dissemination of ideas, and the building of social networks. As I have suggested, groups such as these demonstrate several of the human-technology relations which Ihde describes. Embodied in the operations and methods of these groups is a comprehension that our contemporary being-in-the-world occurs in and through tools and technological devices. These tools include science fiction novels, internet technologies and e-zines. Each of these tools constitutes legitimate components of the human experience. These relations draw technologies into a complex and diverse Actor-Network, regarding them as forms of agency with the potential to shape and influence worldviews.

Whilst these groups have not articulated an interest in cyberspace as explicitly magical space, they do approach it as a magical tool in its ability to facilitate connection, communication and education. Yet significantly, these groups pre-date digital networks, and move into cyberspace as an expansion of their practice. To complete my exploration of technopagan use of the ‘internet as tool’ I now consider two groups which have formed from online discussion groups to establish a community which shares questions, events, experiences and resources among self-identified technopagans. These groups could be seen as emerging as a result of digital and network technologies. They exist purely in cyberspace, regarding the mode of communication in cyberspace as somehow unique. They are specifically virtual communities which take up a utility relation of tool-ic engagement.
This final type of community I consider is formed through LiveJournal, Google Groups or Yahoo Groups, to name a few examples. Two such examples are discussed here, the first being 111TechnoPagans\textsuperscript{53}, a Yahoo Group where individuals apply for membership, and communication takes place through threaded discussions delivered via email, and the second being Technopaganism (magic(k) for the modern world) a LiveJournal open forum. 111TechnoPagans encourages participation from individuals who follow a Celtic pagan path but who love living in this age of blossoming technologies. They point out that they enjoy talking about Chaos magick, Quantum Mechanics, fractals and herbalism, to name a few interests. Around 190 members are registered with this group, and topics include phone magick — the practice of using phone cords/cables, open lines, ringing tones and number combinations as tools and conduits in magical practice — alongside religious law and its affects on pagans, and a healthy dose of humour and self-denigration. They point out that they are \textit{not} Wiccans and do \textit{not} follow the ‘rede’ — ‘an it harm none, do what ye will’ — which they believe violates the polarised nature of the universe and incorrectly asserts the positive over the negative. This shows the diverse ontologies amongst neopagan and technopagan belief systems. Similarly, groups such as this often ridicule the ‘mainstreaming’ of neopaganism and Wicca in particular. They are scathing of the proliferation of popular books aimed at ‘teen witches’, which too often centre on ways to cast spells to ‘look pretty’ or ‘get a boyfriend’.

A second example is the LiveJournal (LJ) group Technopaganism (magic(k) for the modern world)\textsuperscript{54}, an open group where people can post questions in discussion threads.

\textsuperscript{53} http://groups.yahoo.com/group/111TechnoPagans/ (accessed December 2 2007)
\textsuperscript{54} http://groups.yahoo.com/group/111TechnoPagans/ (accessed December 2 2007)
This LJ group is sporadically updated, with members of the community — over 500 listed — posting notices for events with an overlapping focus on raves, environmental consciousness and mysticism, asking questions about rituals, or newcomers clarifying their own ideas about what it means to be a technopagan. One new poster, for example, came to the site seeking more information on technopaganism, and described his understanding of technopaganism as

the following spiritual philosophy: an impersonal, uncaring, engineering type ‘god’, using ‘god’ as another word for particular ecological systems (local pantheons representing local ecologies), including our human cities, that combine to form the greater ecological system of earth, or the highest ‘god’. As such, though these gods cannot be appealed to, they and their creations (including life and the nature as well as so-called ‘unnatural’ human-created sciences and technologies) should be revered and a balance should be struck between technological development/human labors and the natural environment\(^55\)

These final lines illustrate a view which is driven by a desire to foster responsible relations between humans and their (ecological) environment. It is a position which acknowledges the finitude of natural systems, and human reliance on those systems to survive. This poster also makes an interesting statement about technopagan beliefs in relation to what entities exist, and how those entities can be regarded. Some technopagans do not believe that their concept of divinity can be ‘appealed to’ and most certainly cannot be called upon to make requests for good health or happiness. Divinity in this sense is disinterested in serving human needs. Instead, these technopagans believe in honouring deity because it constitutes life on the planet. In acting with respect and reverence toward complex natural systems, these technopagans properly acknowledge their own place within that system, and their reliance upon it to survive and flourish. Additionally, these groups function as a critical tool for questioning viewpoints in unique ways, with particular regard to ‘critiquing’ their own spirituality. The internet is just the kind of unique tool for allowing this kind of questioning to

\(^55\) http://community.livejournal.com/technopaganism/91519.html (accessed November 18 2007)
happen. Technopagans are reflexive, as is this tool of the net they engage, forming a unique tool-ic relation.

Each of these groups is deliberately open about their definitions, pointing out that no-one in these communities speaks for everyone, or has the ‘right’ answer. The individual path and personal experience is emphasised as truth. The web is a ‘classic’ tool for practising in this way, as it weaves loops and turns throughout diverse positions and locales, thus creating another unique tool-ic relation to dynamic, shifting relations which lead to as-yet-unknown destinations. They promote self-reliance and the power of intent, conjuring their god-figures as symbolic centres for drawing power and direction. They also tend to emphasise some degree of worship of, or deference to the goddess Eris, the goddess of chaos and destruction — and the source of most Discordian traditions which I will discuss shortly in the next section. Technopaganism (magic(k) for the modern world) offers a healthy set of links to provide the inquiring newcomer with sources to follow in seeking definitions and ritual practices.

While some individuals emphasise their use of the internet as a tool for their neopaganism, for others technopaganism is about using the tools at hand, using ‘what works’ and recognising that technology is not unnatural. As one poster, ‘pope guilty’, noted in the group, that cities are not necessarily unnatural, and technopaganism is about “eliminating the nonsensical distinction between ‘natural’ and ‘unnatural’ and realising that mixing sand and water does create concrete, but it's still sand and water”⁵⁶. In this way, technopagans understand that there is truly nothing that is unnatural, since everything comes from the earth. Following this statement a discussion

opened up questioning how individuals differentiate between bad and good, if everything is part of nature, and therefore somehow natural and ‘right’. Most contributors to the discussion pointed out that just because something is natural does not make it good (using the example of watching their cat torture a mouse for fun\textsuperscript{57}) and that instead it was each individuals’ responsibility to try to act in the most respectful way possible guided only by an intimate sense of what is right. This can be interpreted as providing an environment conducive to Haraway’s standpoint theories, where a new kind of ‘objectivity’ is formed, one which arises from partial, located positions. These incomplete, situated and mutable views as embodied in technopagan uses of the internet are reflective of Haraway’s re-imagined objectivity. Again, self-responsibility and self-direction are emphasised as the guiding moral frameworks for belief and action instead of prescribed rules enforced through the threat of punishment or damnation.

I have offered in this section a picture of just some of the many groups who inhabit the internet as technopagan. I explained the substantial history neopagans share with the development of cyberculture, and confounded the notion that neopagans fear digital technology. What emerges is an eclectic mix of groups who understand the internet to be a practical and useful tool in spiritual pursuits and sustenance. They embody a form of human-technology relation which properly accounts for our embeddedness within technological contexts and contemporary being-in-the-world.

As I suggested earlier, it is difficult to distinguish between the two categories of ‘internet as tool’ and the ‘internet as ontological affinity’ because some members use

\textsuperscript{57} pope guilty made this statement at the thread http://community.livejournal.com/technopaganism/47785.html (November 18 2007)
the groups simply as a way to gather information, while for others these groups form part of their broader ontological engagement with cyberspace and technology as magical, sacred and imbued with unexplored possibilities. I now consider individuals and groups for whom the internet becomes a form of reality, a space which can be visited, and a place where worlds can be made and dwelt in. This perception of cyberspace articulates a transformation of reality to another realm, a realm wherein ontologically, entities, objects, and virtual spaces, exist. It could be suggested that the transition from ‘internet as tool’ to ‘internet as ontological affinity’ could be likened to the shift from web 1.0 to web 2.0. Web 1.0 was understood more as a data source, a way to access information. In this way, web 1.0 technology offered ‘discrete’ content which allowed for the extraction of information, but not the upload of content or contribution to a website. Web 2.0 on the other hand, is defined by user-generated content, such that the web is shaped, fashioned and brought into being by its users; the line between the producer and the user is collapsed into an egalitarian space of co-contribution, evolving into what Axel Bruns calls ‘produsers’ (2005). In the technopagan world, the ‘internet as tool’ reflects the idea that the web offers information which can be drawn from. When the internet is regarded ‘as reality’ we then understand that we can contribute to, shape, and of course reside in, that dynamic domain. The web then becomes a space, a dwelling place.

**Internet as ontological affinity**

Having considered neopagan and technopagan practices which engage with the ‘internet as tool’ I now discuss practices which take this engagement to an immersive level. These engagements with technology understand cyberspace to be magical space, opening up a new set of possibilities, ideas and connections in the 21st century.
Technopagans in this grouping then, regard an ontological affinity between themselves and cyberspace, in that both technopagans and cyberspace allow for re-imagined forms of existence and dispersed agency which are consonant. I look firstly at the work of Mark Pesce, a self-professed technopagan, and some of the material affinities which emerge in his practices, before discussing two types of groups, the first being neopagan groups which engage in magical workings in cyber covens. For the second, the internet has formed the perfect setting for the production of a new worldview, making new online worlds through discordian, anarchic, humourous technopagan groups which playfully yet earnestly explore creative possibilities centred on spirituality, its form and application grounded in the present and with a view to the future.

Compared with the ‘internet as tool’ experience, for these technopagans — the group of particular interest to this thesis — their magical experience goes far deeper, where the network structure of the internet allows for a new kind of ritual space where users can connect whether through the internet or a Local Area network (LAN) and use each node of connection as a sacred corner in the virtual ritual space. It is useful to consider this approach alongside ANT’s emphasis on networks as suitable embodiments of agency, despite Latour’s discontent with the internet’s influences on the concept of networks. Technopagans demonstrate the way in which a series of actors — composed of humans, computers, network cables, modems, chants, music, compass points and ritual intents — form a complex network of connections which draw together to serve a common purpose, the magical ritual. In traditional neopagan ritual, candles or people often represent the ‘four corners’ of the sacred circle (elemental corners, usually in line with the compass points, representing the four elements of earth, air, fire and water) whereas in a technopagan ritual online, each computer terminal might act as a representative for
these corners — and as Mark Pesce notes in the context of a ritual of CyberSamhain to be described shortly, each element could now be replaced by silicon, plastic, wire and glass (Davis 1995, 5). This is a case in which the ANT recognition of the four earthly elements as agentic is exemplified. Technopagans practice a shifting view of the world, where seemingly fundamental components of the pagan worldview, such as the four elements, can be modified with alterations in knowledge and practices. As technopagans’ worlds change, as they are increasingly surrounded by new embodiments of the material and imaginative worlds, they alter their conceptions of what might count as sacred in this context. They make similar alterations to their use of symbolic representations of the elements — such as the computer terminal taking the place of the candle — and the tools of ritual which may be employed.

Applying the ANT analysis to these practices show how the agency of objects and material substance shape and inform our worlds. Technopagans bestow their tools of ritual work with both a highly pragmatic and esoteric quality. They are in one sense symbolic and metaphorical, serving purposes for conjuring particular thoughts and ideas and for centering the mind into a particular space. At the same time they are material agents which are practical, and which can be substituted, embellished and interchanged; if a wireless connection does not work, get out your network cable, if you can not find your ritual knife, use your screwdriver. Similarly, if the network connection is lost during a ritual, simply work to re-establish it and re-enter the circle calmly (McSherry 2002, 102). In the technopagan worldview, the screwdriver need be no less sacred than the ritual knife; it serves the same purpose and as such can be regarded as a useful magical, and mechanical, tool. Through its use according to the ANT approach, the
screwdriver is enrolled into the network of the magical ritual, becoming a part of the complex exchange of actors which converge in the ritual practice.

If ‘traditional’ neopagans understand the world to be highly interconnected, creating a web of interdependence and diversity, then for a technopagan, the internet could not be a better exemplar of that sentiment. The very physical structures of the internet echo the web-like interconnection that is so central to neopagan belief. The resonance between symbols in neopaganism and the internet are also significant (NightMare 2001, 55). Neopagan ontologies of the spiralling of time and webs of interconnection fit well with the metaphors of the internet because the ‘web’ acts as a signification of physical structure and the metaphor of web structures. The composition of the internet is dispersed and decentralised, with the exception of early ‘bus’ systems which were structured in a parallel layout, and networks are instead scattered and nodal in configuration. The bus structure is still an important one however, because it comprises a material element of our computer and network technologies. Bus systems connect various internal hardware components within a computer to each other, allowing multiple components to be connected together, and more broadly connect computers to each other. This physical aspect of computing articulates the ongoing role of the material and the technical in carrying out complex digital tasks. Despite common representations of computers and cyberspace as immaterial, they are in fact embedded in materiality. In virtual cyberspace, the material remains contingent to the composition of the environment.

The network structure of non-bus systems on the other hand, reflects neopagan use of webs and weaving metaphors popular in elements of feminism. Specifically, there is a
conceptual and material overlap between the emphasis that certain neopagans and feminists have placed on metaphors of webs and weaving. Regarded historically as ‘women’s technologies’ (weaving), as non-hierarchical (web-like in structure), and as metaphors of the ‘natural’ (spider webs), these symbols can be embraced as potentially empowering and egalitarian. The link to weaving presented here was also shown in Chapter Two; key connections exist between programming and weaving, as demonstrated by Sadie Plant in *Zeros and Ones* (1997). These material links include the invention of the jacquard loom, a computer-style technology designed for weaving fabrics. This technology employs interchangeable ‘punch cards’ which control the pattern and style of the weave. These cards are regarded as a precursor to computer hardware and computer programming. Witches too weave webs, in their magical practice and worldviews of intricate interconnection. These overlapping metaphors, representations and materialities, which resonate on so many levels, articulate the technopagan worldview: spiders weave webs in nature; the webs of the internet connect us together in nodal, non-hierarchical ways; neopagans cast webs in their ritual work, seeing everything as interconnected; and women celebrate the gendered history of weaving in a complex world of high technology where weaving is imbricated. These examples demonstrate the crossover between the material and the metaphorical in a Harawayan sense, and these overlaps shape and inform our understandings of nature, the internet, technopagan practice and the gendered practice of weaving. Technopagans draw these overlaps into their being, regarding these significant connections as informing ways of being-in-the-world.

In 1995, cultural critic and cybertexture writer Erik Davis wrote an article on technopaganism for *Wired*, and it remains the most thorough exploration of this eclectic
bunch of technomages. Before discussing Davis’ article, an important caveat should be made here which exemplifies the easy translation of patriarchy in cyberspace. Davis’ article, now over 10 years old, was written at a time when he was a popular writer for *Wired* and for *The Village Voice*. Feminism and techno-theorist Paulina Borsook had apparently pitched the ‘Technopaganism article’ to *Wired* for some time, eventually convincing them it would be a cutting-edge article for the publication. As the deadline approached, Borsook was informed another writer was being brought in, and that her article would be tied to the end of Davis’ piece. The final publication of Davis’ article has a very brief article at the end by Borsook discussing specifically women’s relationship to technology, and the kinds of pathways that were opening up for women in cyberspace. In a later article Borsook (1996) discusses the experience of having her idea poached (though she bore no grudge towards Davis) and the experience of having to deal with what is essentially a fairly patriarchal publication like *Wired*. Because Borsook’s approach considered women and technopaganism, she argues it became automatically unappealing as a stand-alone article. In the end, a man’s voice was preferable to the *Wired* editors, despite the story having intimate links to feminism and women’s empowerment on the net. The point of this story is that it illustrates how amidst the potential and opportunities of cybertulture, patriarchal views still reign, and that gender-bias translates so easily in cyberspace. Borsook’s proposal for the piece was read purely as a ‘female’ perspective on technopaganism, as a corollary to the main story, not as a legitimate story in itself. The ongoing struggle for a more equitable world in cybertulture is demonstrated through the Davis/Borsook story.

Nevertheless, Davis’ evocative article remains relevant. In his article, Davis interviews self-professed technopagan Mark Pesce. Pesce is well-known in cybertulture, perhaps
most notably for being the creator of Virtual Reality Markup/Modeling Language (VRML), and it could be said that it is his mystical, spiritual approach to high technology which facilitates these revolutionary developments in software and broader technological design. In fact, for individuals like Pesce, the line between fact and fiction is an arbitrary and unnecessary one. For example, Pesce was inspired to work towards the idea of VRML after reading William Gibson’s *Neuromancer*. It is stories like these which illustrate the interchange, the back-and-forth relationship of interaction, between *imagining* and *praxis* which takes place in digital culture.

One example of the ways technopagans ‘cast their webs’ out to virtual spaces can be seen through Pesce’s creation of VRML. The programme, conceived to represent three-dimensional models on the web, came to him as a vision of a great net or web, connected by nodes in a fractal-like manner, where each node on the web is mirrored and reflected on other nodes (Davis 1995, 3). He coded this vision into a “spatial cyberspace protocol for the net” (Davis 1995, 3) and it was only months later that someone told him about the mythical Net of Indra, a Hindu god who possesses a great net of infinite size, containing a jewel in the node of each net, with each jewel reflecting every other jewel in the net. When Pesce was told the story of the Net of Indra, he was struck by the strange sense that his mystical experience had manifested in the form of an algorithm (Davis 1995, 3). For Pesce, the experience of the internet has been a deeply mystical and enlightening one, and began with his first encounter with a web browser. This programme, Mosaic, was developed by NCSA on the principle that it would be free, non-commercial and enable research via a publicly available platform. This ‘vision’ for the programme subsequently diminished after being overtaken by Netscape.

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58 National Center for Supercomputing Applications
and later Internet Explorer. When Pesce saw this early version of Mosaic, he claims he experienced an epiphany he has never quite left, and that he saw the Web as “the first emergent property of the Internet” (Davis 1995, 3). In Pesce’s words, “[i]t’s displaying all the requisite qualities — it came on very suddenly, it happened everywhere simultaneously, and it’s self-organizing. I call that the web eating the Net” (Davis 1995, 3). What Pesce is suggesting here is that the web acts as a form of ‘messy’ culture against the ‘logical’ structure of the net and that these web browsers such as Mosaic could enable the dynamic, social, and cultural elements to overtake and consume the structural properties of networks.

Pesce’s experience captures a sense of technopagan ontologies. These ontologies allow for this so-called contradictory exchange between the immovable logic of digital technologies and the fluidity of mystical experience. There is, for example, a similarity between psychedelic drug hallucinations and fractal geometry, where the experience of self-similarity of objects, replicated in compounding complexity and often vivid colour is experienced through the use of psychedelic drugs. Computer technologies facilitate the representation of complex psychedelic imagery, and can be seen pulsing to the rhythms of music in Windows Media Player™ in its visual simulations. These visions are themselves replications of the models produced through fractal geometry. Technopagan ontologies incorporate seemingly disparate spheres — in this case scientific formulae, computer technologies and countercultural drug experimentation — into a sacred whole into which new objects, theories, languages and consciousnesses can emerge. This worldview challenges the traditional notion that ‘science’ occurs in a clean, hygienic vacuum, removed from mystical or psychotropic experiences. Pesce’s experience demonstrates how the convergence between the scientific and the mystical
can be successful and productive, because his mystical experience translated into a mathematical algorithm for a software programme. As I have mentioned earlier in the thesis, the convergence of the scientific and the mystical has been common for some prominent thinkers. Isaac Newton’s occult interests for example, fuelled many of his investigations, giving rise to fundamental scientific knowledge that today remains critical to our understandings of the world.

Having discussed the way that technopagans understand the material and representational affinity between cyberspace and technopagan practice and belief, I now turn to the groups which exist online wherein cyberspace constitutes a real, magical space. Within these groups, cyberspace opens up a new form of being-in-the-world, and they use this space accordingly. From the cyber covens which transform traditional ritual into a virtual experience, linked by the nodes of the web, to the ‘discordian’ technopagan groups which engage digital technology with a radical and playful mindset, an exciting vision of cyberspace emerges. I then describe a technopagan online ritual, Cybersamhain, to convey how the virtual becomes appropriated in the technopagan ontology. Finally, in order to further demonstrate the resonance between Burning Man and cyberspace, I discuss an online occurrence of the Burning Man event, Burning Life. I consider Burning Life for its explicitly ‘cyber’ location, and for the links which exist between Real Life (RL) and virtual events. I will argue that all of these groups are both feeding from and fuelling the shape of cyberspace in a fashion which is dynamic and transformative of our ontology.

Cyber covens are neopagan covens formed in cyberspace. It is impossible to estimate the number of these kinds of groups that exist, though it is safe to say they number in
the hundreds or thousands. Cyber covens are generally formed along the lines of more traditional covens, drawing on a particular neopagan tradition, such as Norse, Celtic, faery or Feminist Witchcraft, and then become manifest in cyberspace. These groups usually maintain on their sites a ‘disk of shadows’, the cyber-version of a pagan Book of Shadows\(^{59}\), which members can access and contribute to as new rituals develop and evolve. Cyber covens may practice magic online or off, depending on the geographical dispersion of members, and their desires in terms of the goals of the group. For many cyber covens however, the goal is explicitly to attempt magical ritual in cyberspace, in order to transgress geographical boundaries and to experiment with using the networks of the internet as channels for magical energy and intent. At this level, these cyber covens’ ontologies perceive the internet to constitute a space which can be used for magical workings and explored as ‘new’ space. That is, cyberspace exists, it is a place which can be visited and dwelt in. This worldview then, understands the virtual to exist in a very material sense, because into that virtual space converge other humans, hardware, software, ideas and data, which compose a material-semiotic or sociotechnical network as an emergent form of contemporary reality. The boundary between the virtual and the real therefore, is blurred and problematised when we can practice online and off.

JaguarMoon Cyber Coven is one of the more well known cyber covens on the internet. JaguarMoon defines a cyber coven as being “a group of people of an earth-based religious faith or belief system who interact primarily, if not solely, through the Internet

\(^{59}\) A Book of Shadows (BoS) is a book containing spells, rituals, poems and initiation information for Wiccans and witches. In neopaganism more broadly, the BoS may take more of a journal form. Typically, a new member of a coven will be asked to copy out by hand the contents of the coven’s BoS into her own BoS. Over time, she will add to and amend her BoS which will eventually be copied out by another initiate.
and/or the World Wide Web\textsuperscript{60}. The coven also emphasises cyberspace as the very space articulated in many pagan traditions of being ‘between the worlds’. The coven offers year-long courses which users can subscribe to in order to learn more about magic in cyberspace. Their front page explains their purpose in asking:

\begin{quote}
Have you ever wondered what it would be like to gather in a circle in cyberspace? Whether it is possible to raise energy and direct it when you are not physically in one location? How it feels to Work on the astral plane? Are you looking for an interactive classroom environment where you can learn the basics of Witchcraft? But you’ve been confounded by a lack of time, or daunted by travel? Or even cost?\textsuperscript{61}
\end{quote}

Articulated in this quote from the introductory page to JaguarMoon’s site is a snapshot of the cyber coven’s ontology. Within this conception of existence is the idea that the energies of the mind can be projected into the virtual zone of cyberspace. The cyber coven conceives that each member can extend beyond their physical self and reach out towards the other members of the coven through the channels of cyberspace. Using the network channels, the nodes, cables, and connections as an aide, they direct their mental energies beyond the geographical limitations of the physical coven circle, and transport it through cyberspace to the virtual location of the cyber-circle. Given that so much magical work involves mental focus and energy projection, it seems suitable that these practices are adaptable to the virtual space of online worlds. Where a traditional coven gathers its circle to raise power within physical proximity, the cyber coven simply visualises that gathering place to be ‘somewhere’ within the virtuality of the web.

Cyber covens offer the anonymity and protection previously articulated as an appealing factor of online communication for many individuals, especially when following unorthodox paths like neopaganism. They cater to the geographically dispersed, and of

\textsuperscript{60} http://www.jaguarmoon.org/whatis.php (accessed January 12 2007)
\textsuperscript{61} http://www.jaguarmoon.org/ (accessed January 12 2007)
course to those people who simply have difficulty meeting a community in their area, for any number of reasons. Cyber covens offer security, safety, and convenience for neopagans interested in building community where previously they have struggled to do so. They further offer the added element of extending the notion of magical spaces and power outwards into the realm of cyberspace; if for the neopagan divinity is immanent, for the technopagan, immanence resides in code. Finally they speak to the neopagan ideal of ‘using what works’ and of the no-nonsense element of neopaganism which endorses simplicity and practicality: it is fine to use a screwdriver as your wand in a ritual, maintain your book of shadows in a word document, and if magic is energy, then it holds that this energy can be felt in cyberspace, and can be manoeuvred and drawn upon as well. The ‘reality’ of cyberspace is deeply apparent to cyber covens.

Neopagan worldviews generally contain the idea that there are at least two worlds/realities operating: the material world we inhabit everyday, and a spirit world which co-exists alongside the material world. Magical ritual is often about ‘lifting the veil’ between the worlds in order to access spiritual power. Particular festivals in the pagan year, especially Samhain (Halloween) are considered to be times when the veil is particularly ‘thin’, making access to the other plane of reality easier. This ontological element of the neopagan and technopagan identity reflects a belief in multiple realities, accessed through shifts of consciousness, changes in season, or astrological phenomena. Where traditional neopagan ritual seeks to raise a sacred circle in order to straddle the space between the ‘real’ world and the ‘other’ worlds of astral planes or the afterlife, cyber covens similarly interpret cyberspace as a liminal space. The very vehicle and structure of networked technology straddles varied dimensions and levels of connection, imagination and projection. The integration between hardware and software, the
embodied individual and the disembodied representation in cyberspace, and the synergy of the real and the virtual make cyberspace the ideal technopagan relocation of neopagan ritual ‘between the worlds’. Thus the concept of place is generated through an embodiment relation wherein cyberspace represents the possibilities of world-building. Inhabiting cyberspace as an avatar for example, who is both ‘me’ and ‘not me’, confounds traditional constructions of human-technology relations and gives way to a more flexible ontology of worlds we inhabit in and through technology.

I have discussed the ‘internet as ontological affinity’ employed by technopagans who belong to cyber covens. Cyber covens are significant because they perceive internet space to be consonant with mystical or magical space and they do not regard the geographical dispersion between coven members to be a hindrance to their work. Nor do they see the tools and technologies which mediate their magical gatherings to be anathema to their purposes, and instead regard these elements to add to, enhance, and indeed provide the conditions for, their ritual workings. The links between the human and technology in these relations is elemental, defining and shaping the reality of the technopagan worldview. The convergence of actors at the juncture of ritual practice exemplifies ANT’s argument for the need to recognise the roles all actors play in the formation of networks, in this case, the network of magical ritual. These actors can include the human participants, the computer components of hardware and software, network connections, data cables, keyboards, IRC channels, ritual proceedings and digital imagery used for focus and meditation. To explore the dynamics of agentic convergence further, I now discuss the emergence of ‘discordian’ technopagan groups online, which have dynamically surfaced from the chaotic and anarchic nodes of the web.
Where cyber covens could be said to draw more directly from neopagan, Wiccan and witchcraft traditions, adapting them to the spaces of the internet, these discordian groups are far more chaotic in their approach to magical practice. They have built a numerous, if disjointed, set of groups and traditions under its banner in the search for a spirituality that is practical, playful, energetic, ironic and irreverent in its reverence. I consider these groups technopagan, though they may not always explicitly label themselves as such, in that they have formed from a number of sources, which include neopaganism, Discordianism, and anarchism. They are described by Margot Adler as “delightfully bizarre and surrealist Neo-Pagan groups” (Adler 1997, 293). Their influence can be traced back to countercultural engagements with earth-based spiritualities to such an extent that there is speculation that neopaganism is an Erisian plot (Adler 1997, 294). Erisian worship is worship of the goddess Eris: goddess of strife, discord, chaos and confusion, who translated into Latin becomes Discordia. Discordianism as a religion was first articulated in the Principia Discordia published in 1965 with a production run totalling only five copies. It has since been republished many times under the title Principia Discordia, or How I Found the Goddess and What I Did To Her When I Found Her (Malaclypse, Thornley et al. 1990), and has become the central text for a thriving form of spirituality, birthing the POEE or Paratheo-Anametamystikhood Of Eris Esoteric. This group was formed by Malaclypse the Younger (Greg Hill) as an “Erisian Neo-Pagan Paradox Cult” (Adler 1997, 328). Both Discordian and Erisian worshippers, though sometimes distinct, share much and are described as a “Non-Prophet Irreligious Disorganisation” (Adler 1997, 328). According to the Principia Discordia every person on the planet is a pope and has the right to
claim themselves as such; the *Principia* even contains a business card which can be copied and circulated in order to demonstrate that each person is a ‘card carrying pope’:

Front of card     Back of card

(Thornley, Malaclypse et al. 1990)

Discordians are distinct from neopagans, though many Discordians consider themselves neopagan. Robert Anton Wilson — aka Mordecai the Foul or RAW — author of the science fiction novel *The Illuminatus Trilogy* (Shea and Wilson 1988) is one such example. Wilson co-wrote *Illuminatus* with fellow Erisian Robert Shea, a “three-volume science fiction/occult/conspiracy novel that takes place in an Erisian framework” (Adler 1997, 333). It is a science fiction trilogy of complex and chaotic narrative structure. The story jumps randomly back and forth between characters, time, and consciousness as it deals with a set of unfolding conspiracy theories. The book makes many references to Discordian traditions, such as the golden apple62 used in the *Principia Discordia*’s official symbol; the AA of Crowley’s *Argentum Astrum* (discussed in Chapter Four); and the use of the much-loved geek word fnord63, first used in the *Principia*. The book further references elements from the Cthulhu world mythos, events, figures and ideas from H.P. Lovecraft’s horror science fiction story *The Call of Cthulhu* (1963) first published in 1926. Discordians from the 1960s onwards

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62 The apple symbolises the golden apple of discord, from a Greek myth about the Judgement of Paris.

63 Fnord is generally a statement of something out of place. It is almost impossible to describe, and intentionally vague, acting as a sort of password for those ‘in the know’. Fnord regards discord and ‘out of place’ as a positive state.
have initiated projects in various forms of media in order to educate the public that
different realities exist and that there are different ways to consider existence. In so
doing, they affirm that through substantial ontological change, a better, happier world
might come into being. These worldviews are again examples of the way that fictional
renderings can offer viable ways to imagine being-in-the-world. These traditions draw
broadly and playfully from various sources to construct practices which are witty,
ironic, and mischievous. By sourcing literary works for example, they introduce new
words into their lexicon, reconstructing the possibilities for understanding and
interpreting existence.

Discordians and Erisians alike allocate Eris as the goddess of computers, and engage
new technologies and networked technologies in particular with enthusiasm. Examples
of groups which have emerged out of these ‘traditions’ are The Church of Subgenius64,
Discordian.com65, the Open Source Order of the Golden Dawn66, and Thee Temple ov
Psychick Youth67. I present two of these groups — Discordian.com and the Open
Source Order of the Golden Dawn — for consideration as manifestly technopagan, and
as useful for demonstrating alternative, subversive and mystical ways to inhabit
cyberspace68.

64 www.subgenius.com (accessed March 3 2007)
65 www.discordian.com (accessed March 3 2007)
67 www.topy.net (accessed March 3 2007)
68 A final group TOPY, which I mentioned earlier in this chapter, is elaborated on in Appendix 5. I have
placed TOPY in the Appendix because I have already discussed the group’s functions and views, and
elaborate on some details, which while not pertinent to this discussion, offer some insights to the
interested reader.
Discordian.com, whose entrance page to their site proclaims “chaos with a clue” presents a bountiful set of links and information to help people ‘change the world’ while still doing all the things we need to do in order to pay the bills, meet our day-to-day commitments and so on. Discordians can be critically understood through Ihde’s assertion of the ontological relationality and affinity which exists between humans and technology. He emphasises that technologies can only be suitably understood as they materialise in and through their use by humans. Thus, in imaging the creative emergence of new communities through the digital technologies of cyberspace, Discordians demonstrate this awareness of the possibilities which lie in the dynamic interaction between humans and technology. Discordian.com was started by the Church of No Dead Saints as a way to spread the Discordian message and to ‘Hail Eris’ online. Discordian.com constructs a space within cyberspace which functions as a kind of reality encouraging visitors to re-imagine the world and reality in multiple, varied levels. Following the hacker worship of Eris, they apply chaos in a spirit of hopefulness, playfulness and earnestness, constructing and inhabiting new spaces simultaneously. This example can be usefully investigated using the ANT view of network functionality.

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where the participants constructing this reality are humans, computers, networks and discord. For example, computer technologies notoriously exhibit inexplicable errors and glitches which often baffle reason and deductive processes. Rather than expressing frustration at this phenomenon, Erisians take it in their stride, appealing to the chaos within their machines rather than cursing it, recognising the ‘glitch’ becomes a kind of actor in itself. It is in their dynamic interaction and synthesis as a network which forms the Erisian reality.

Entering the site the visitor first sees the latest news headline, proclaiming the passing of Robert Anton Wilson (RAW) — who described himself as a “guerrilla ontologist” (Wilson 1982) — in January of 2007, and praising his influence and impact on the Discordian movement. Guerrilla ontology is a term coined by RAW as a response to fixed worldviews and prescriptive doctrines. In a later publication, *The Illuminati Papers* Wilson commented that guerrilla ontology is “[t]he basic technique of all my books. Ontology is the study of being; the guerrilla approach is to so mix the elements of each book that the reader must decide on each page ‘How much of this is real and how much is put-on?’” (Wilson 1982, 2). This approach suggests Wilson was eager to ‘jolt’ readers into independent, active thought. He proclaimed that belief was the most dangerous enemy to knowledge and intelligence because it was immutable and fixed. He claimed ‘ontological pluralism’ was the only viable philosophy in our time. Through his Guerrilla ontology he pushed people to radically reassess their knowledge and assumptions and to embrace active thinking. Through this process he hoped to re-conceptualise thought and reality into a dynamic, ever-shifting process of independent

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70 Wilson’s passing on the binary date of 11/01 is noted as significant by those praising his life and work (http://www.rawilson.com/main.shtml). (accessed March 5 2007)
thought and open-mindedness. RAW states “[it] only takes 20 years for a liberal to become a conservative without changing a single idea. In an evolving universe, who stands still moves backwards”71. This guerrilla ontology understands that what counts as ‘reality’ can be variable, unfixed and shifting, showing a clear alignment with technopagan ontology in propounding independent, active, critical thought and the constant embrace of inquiry and pursuit of knowledge.

The Discordian.com welcome page also announces their presence at the upcoming *pantheacon*, a neopagan convention held annually. The site contains pages detailing ways to live day to day in Discordian homage; rituals, including the technopagan blessing for the Leatherman tool which is included in Appendix 6; external links; networking — presented with the subtitle “g0d is in the network: connect”72; and sex, to name just a few. In describing themselves on this particular site, the site operator Saint Mae states that we are all divine. She proposes the idea that “the Big Bang was Divinity…shattering into a million pieces and forgetting itself”73, and notes her use of Divinity as a term replacing God, because the latter is such a loaded term. She also explains her reluctance to write the very page describing Discordianism, due to an aversion to ‘sacred texts’ or ‘pinning oneself down’ through the process of committing something to text. Demonstrated through these gestures is a desire to ‘reclaim’ notions of divinity from the lofty untouchable heights in which it is traditionally placed in traditional forms of Judeo-Christian religion. By refusing to defer to the wisdom of ‘dead saints’ and by claiming each person to be divine, Discordians recast spirituality as accessible, playful, and never confined to doctrine or dogma which ‘fixes’ a movement

71 http://www.rawilson.com/papers.shtml (accessed March 5 2007)
and denies its ability to shift with time and knowledge. Discordian practices view divinity as immanent and dispersed, and explicitly regard the internet as one of these examples of divinity. Like the network of the web, their worldview is dynamic, shifting and mutable. Within this immanent worldview of divinity, the technologies surrounding digital culture are included as dynamic tools of being-in-the-world. It is only through the praxis of these relations, or in Ihde’s terms, technologies ‘in use’, that Discordians’ unpredictable consideration of technology can be understood and appraised. Discordians exemplify the way that technologies provide the conditions for relations and practices.

The second online group, the Open Source Order of the Golden Dawn has its roots in the Hermetic Order of the Golden Dawn, introduced in Chapter Four. They believe humanity is entering a new aeon, and the solution is not to destroy the old religions, but to make them new again. The manifesto of the OSOGD begins with a line from Crowley’s Book of Law demonstrating his continuing influence on occult and pagan practice. Their manifesto emphasises that the order has no right to judge or interfere with each individual’s moral code or behaviour, noting that the only true goal of the order is “the elevation of individual human beings from ignorance of their true nature to Magical Adepthood. The Order asks nothing of its Initiates but a sincere commitment to penetrate the Occult Mysteries and apply the knowledge gained to their own lives in a productive and compassionate manner”74. Here the order articulates a liberal ideology of independent thought, stressing a departure from the traditional religious structure which dictates a moral code to its followers. They instead emphasise the notion of individual growth and exploration in an ongoing project of learning.

74 http://www.osogd.org/aboutUs.html (accessed March 4 2007)
Previous traditions of Hermetic practice were once cloaked in secrecy, with its participants swearing vows to keep the secrets of the tradition from a broader audience. OSOGD however, choose to take inspiration from the Open Source Software movement which is based on the principles of accessibility, and which allows users to download, alter, manipulate and redistribute the software. In this principle, OSOGD make their interests available for all to access, stating “[w]e have no ‘secrets’ to conceal, in particular those that have already been revealed. And in any case, the era of artificial secrecy is at an end. Ours is the Information Age, and we embrace it fully. Therefore we ordain and establish our order as the Open Source Order of the Golden Dawn”75.

OSOGD state that they choose to use the World Wide Web as their primary source of communication, in deference to this commitment to sharing their practices and beliefs, referring to Robert Anton Wilson who stated that “[a]ccuracy of signal and free flow of information define sanity in my epistemology”76. They believe that the World Wide Web provides economical and accessible means to communicate, and use it as such. However, it is more than this, groups of this sort are taking internet technologies and applying their structures and functions to philosophical and ontological frameworks, seeing the net as a ‘place’. In this case, the principles of free flow of information and exchange are applied.

OSOGD describe their ‘experimental’ approach to practice as one which tries theories, tests them out, perhaps discarding them if they fail to serve their desired purpose. In so doing, they liken their practice to ‘beta’ testing of software, where beta testing is the practice of releasing software for public use, so that the public can test, assess and

75 http://www.osogd.org/aboutUs.html (accessed March 4 2007)
76 http://www.osogd.org/aboutUs.html (accessed March 4 2007)
uncover errors, glitches or problems with the programme. This principle echoes the practical, pragmatic principle of ‘using what works’ that I have earlier identified in technopagan practice. OSOGD’s use of beta testing also makes an explicit connection between technologies and ritual practice, an affinity I have emphasised through Ihde’s human-technology relations, and a praxical focus central to neopagan and technopagan ways of being. These relations emerge from the recognition that the uses and functions of a technology, and its impact and use by humans can only be determined in the context of their practical use. In this way, praxis becomes an ontology; what exists materialises in relation, in the enacting of knowledge into practice. These ontologies then are variable because praxis is variable; they are mutable and shifting accounts of being and existence. It is in the relation between the two actors, the human and the technology, that their form can be properly perceived, and thus praxis will always give way to a variable, destabilised ontology. Further, Ihde’s definitional component that technology must have some form of ‘use’ is similarly reflected in beta testing. For OSOGD this beta testing might involve trying out a new ritual for example, and if in the process of practising the ritual it shows itself to be unworkable, it will be modified or discarded accordingly. For example, a ritual may be created for an equinox which, upon experimentation, is deemed to lack the energy-raising elements required for magical ritual. The ritual may then be rewritten to attend to this need for energy-building elements, such as chants or meditation.
All rituals once ‘tried and tested’ by central members of OSOGD are then provided for free as PDFs on their site for any and all to access. Most of their rituals end with a ‘Dedication of Merit’ which states:

May the benefit of this act, and all acts, be dedicated
Unto the complete liberation and the supreme enlightenment
Of all beings everywhere pervading space and time.
So mote it be.
May the benefits of practice, ours and others, come to fruition,
Ultimately and immediately,
and we remain in the state of presence—Ah!

OSOGD encourage individuals to take these rituals and adapt or alter them in any way they choose, seeing this as a fundamental process within the Order, to build for the future, to make things ‘work’ for themselves. The OSOGD provides yet another engaging example of the diversity of ways in which neopagan and occultist individuals and groups have adapted and indeed thrived in the virtual spaces of the internet. Encouraging self awareness, the responsibility of the individual, while emphasising community and harmony, facilitates connection through a seemingly disconnected world. Each individual is invited to recognise their own power to enact change, and to avoid apathy at all costs, while remaining deeply entrenched in a tradition of humour, irony and play. Drawing from software design demonstrates another aspect of technopagan ontology which poaches from one area and applies it to another, seemingly unconnected area. As demonstrated in the example of the beta testing of rituals, OSOGD approach technologies along with rituals in a practical manner, using, adapting, fixing what works, and disposing of what does not. This method ‘disrespects’ the prescribed uses of technology and prefers to modify and alter technologies to suit the context in which they will be used. Yet this playfulness does not occur to the

exclusion of serious dedication to their pursuits. OSOGD followers and technopagans by extension, carry a sense of being a part of a far larger structure which spans across the ‘space and time’ to which they refer in the Dedication of Merit above. I suggest this indicates that technopagan ontologies are aware that humans do not reside at the ‘apex’ of existence, and as such they wish to act in ways which are conscious of their place within a broader world of actors. Technopagans respect the life of the universe as a whole and as such attempt to understand themselves within that massive context of space and time. Re-conceptualising ontology in this way gives way to the ‘open source’ philosophy which downplays ego and consumption and instead offers itself up to interested participants. These viewpoints speak to my argument for practices which conceive of the world in responsible, anti-humanist and creative ways, drawing together the esoteric and the technical into a hybridised way of being-in-the-world.

Through an examination of technopagan groups that consider the internet as its own space as a form of *reality*, where technopagans and cyberspace share ontological affinity, I have shown the enormous possibilities contained within the fusion of the spiritual and the technical. Technopagans view cyberspace as transformative space and create active, energised and passionate contributions to the digital future which effectively reformulate our perceptions of being in the more-than-human world. Technopagans see new realities forming through the network cables and wireless integrated systems in which humans and their machines are converging toward a promising and sustainable vision of the future. These realities are ecologically responsible, politically active, philosophically engaged and collectively formed. The network of the internet exposes the connections which lie beneath the false binaries of
Western thought and suggest a webbed structure of dependence and interdependence upon which the world is constituted.

I have offered a critical description of some of the Discordian groups, and the practices in which they engage. I now look specifically at a technopagan ritual of CyberSamhain as a way to further examine the praxical element of technopaganism. In particular, these examples show the way traditional neopagan rituals are transformed into the digital network, whilst maintaining a recognition of the role of the body in the human-technology relation. These technopagan rituals maintain their corporeal nature, affirming the embodied nature of relations and experience.

In his article *Technopagans* Erik Davis (1995, 5) describes a technopagan ritual, a “CyberSamhain” carried out in San Francisco. Samhain is most popularly understood to be the neopagan celebration of Halloween (a celebration of death in all its forms), and Davis attends a cyber-version of a neopagan celebration of this event where computer terminals are employed to represent the cardinal points of earth, air, fire and water/silicon, plastic, wire and glass with the (digital) connection between them forming the sacred circle of neopagan ritual.

Tonight’s Watchtowers are four 486 PC’s networked through an Ethernet and linked to a SPARCstation with an Internet connection...The four monitors face into the circle, glowing patiently in the subdued light. Each machine is running WorldView, and each screen shows a different angle on a virtual space that a crony of Pesce’s concocted with 3D Studio. The ritual circle mirrors the one that Pesce will create in the room: an ornate altar stands on a sliver pentagram splayed like a magic carpet over the digital abyss; four multicoloured polyhedrons representing the elements that hover around the circle; a fifth element, a spiked and metallic “chaos sphere”, floats about like some ominous foe from Doom (Davis 1995, 5).

Samhain’s lesson is the inevitability of death in a world of flux, and so Rowley leads the assembled crowd through the Scapegoat Dance, a Celtic version of “London Bridge”. A roomful of geeks, technoyuppies, and multimedia converts circle around in the monitor glow, chanting and laughing and passing beneath a cloth that Rowley and Pesce dangle over their heads like the Reaper’s scythe (Davis 1995, 6).
The creative possibilities presented by such a ritual are promising and exciting. Digital and network technologies are moving us towards a world of ‘meat-less’ existence, and in this context the technopagan approach is a refreshing and distinctly corporeal one. The corporeality of rituals, whether they are ‘virtual’ or ‘real’ is significant and central to technopagan ontology. Erik Davis participates in the CyberSamhain described above and it prompts him to note that “I’m reminded of those gung-ho futurists who claim that technology will free us from the body, from nature, even from death. I realize how unbalanced such desires are. From our first to final breath, we are woven into a world without which we are nothing, and our glittering electronic nets are not separate from that ancient network” (Davis 1995, 6). Online rituals need be no less embodied than one which takes place in more ‘traditional’ surrounds. They explicitly maintain and emphasise our connection to seasonal rhythms and natural occurrences. The world is no less ‘connected’ from these rhythms, but there is an increasing assumption — as a result of our ability, enabled by technologies, to produce seasonal crops year-round, to generate ‘artificial’ sunlight at night-time, and our enormous machines of industry — that we are separate from these rhythms. Rituals like the Cybersamhain confound the idea that somehow technology removes and distances us from ecosystems, and instead acknowledges these acts as developed in constant communion with ‘natural’ spaces. The CyberSamhain restores a balance between nature and technology, and re-positions them as part of the same relational ontology.

Having presented an example of a cyber-ritual, I now draw further from the Burning Man case study I discussed earlier in the chapter. Burning Man manifests online through a virtual version of the event — Burning Life — held in the online virtual
world, *Second Life*. In contrast to the extreme geographical setting of the immersive and radical spaces of Burning Man, a digital counterpart has emerged which exemplifies the connections between Burning Man and technopaganism, and specifically, the principles of connection and engagement in cyberspace.

One of the most high profile virtual worlds, *Second Life* (SL) claims an estimated 13,400,000 residents, with about 500,000 regularly logging in each week\(^78\). *Second Life* operates as a commerce society, where residents are free to pursue any interests they please, though generally at a price. The currency of *Second Life* is the Linden, named after the game’s developer, Linden Research, and can be exchanged for RL money. Residents populate *Second Life* as avatars which can move, and even fly, through the environment. People can buy houses in SL, islands to build on, set up businesses to sell products to other residents — from clothing to sex toys — or attend nightclubs to dance and socialise. The emphasis in SL is not on a game structure, but as a space in which people, as mirrors of their RL selves, or as newly formed identities, can socialise and interact with other SL residents and create their worlds as they see fit. It is significant to this thesis and this case study in particular that a real world event such as Burning Man, already allied with technopagan ontologies and ideals, is mirrored in a virtual space like *Second Life*\(^79\).


\(^79\) Second Life receives a lot of media attention as the largest online community. It is regularly dragged out when current affairs groups want to do a story on cyberspace. The fact that SL receives so much attention, largely for its ability to potentially generate its users real-world cash, and the overwhelming marketing presence in-world, represents a disappointing approach to the potentials of cyberspace. Activities in Second Life revolve around revenue generation, cybersex and the attainment of status. Investigations into fantasy Role-Playing Games as examined in this thesis in Chapters Three and Five for example, yield a far more interesting, creative, and anti-capitalist possibilities in cyberspace.
As the name ‘Burning Life’ suggests, this event is a Second Life manifestation of its ‘big sister’ real life event Burning Man. Started in 2003, the same year Second Life itself was launched, Burning Life was an attempt to allow people in SL to participate in a virtual version of the real life desert-based technopagan bacchanal. A virtual ‘man’ is constructed, art spaces are allocated to interested parties, and for a week dancing, artwork and social interaction via avatars climax to the point where, in tandem with the RL event, the virtual man is burnt as attendees dance at his feet. Not only does the event offer participatory opportunities to people unable to attend Burning Man, its echoing in cyberspace articulates something notable about virtual communities. If technopagans are right about sending the divine out into cyberspace, then the idea that hundreds and maybe thousands of people are ‘attending’ Burning Life to build artworks, to dance or to commune with fellow members of their community has the potential to generate a significant spiritual or mystical experience for its participants. Across the network nodes the energy of frenzied individuals converging in cyberspace to honour an RL event bespeaks the potential of the web to create an alternate ontology. In particular, Burning Life can be read against Ihde’s human-technology relations, which reveal the intertwining of the various interactions which occur between humans and their technologies. For example, embodiment relations account for the way that the keyboard, the mouse and the monitor become aspects or extensions of ourselves when we are immersed in a virtual environment. Burning Life also articulates a hermeneutic relation, where the computer screen somehow refers ‘beyond itself’ to the imagined virtual world in which the community converges. The relation requires a ‘literacy’ of Second Life to be able to read the world, interpret it, and understand how to move through it. Finally, to interpret Burning Life through alterity relations, the inhabitation of an avatar in this space creates a sense in which the technology is both ‘me’ and ‘not me’. Similarly, the
space of the event, occurring through the technologies of digital networks, can be experienced as ‘other’, where we are moving into an environment which is not of this world. This last relation describes how Second Life, and thus Burning Life, has an ontology of place. It is a terrain that can be traversed, navigated, and inhabited. The terrain of Burning Life simulates a technology of space and place into which we project as a reality which can be dwelt in.

In this section I have charted the occupation of online spaces in technopaganism which understand the internet as a tool, and as an ontological affinity. I presented a two part exploration of technopagan practices which firstly engage with the internet as a tool, including groups like Witchvox and the Church of All Worlds. These types of online entities display a pragmatic approach to technologies, deftly incorporating them into their spiritual practice and day-to-day lives. Secondly, I discussed expressions of technopaganism which understand the internet as ontological affinity, where the conceptualisation of agency and spaces that exist are re-cast in digital terms. These practices, including groups like discordian.com and the event Burning Life, approach digital networks as spaces and places which can be built, created, visited and dwelt in. These technopagan engagements in cyberspace express the complexity and dynamism of human-technology relation as it applies to technopagan practices. These practices, embodied through tools and technologies, articulate responsible, progressive, and playful ways of being in contemporary culture.

**Technopagans: hybrid agency in the more-than-human-world**

In this chapter I have presented the technopagan through a variety of manifestations. I introduced some of the links and histories which occur between digital cultures, counter
cultures, geek/gamer cultures and the occult worlds of neopaganism. I discussed the shape of technopagan identity and its role in contemporary culture as a challenge to absolutist scientific knowledge constructions. To give further form to technopagan ways of being-in-the-world, I presented a case study of Burning Man, a unique and radical event which re-imagines the world and approaches it in sustainable yet flourishing ways which incorporate tools, materiality, and objects into its practice. I then explored technopagan interaction and engagement with the internet in the ontological realms of internet as tool, and internet as ontological affinity. Within both of these spheres were found diverse groups and organisations which foster the fusion of technological growth with the worldviews and practices of neopagan spiritualities. I offered several examples of online communities which have emerged from the digital world with a view to creating alternative realities which account for the agency of the nonhuman world in radical ways. These spaces online make room for spirituality and mysticism and embody technopagan values. Faithful to ecology, feminism, neopaganism and adequate accounts of human-technology relations, the technopagan subverts the division of the cyborg and the goddess and makes room for the collapse of the false boundaries of dualism, offering instead a radical reconfiguration of identity in the digital world.

Throughout this chapter I have demonstrated the multiple levels upon which technopaganism manifests itself. Spaces, events, games and people converge as networks of diverse actors in a promising vision of existence in the more-than-human-world. Technopagan worldviews respect the body, and the body of the earth. They are engaging and connective and committed to principles of ecofeminism, technofeminism and reconfigurations of agency and identity in contemporary culture. Through what it signifies and what it embodies, the technopagan captures a viable and responsible model
of being-in-the-world. I conclude this chapter by reflecting on the significance of the material-semiotic analysis, the network and the human-technology relation of the hybridised technopagan. I review the analyses I have presented throughout by summarising the technopagan identity reiterating the significance derived from the application of the various theories I have used from Ihde, Latour and Haraway, to provide a more robust analysis of this identity. The reading of technopaganism against these theoretical considerations affirms its suitability as a theory and practice of agency in the digital and ecological present.

The dynamic of exchange between science fiction and reality, science and spirituality, contemporary culture and ancient worldviews, has been explored in relation to Actor-Network Theory, as discussed throughout this thesis. In attempting to understand the ways in which relationships of interaction flow in different directions, I have shown that fiction and the ‘real world’ are co-constitutive, our ‘real worlds’ are constructed through readings and engagements with fiction — an exchange which can flow in more than one direction, affecting, influencing and shaping our worlds in highly complex and dynamic ways. The *Church of all Worlds (CAW)* as I have demonstrated is one of the oldest offline and online manifestations of neopaganism and was borne out of a group of undergraduates who read *Stranger in a Strange Land* (Heinlein 1977) and decided to form a religion based on the book. Consonant with ANT networks and concepts of agency, dualism is challenged, replaced by complex interactive networks which influence, mobilise and affect various actors. Mark Pesce, as a technopagan using mystical and fictional channels to develop software, embodies this challenge to binaries, as do so many technopagans through their ‘poaching’ and blasphemous practices.
In keeping with the theme of the criss-crossing of influences and interests which converge in the technopagan, Davis points out that “you can find occult books at science fiction conferences and Klingon rituals at Pagan gatherings” (1995, 6). Neopagan rituals can be influenced by J.R.R. Tolkien (Lord of The Rings), Gene Roddenberry (Star Trek) or Frank Herbert (Dune). Davis suggests one of the reasons hackers and programmers tend to be drawn to the worlds of sci-fi fantasy genres is that the writers in these fields “don’t just tell tales they build worlds” (Davis 2004, 217). Science fiction and fantasy fandom presents a “world whose role playing, nerd humor, and mythic enthusiasm has bred many a Pagan” (Davis 1995, 6). Neopagans and technopagans delight in moving ‘between the worlds’ — a neopagan concept of the movement between the material world and the unseen, but ever-present spirit/other/underworld. They approach this task with “passionate and often deliberately amusing verve, they insist on the sacredness of the body and the earth, and most believe that the active cultivation of magic can build a bridge back to the enchanted, but very concrete, world that most humans lived in before the Enlightenment reduced the *anima mundi*\(^80\) to a soulless machine” (Davis 2004, 214-215). For Davis the technopagan identity is at once material and spiritual, practical and mysterious — a form of agency which is connected, engaged and complex in its boundary transgressions. Technopagans are “digital savants who keep one foot in the emerging technosphere and one foot in the wild and woolly world of paganism” (Davis 1995, 1). Formed in this boundary-crossing fashion, the technopagan identity can seem to be something of a contradiction because “they are Dionysian nature worshippers who embrace the Apollonian artifice of logical machines” (Davis 1995, 1). Here, Davis is referring to Dionysus, the Greek god of wine, \(^{80}\) Latin for the ‘world soul’. It is the idea that an ethereal spirit pervaded all of nature — not unlike the concept of immanence.
ecstasy, peace, music, who is also known as Bacchus; his frenzied spiritual festivals
give us the term ‘Bacchanalian’. Apollo, the Greek god of medicine, healing, truth,
harmony, logic and order, is positioned as the total opposite of Bacchus/Dionysus. It is
this contradiction, this juxtaposition, this oppositional identity embraced with such ease
and comfort, which reflects the hybrid agency of the technopagan, embodying the
boundary breakdowns which Haraway identified as definitive of the cyborg. In so
doing, Technopagans confound the appeals to purity found in some forms of
ecofeminism, ecofeminist spiritualities and goddess worship. They embrace technology
as part of the spectrum of human experience and present a middle ground through the
feminist impasse between goddesses and cyborgs.

As I have argued, the neopagan worldview makes it the ideal spirituality for the wired
world, providing the basis for technopaganism. As practitioners of magic, neopagans
see the act of bending and altering consciousness through practice as one perfectly
suited to the mutability of knowledge online. So much of how we understand the
internet is an act of imagination, the harnessing of a metaphorical vision, which leads us
into the ‘consensual hallucination’ that Gibson spoke of in Neuromancer. For
technopagans then, their occult roots provide the perfect vehicle for navigating the
digital world through praxis. Rather than a world in which it might seem that the
neopagan is being displaced, the technopagan understands technical space as just as
divine or sacred as so-called ‘real’ or ‘natural’ space. If neopagans see the divine as
immanent in the world, then so too is it immanent in cyberspace.

Technology is merely another manifestation of the earthly world, and is nothing if not
potentially sacred. In fact for Pesce, it is this sacredness that is most important because
“[w]ithout the sacred there is no differentiation in cyberspace; everything is flat and gray. If we are about to enter cyberspace, the first thing we have to do is plant the divine in it” (cited in Davis 1995, 4). As I discussed in Chapter Four, neopagans are reluctant to draw sharp boundaries between notions of absolutes like good and evil, darkness and light, and the same can be said for their engagement with forms of technology. The divinity neopagans see as immanent in nature permeates the boundaries of cyberspace, so that divinity merely grows rather than recedes. This boundary transgression demonstrates the way in which “pagans refuse to draw sharp boundaries between the sacred and the profane, and their religion is a frank celebration of the total flux of experience: sex, death, comic books, compilers” (Davis 1995, 2). For some neopagans, but for technopagans especially, technology forms yet another aspect of the circle of life, and can be a space for magical practice and spiritual experience in just the same way as a grove of trees in an ancient forest.

Having considered the bubbling synergy which lies at the core of technopaganism, and the eclecticism, humour, reflexivity and playfulness with which this group approaches the high-modern world, I have revealed the technopagan identity as worthy of exploration on a several levels. The technopagan, enacted through individual praxis, the formation and sustenance of communal events and spaces, and through the distribution and digestion of forms of writing and community, is useful to investigate the ontology of practice, and the validation of experiential knowledge. To emphasise the significance of the technopagan even further, I have positioned this hybrid agent not dissimilar to Haraway’s cyborg. In this way, I have argued that the technopagan is a key figure within the context of sociotechnical reality today.
Whilst it has been a goal of this thesis to thoroughly blur the line between the metaphorical and material elements of the technopagan identity, it has also been necessary to detail these two elements somewhat separately. Having just detailed ways in which the technopagan manifests in material spaces and places, it is important also to address the existence of the technopagan as a metaphorical creature in a similar vein to the cyborg of Haraway’s imaginings. That is, that whilst cyborg states can be imagined in material ways, such as our human reliance on non-organic prostheses or technological devices which aid us in day to life, it is the ontic status of the cyborg which is most significant in philosophical investigations of this kind.

The argument I assert here is that there are ways in which technopagan status can be read upon individuals who may not consciously see themselves as technopagan, in the same way that cyborg status may be similarly assigned. The metaphorical state of ‘technopagan-ness’ is the state of organic communion with technological modes of being in contemporary culture. These states are ontologies wherein the organic and the technological reside within a single being. The technopagan as metaphor speaks to convergent states of hybridity, wherein ecological sustainability can be fruitfully served within digital networks. Technopaganism as ontology and a metaphor then, is the condition of being-in-the-world in contemporary culture which recognises both the technological and the organic as fundamental components of being.

Technopaganism as metaphor too, in its embrace of the convergent and the complex, brings diversity into the foreground as a core element of being-in-the-world. It is for this reason that the technopagan is positioned as an exemplary figure for feminist analyses, and also for considerations of race and ethnicity. In the same way that ecofeminist
philosophy argues for the consonant consideration of the roles and influences of gender, race and ethnicity alongside one another, so too the technopagan metaphor operates to represent agency which is considerate and congisant of the range of influences and markers of identity which constitute being. In particular, those markers of identity which have traditionally been stratified according to a dualistic system of value are encompassed in more egalitarian ways. The technopagan as a metaphorical identity has no pre-assigned race, ethnicity, gender, or class, and ontologically can encompass any configuration of these traits into states of being. The hybridity of the technopagan is what allows for these re-imagined combinations to take place, and for the old hierarchies and binaries to be challenged and creatively positioned.

I have suggested how the technopagan has operated as a figure which can bring cyberculture, feminism and technology, and identity together. Specifically, I have argued that the technopagan can be employed as a *hybrid* identity, and considered in conjunction with and in contrast to, Haraway’s cyborg and its oppositional other, the goddess. It enters conversations about the philosophy of technology to assist inquiries into the ways we understand and interact with the various forms of technology with which we increasingly interface, redefining the human-technology relation. The technopagan informs and is informed by the notion of relationships between actors in the network, as an operative, connective node. Applying the Latourian concepts of hybrid states and the Actor-Network Theory analysis to the technopagan allows us to conceptualise the active nature of human-technology relations, and to better understand the mutuality with which these relationships are formed. Consequently, these discussions led into fuller understandings about embodiment, gender and technology and environmental sustainability. On this level, I have posited that the technopagan
offers much to inquiries into avenues for ecological sustainability, feminism and technology, and provides a rich canvas upon which to muse upon our current worldview(s), and our attempt to find ways of engaging with the world and its inhabitants which avoid separation, dualism and hierarchy. As a transgressor of boundaries, as an embracer of contradiction, and as an embodiment of the love and reverence for both nature and technology, and indeed as a champion of the falsehood of the nature/technology split, the technopagan has formed a significant and worthy subject of inquiry.

As a hybrid identity of cyborgic form, the technopagan has offered avenues for considering the construction of a real-world identity which sees itself as truly and explicitly hybridised. This project is relevant to feminism, ecofeminism, ecology and the philosophy of technology — especially in the wired world where it could be argued that the crossing of boundaries between self and other, machine and organism, is in some ways facilitated with more ease than has been possible in the past. The technopagan identity forms itself intentionally at the boundaries of things — right at the (new) edge, in between the worlds; it is an identity which seeks out fractures, contradiction and irony. In Chapter One, the identity which emerges from ecofeminist forms of spirituality is the goddess. A figure critiqued in broader feminist circles for her purity and essentialised femininity, I have argued that her position as oppositional to Haraway’s cyborg requires re-examination. Haraway’s cyborg, as a material-semiotic actor, has been widely recognised as a promising and revolutionary figure for feminist politics in the technological present. I have argued for an alliance between the cyborg and the goddess, suggesting they share much as contemporary agencies and philosophical constructs useful to feminism. This argument positions the cyborg and
goddess in allegiance, as van Dooren notes: “the goddess and the cyborg in Haraway’s work, despite their differences, are figures who are bound together in political and spiritual struggle to negotiate a liveable world; in short, they are figures that are bound together in solidarity” (van Dooren 2005, 49). It is in the technopagan identity that I suggest both the goddess and the cyborg may merge.

I have also argued that the technopagan embodies the material-semiotic actor, as shown in its real-world manifestations throughout this chapter, the material links between computer technology and technopagan practice, and through its neopagan loyalty to embodiment. The ‘meaning’ of the technopagan resides in its hybridised state within naturecultures, and as a boundary-crossing identity embedded within complex networks of human and nonhuman actors. The hybridity of the technopagan seeks not only to transgress boundaries, but to dissolve or at least make a mockery of, dualism and its associated concepts, collapsing and converging these boundaries. In so doing, technopagans overcome binaries through the network vision of dispersed and decentralised intersections of agency.

Influenced by the analysis of technology presented by Ihde, I have located the technopagan as a simultaneously high-modern and ancient figure formed through human-technology relations. In so doing I suggested the technopagan identity can illuminate the search for meaning and understanding in a world wherein we perceive ourselves to be thoroughly surrounded by and embedded in technology. Through Ihde’s philosophy of technology I have analysed the role technology plays within our lives and within the history of humanity, and I assert that the technopagan identity can inform this
search in ways that understand and incorporate the relational ontology of humans and technology.

A technopagan interacts with and perceives the role of technology in ways which often deviate from traditional understandings of technology as ‘other’ or as simply tool. For example, the re-contextualising of ancient sites like Stone Henge established that neopagan worldviews are not necessarily regressive or anti-technological. Ihde’s analysis demonstrated that ancient societies can be seen as advanced tool users, revealed through the use of time measurement devices like Stone Henge, such that spiritual pursuits which affirm these practices and societies can be re-cast not as regressive, but contemporary. Ihde locates the human-technology relation as a primary relation, such that it forms the foundation of what it means to be human. Ancient pagan societies and modern neopagan rituals are both shaped by engagements with technologies, such that the tools of ritual, space, place and time converge. Tools like ritual wands, candles, robes and cauldrons are all forms of technology which actually announce neopagan connections to nature. When technologies are interpreted in this instrumental fashion, human-technology relations can be seen to affirm, not reject, human ties to the natural world. By extension, the technopagan use of the ritual technologies of Local Area Connections (LANs), modems, screens and online spaces are similarly technologies of connection to the sacred and to nature. They articulate a human-technology relation embedded within the more-than-human-world, not removed from it. Thus technopaganism can effectively reconfigure human-technology relations and notions concerning communion between nature and technology, in practical, logical and fruitful ways.
The relevance of the technopagan as an identity in a philosophical context is further advanced by insights drawn from Actor-Network Theory. Actor-Network Theory seeks to understand the way relationships are formed in communion with others — and these others may be other people, technologies, objects and so on. ANT has “helped to destabilize Euclideanism: it has shown that what appears to be topographically natural, given in the order of the world, is in fact produced in networks” (Law 1999, 8).

Euclidean geometry feeds the idea that we can extract from nature, through scientific practice, order and linearity in uniform fashion. Despite elements of geometrical conformity in nature, it is mistaken to perpetuate the idea that all knowledge can be made to conform to such a rigid model. Objects do not exist in isolation, but rather in conversation with other objects within a network of interwoven relationships. Reading this analysis against the technopagan identity contributes much to this discussion. The technopagan is an identity constructed in conversation with technology; an identity which converses and communes with technology and objects of knowledge in ways which are potentially liberating and which informs our understanding of our relationships to human and nonhuman agents. This idea can be expanded through the consideration that agency explicitly includes nonhuman animals, organic and inorganic beings, and that their roles within networks are centrally important to any philosophical inquiry, particularly when that inquiry is driven by environmental ethics. Despite Latour’s reservations about the network metaphor in Actor-Network Theory, I have suggested that the web itself highlights and foregrounds the role of networks as centrally important in our lives. Nevertheless, I have argued web worlds contain an array of potential but can equally be limiting and restrictive spaces which should be approached critically.
I have suggested that technopagan worldviews resemble the Anthropological Matrix Latour identifies as existing prior to Enlightenment theories which constructed the Great Divide in disciplinary knowledges. Specifically, Latour identifies a pre-Enlightenment era wherein the disciplinary boundaries of specialisation we know today did not exist. At this time, science, poetry and weaving formed part of the same overlapping framework in which the world is revealed. This worldview is named the Anthropological Matrix. Latour notes we ascribe this Matrix ontology to indigenous cultures, but never to ‘our’ Western, so-called Modern culture. Enlightenment era changes compartmentalised and specialised knowledge, creating disciplinary divides such as medicine, literature, geometry, and anthropology, in which the world is separated out into discrete ways of knowing, what Latour calls the Great Divide. It is this partitioning of the world which actually allows hybrids to exist, as they are created through the necessary, but denied, agentic networks which cut across these false boundaries. As the hybrids proliferate, the boundaries steadily collapse, and Latour argues the marker of our current era is that of the collapse of the Great Divide. The technopagan identity, as inherently hybridised through its reverence toward nature and technology and its irreverence toward disciplinary knowledge borders, embodies the convergent boundary-less matrix Latour describes. Neither technophobic nor technophilic, the secular spirituality of technopagan identity challenges the binaries of the Great Divide. Instead, it embraces the convergent networks of contemporary, digital culture.

The technopagan identity is a material-semiotic actor; manifested in both real-world and metaphorical signification. Hybridised in character, the technopagan offers a bridge between cyborg and goddess, essence and construction, and technology and nature. The
technopagan rejects the totality of constructionist models and is simultaneously suspicious of claims to purity and essences. Technopagans are constructions of agency which properly incorporate Haraway's breached boundaries between science fiction and reality. They dwell in fantasy and facticity, recognising both as valid elements in the construction of reality. In the digital present, this hybrid figuration of agency as simultaneously embodied and signified is deeply appropriate in serving the goals of feminism, environmentalism and spirituality. Taking the spiritual, occult and mystic legacies of earth-based spiritualities and adapting them to a digital world of virtuality, the technopagan embodies appropriate human-technology relations, sustainable ecological philosophies, feminist politics, and a commitment to embodiment, praxis and community.
Coda
Coda

Paganism, magic, minds, Earth science, and e-mail have joined together to form a vortex/node in the web of life where many strands intersect and connect (NightMare 2001, 35).

The 2006 Australian Census showed the numbers of people identifying themselves as neopagans to be at around 75,000 (Andrew 2007). This figure has tripled from the 24,000 people in the 2001 census, and is almost ten times higher than the 8,000 respondents in the 1996 census. Bolstered by the strong assumption that due to the negative sentiment still attached to neopagan groups, many people do not identify themselves as neopagans in censuses, this figure may be in truth be far higher than this already exponential growth. Over 30,000 people attend the winter and summer solstices at Stone Henge each year, adding to the evidence that neopagan groups and interests are on the rise as the turnout grows with each solstice.

Concurrently, we witness a torrent of neopagans entering a new sacred space, cyberspace. The internet has reminded us of the ways things interconnect, and how information and education are crucial to responsible engagement with the world. Neopagans have been particularly comfortable with the medium of the internet. Resonating with the concept of the web, neopagans comprehend cyberspace as a new dimension of engagement and interaction within the realm of existence. In so doing, they move with ease into this new space, conjuring an identity which is flexible, dynamic and progressive. Neopagans online articulate that agency is not merely confined to humans, and can even extend beyond nonhuman animals to encompass computers, network cables and the virtual, nonmaterial spaces of cyberspace. Connected to and excited by technological innovations, they do not turn from their organic roots, but rather see harmony between the natural and the technical, inspired by one to sustain
the other. In so doing, they articulate a deep engagement with the world around them. Neopagan interests span from politics, ecology and social justice, to the sustenance of their spiritual pursuits.

As I outlined at the beginning of this thesis, critical theory has attempted to understand the nature of the three phenomena which form the cornerstone of this study: the rise of digital, networked technologies, the growth of secular spiritualities, and the burgeoning environmental crisis. The exponential rise of digital technologies and their role in our everyday lives have called into question the nature of human identity. Electronic interaction, virtual communication and online worlds have revealed a creative explosion of possibilities. The emergence of cyberspace has been an unexpected site for cultural growth and interaction, offering surprising avenues for social interface, information dispersion and political action. Philosophical questions regarding the nature of the self, the role of the body and concepts of truth are all challenged through these new forms of human-technology relation. To explore and understand the significance of this new phenomenon of digital worlds in the context of questions relating to existence and agency has been a goal of this project.

As our digital world expands and flourishes, our non-digital, organic world is being pushed to its limits. Population growth, resource depletion and the looming effects of global warming have alerted us to our dependence on natural systems to survive. As global citizens become cognisant of the effects of human impact on the planetary ecosystem, the need to implement change becomes apparent. While I have argued the change required needs to be philosophical and radical in nature, slowly and steadily, human behaviour is beginning to change. In the coming decades some of the greatest
challenges to humanity will relate to our ability to sustain the nonhuman world and ensure its ongoing integrity, for its own sake, and for ours. The need to reduce our consumption, to find alternative power sources, and related environmental concerns are issues which must be confronted in the context of technological and digital development. Technological growth, particularly as it manifests in forms of industry, presents unprecedented challenges to the integrity of ecosystems. Meanwhile, digital technologies appear to draw us ‘away from’ the natural world and toward visions of a disembodied future. The need to attend to ecological finitude and sustainability in many ways seems contrary to these technological developments I have previously described. It has been my contention that what is needed is a way to allow these two issues to reside together. Rather than seeing these phenomena as incongruous, I have argued that if we can find epistemologies and ontologies which can incorporate these concerns in complementary ways, we will move toward solutions to the ecological crisis without needing to turn away from technological development.

The fundamental shifts in epistemological and ontological engagements with the digital and natural worlds I argue for might be encompassed within a ‘spiritual’ framework. Through a consideration of ‘secular spiritualities’ and specifically neopaganism, I have suggested a way out of the Western philosophical trap of juxtaposing nature and technology. Instead, secular spiritualities like neopaganism offer pathways where reverence of the natural world and immersion in digital, networked spaces co-exist and even mutually inspire each other. Contemplating agency as forming through a synergy of the natural and the technical, and allowing for communion between these spheres is an issue that lies at the heart of this thesis.
In this dissertation I have offered a model of agency, made flesh in the form of the technopagan, in order to conduct a discussion around the issues I have identified in relation to the rise of cyberculture, the burgeoning environmental crisis and the growth and significance of secular spiritualities. To move beyond the tension between ‘anti’ and ‘pro’ technology stances — especially as they exist in feminist and environmental philosophies — I presented the technopagan as a figure which traverses both these spheres. By connecting both to notions of divinity in nature as well as to the worlds of digital technology this identity effectively merges the spheres of technophobia and technophilia. The technopagan offers ways to think through the human-technology relation without the need to resort to appeals to either holistic naturalness or utopian digital perfection freed from the constraints of imperfect nature. This identity also effectively encapsulates an ontology which finds either of these appeals to ‘techno-topia’ or ‘back-to-the-trees’ to be impossible and ineffective. Technopagan ontology recognises that claims to purity are based on false assumptions about the human-technology relation and the human-nonhuman relation. Instead, this ontological engagement recognises a form of human agency which is borne of both natural and technological elements, and that moreover, the very spheres of nature and technology have become so ruptured that we are ultimately hybrid compositions of these indeterminable and inextricable aspects of being. To more fully understand the nature and significance of the human-technology relation, I employed the technopagan as an identity which properly incorporates and represents these relations in a responsible manner. The responsibility to which I refer is the concept I introduced in the introduction, where responsibility entails care and investment in the relations of being-in-the-world. Responsibility thus involves situated, connected, and attached modes of being. Using the technopagan as both a real-world, material manifestation of agency and
as a metaphorical construct around which to consider these issues, I have argued for fruitful outcomes embodied in this figure. Technopagan agency is distinctly hybridised, offering one example for a re-imagined ontology of connection, intersection and partiality in a dynamic, creative and finite world.

This thesis began by examining a dissatisfaction emerging from within ecofeminism. Ecofeminist theory has identified important connections between ‘women’ and ‘nature’ embedded in Western patriarchal thought, providing valuable contributions to the fields of environmental philosophy and feminist theory. Despite these insights, ecofeminism has become mired in debates between those wishing to endorse a ‘special’ connection between women and nature, and those wishing to deconstruct the concept of ‘woman’ altogether. Mindful of the strengths and limitations of both of these approaches, in Chapter One I analysed ecofeminist theory as a body of work, and deliberated on the debates which exist within the movement. Exploring the woman-nature connection as delineated through Karen Warren, and expanding this analysis through an investigation of the intricacies of dualism as presented by Val Plumwood provided the framework for understanding ecofeminist theory. The celebrations of traditional forms of ‘femininity’ suggested by some ecofeminists, embodied in earth-based spiritualities centred on goddess worship were explored as potentially positive actions within a patriarchal environment. The consequential critique of these approaches as essentialist and as potentially hindering feminist goals was argued through feminist theorists Janet Biehl, Chris Cuomo and Val Plumwood. However behind these critiques lie problematic assumptions about the practices they target. Critiques of ecofeminist spiritualities also make assumptions about deconstructions of femininity which require critique. I attended to these criticisms through a series of theorists who suggest that despite their essentialist
leanings, dismissal of earth-based spiritualities which seek to empower women would be unwise. The landscape of ecofeminist debate was then concluded as I explored the strengths and weaknesses in both the fields of ecofeminist spiritualities and critical ecological feminisms, and suggested that drawing both of these approaches into a single philosophical framework may be more successful. Finally, I highlighted a tendency within ecofeminism generally to approach technology with suspicion and wariness. Despite highlighting the patriarchal influences on technology, and the consequent need to critique the masculine bias of technology, ecofeminists require a new approach which properly acknowledges the role of technology and its potential for projects of liberation and equality.

Ecofeminism has not been the only branch of feminism to struggle with the concept of technology and its links to patriarchal culture, thus in Chapter Two I explored feminist approaches to technology more generally, before looking in detail at the emergence of cyberfeminism as a popular contemporary approach to technology within feminism. Feminism as a body of theory offers meaningful approaches to agency, deconstruction, embodiment, hybridity and critiques of technoscience which are all useful to my project. Critical theories of cybercultures, and specifically feminist approaches to technoculture as embodied in cyberfeminism, have offered some worthy alternatives to feminist technophobia, capturing a sense of optimism toward our increasingly technological world. At the outset of the chapter I explored technoscience and the feminist critiques of technologically embodied science. The strong feminist history of analysis and critique of the supposed value-neutrality of science was discussed in order to begin the process of destabilising claims to truth and objectivity. I then moved to
more broadly consider feminist approaches to technology, with a focus on the cultural
significance of the role of technology.

The emergence of cyberfeminism in the 1990s was presented along with the feminist
technophobia which contrasts against this approach. The rise of cyberfeminist debates
concerning technology, and the resultant conflicting approaches as to how to tackle it
were motivated in part by the emergence of the cyborg in popular culture and critical
theory. I outlined the rise of this figure, and placed it against its ‘opposite’ the goddess,
in order to develop considerations of the strengths and limitations of both figures. The
endorsements of the cyborg in cyberfeminism, and the endorsement of the goddess in
ecofeminist spiritualities outlined in Chapter One, were considered in order to present a
balanced critique of the role and significance of both of these agencies. Emergent from
this critique was the recognition of the problems of essentialism relating to the goddess
and earth-based spiritualities of ecofeminism, alongside the inherent problems with the
pro-technology, utopian stance embraced by cyberfeminists. The cyborg is identified by
its embodied state, whereas the goddess could be cast as a disembodied agent outside of
materiality. The goddess need not be a hierarchical, immaterial figure, but can manifest
in mundane, contained spaces of the body, as invoked through neopagan worldviews,
while the cyborg can be viewed in both its embodied and symbolic state as a post-
human state of being. The reconciliation of these figures, and an emphasis on their
continuity over their differences was one of my core goals.

At the conclusion of these two chapters, it was clear that flaws exist in approaches
which are either too quick to endorse a technological future or those which argue for a
turning away from the technological history of humanity. To develop the discussion of
approaches to technology, in Chapter Three I explored a variety of alternative approaches to the human-technology relation. The diversity of critical discussion surrounding the role of technology in relation to the identity of the human was presented through a series of theorists whose work informed this study. Don Ihde was first employed to build a definition of technology through a series of criteria which allowed for thinking through technology as ‘high’ or ‘low’, and to variously understand the roles technology can play in the construction and agency of the human. Comparing and contrasting Ihde’s approach to that of Martin Heidegger allowed for a deepening of the complexities involved in how we think of technology and its role in relation to the concept of science. I then dealt with Ihde’s concept of Instrumental Realism, highlighting the inextricable links between science as a mode of thinking and the tools involved in this process, followed by a deliberation of the various kinds of human-technology relations Ihde details. At the conclusion of this analysis, I was able to argue for a reconfiguration of the perception of ancient sites such as Stone Henge from ‘primitive’ to ‘technological devices’. More broadly, this allowed for a reconsideration of neopagan practices — widely regarded as regressive or anti-technological — to be understood as deeply engaged in technological interaction.

Contrasting Ihde’s approach to technology, which maintains a distinction between the human and technology, I turned to Bruno Latour for an approach which entirely ruptures the notion of such a division. Latour’s assertion of the concept of agency in networks was presented as a valuable contribution to understanding the technoscientific process of relations and interactions. I have positioned the technopagan as a hybrid identity in this study, using both Latour and Donna Haraway to do so. In Latourian terms, I used the concept of the proliferation of hybrid agencies in the ‘modern’ world
to demonstrate how a technopagan identity is manifestly hybridised. This ‘modern’ world was contrasted against a consideration of the non-modern concept of the Anthropological Matrix, in which Latour asserts an overlapping, intersecting matrix of knowledge, contrasted against the ‘Great Divide’, the contemporary disciplinary boundaries of specialisation and separation. I took up Latour’s proposition of the Anthropological Matrix as articulating a methodology sympathetic to technopaganism, in which seemingly disparate, disconnected areas can be drawn together as a series of overlapping interests and influences. Latour’s role in Actor-Network Theory along with fellow ANT scholars was outlined in order to expand on this concept of a transition from ‘humans and technology’ to a circulating series of relations which occur between a variety of agents which may be people, objects or forms of knowledge. I attempted to circumvent some of the definitional obscurity of ANT by applying it to a technopagan event — Burning Man — to demonstrate how ANT could be applied to a real-world activity. I was able to conclude this section with an understanding of ANT as able to draw out significant elements of technopagan agency relevant to this study, in particular with regard to the dispersal of agency within networks.

Donna Haraway, whose work regarding the material-semiotic actor shares a consonance with Latour’s socio-technical hybrid, was used to deepen the analysis with a feminist focus. I began by outlining Haraway’s contribution to feminist critiques of technoscience, charting the question of objectivity in science and her endorsement of the feminist notion of ‘situated knowledges’. This analysis allowed me to strengthen the argument for the destabilisation of the authority of science and to promote the importance of partial, fragmented forms of knowledge which when gathered together, can form a picture of objectivity redefined in Haraway’s terms. I then explored the
material-semiotic actor which figures in Haraway’s work, and discussed how the technopagan constitutes such an actor. The technopagan demonstrates both the material and semiotic qualities Haraway defines, and illuminates the significance of materiality and meaning bound up in our understanding and experience of agency. I concluded my engagement with Haraway through a re-visitation of the cyborg figure, central to Haraway’s scholarship, and a key figure in this dissertation. The cyborg was outlined as pivotal to discussions concerning feminist critiques of technoscience, the concept of hybrid identities in contemporary culture, feminist considerations of embodiment and questions regarding essentialism. I concluded with the assertion that the technopagan is kin to the cyborg, as a material-semiotic identity which dwells in partiality, hybridity and technological composition.

These three chapters formed Part I of the dissertation. Emerging from these chapters was a community of actors whom I position as critical to this study, and yet often dissonant: goddesses, cyborgs, hybrids and material-semiotic actors. At the outset of Part II I argued in the Interlude that I would draw these figures together and highlight their continuities. I suggested that in deliberating on the emerging figure of the technopagan could be found a conceptual and material space capable of holding together this community of actors in revolutionary and sustainable ways.

As the picture of the technopagan developed through this study, it was necessary to reflect on the ways in which the technopagan is neopagan in its ontology and praxis, and to investigate the relevance of this form of spirituality in the context of the thesis. In Chapter Four I outlined neopaganism generally in terms of a broad, varied group which is growing rapidly in contemporary Western culture. To develop the neopagan
worldview, I presented a brief etymology of terms relating to neopagans, thus showing the connotations and influences attached to neopagan practice and belief, and the related historical events which precipitated these connotations. This definition was heightened through a historical analysis of neopaganism, charting its rise from prehistory, to recent occult resurgences in the past few decades. I also set out a typology outlining the variety of neopagan beliefs and sub-groups. I attempted the difficult task of defining this diverse community by considering what they share ontologically. Contemplations of existence illuminated a great deal about neopagans and their beliefs, assisting in my task of drawing a picture of how these ontologies might be valuable in the context of my project. I deepened the picture of neopagan ontology through an exploration of neopagan praxis, with a focus on what neopagans do which defines them as neopagan.

In presenting a balanced and critical approach, I concluded the chapter with an analysis of the potential limitations and theoretical problems with neopagan belief and practice, further contributing to considerations of essentialism in spiritualities, and feminist concerns relating to goddess and earth-based spiritual traditions. Mindful of these limitations, in the final chapter I moved toward a model of technopaganism which considers and incorporates these critiques of neopaganism, and which also highlighted some of the errors in assumptions about modern neopagan belief.

Drawing together all the arguments made thus far, in Chapter Five I used the technopagan as an identity which can appropriately address the issues raised in the dissertation. At the outset I charted the histories and spaces which I suggest gave rise to technopagan ways of being, such as online Role-Playing Games and countercultural movements of the ‘60s and ‘70s. The technopagan figure has received only minimal theoretical attention, so I began by outlining the existing material relating to
technopagan identities. I developed the concept of the technopagan though a bi-level analysis of individuals embracing this identity: on the first level are technopagans for whom the internet is a tool, a device which can supplement and complement their existing occult practices, and on the second level, I investigated technopagans for whom the internet offers a radically different space, a magical space, a form of reality and ontological affinity in which to commune and practice ritual. In so doing, I highlighted the value ‘real world’ individuals generate in this identification, and the critical value in employing the technopagan as a metaphorical vehicle for considering issues relating to identity in the context of digital technology, environmental crises and secular spiritualities. I then considered other formations which could be considered technopagan in flavour, attending to the large scale event of Burning Man as a way to enrich the picture of what constitutes technopaganism. Finally I examined the conceptualisation of technopagan agency, wherein I positioned this figure as a material-semiotic actor. Similar to the cyborg in its philosophical role, I argue for the ability of the technopagan to embrace the concepts raised in this thesis while successfully avoiding the limitations identified in previous attempts to generate such metaphorical figures, as seen in the goddess figure, for example. I concluded the chapter having presented an identity which is capable of appropriately attending to the philosophical challenges brought by ecofeminism, cyberfeminism, and philosophers of technology.

The technopagan has been offered in this thesis as a way to consider a twenty first century construction of agency which properly attends to the threefold issue I have raised, and as an appropriate embodiment of human-technical relations. In identifying within ecofeminism a tension between those theorists wishing to endorse earth-based spiritualities and their reverence of goddess figures, I recognised the need to address this
tension constructively. Mindful of the critiques raised by ecofeminist scholars of the essentialist dangers inherent in goddess-centred neopaganism, I sought a model for agency which could still embrace neopagan practices. I further identified shortcomings in the critiques of these forms of neopaganism, and wanted to uncover forms of neopagan practice which were not culpable of essentialism in the ways previously outlined. I also set out to show how neopaganism does not necessarily display technophobic properties, as is often suggested by critics of neopagan practice. Recognising the technophobia within elements of ecofeminist and environmental philosophies too, I demonstrated how identity could be shaped in ways which were ecologically reverent, politically motivated, feminist, and which avoided technophobia. Conversely, in search of these models, I explained how ‘replies’ to these tendencies within feminism tended toward a technophilia which is just as limiting and dangerous as the technophobia it sought to thwart.

Exploring the feminist cyborg, and related philosophies of technology, I argued for an agency which appealed to hybridity instead of purity, and which was capable of capturing the complexity of overlapping interests. In a feminist theoretical discourse which set out a battle between the goddess and the cyborg, I argued for a figure which could successfully embody both of these agents without recourse to the limitations of each. The agent able to embody these complexities is the technopagan. A figure which challenges the assumptions that neopagans are anti-technology, or regressive in their outlook, the technopagan embodies a contemporary formation of agency developed in the context of a digitally connected, dynamic, yet ecologically fragile world. Illuminating the existence of hybrid identities like the technopagan, allowed for considerations of agency which circumvent the existing debates I have outlined.
This thesis has sought to challenge dichotomies of spirit and politics, technology and nature, nature and technology, and mind and body. I have argued that occult interests do not and are not necessarily in conflict with the disciplines of science. Even Isaac Newton was an occultist, and many of his scientific ideas were inspired by those occult interests. Technopagans too, marry their occult interests with their technological know-how to dynamically live out an ontology which does not see separation between science and the occult, nature and technology, or the mind and the body. Technopagan identities draw together diverse interests into a web of interaction and interconnection in which these interests inform and inspire each other. Neopagan rituals held online, cyber-sorcery and grass roots activism converge in the technopagan framework to undermine and challenge dualistic, divided modes of thinking. Learning to think of ourselves as organic yet technological, scientific yet spiritualised, one and yet many, paves the way for a future which can better achieve sustainability. The technopagan challenges the dominant modes of thought, while still remaining deeply engaged in the world which surrounds us, and holds the potential for a responsible future.
Appendices
Appendix 1

The Informatics of Domination

Representation
Bourgeois novel, realism
Organism
Depth, integrity
Heat
Biology as clinical practice
Physiology
Small group
Perfection
Eugenics
Decadence, *Magic Mountain*
Hygiene
Microbiology, tuberculosis
Organic division of labour
Functional specialization
Reproduction
Organic sex role specialization
Biological determinism
Community ecology
Racial chain of being
Scientific management in home/factory
Family/Market/Factory
Family wage
Public/Private
Nature/Culture
Co-operation
Freud
Sex
Labour
Mind
Second World War
White Capitalist Patriarchy

Simulation
Science fiction, postmodernism
Biotic component
Surface, boundary
Noise
Biology as inscription
Communications engineering
Subsystem
Optimization
Population Control
Obsolescence, *Future Shock*
Stress Management
Immunology, AIDS
Ergonomics/cybernetics of labour
Modular construction
Replication
Optimal genetic strategies
Evolutionary inertia, constraints
Ecosystem
Neo-imperialism, United Nations humanism
Global factory/Electronic outage

Women in the Integrated Circuit
Comparable worth
Cyborg citizenship
Fields of difference
Communications enhancement
Lacan
Genetic engineering
Robotics
Artificial Intelligence
Star Wars
Informatics of Domination

(Haraway 1991b)
Appendix 2

The Charge of the Goddess

Listen to the words of the Great Mother, Who of old was called Artemis, Astarte, Dione, Melusine, Aphrodite, Cerridwen, Diana, Arionrhod, Brigid, and by many other names:
Whenever you have need of anything, once a month, and better it be when the moon is full, you shall assemble in some secret place and adore the spirit of Me Who is Queen of all the Wise.
You shall be free from slavery, and as a sign that you be free you shall be naked in your rites.
Sing, feast, dance, make music and love, all in My Presence, for Mine is the ecstasy of the spirit and Mine also is joy on earth.
For My law is love is unto all beings. Mine is the secret that opens the door of youth, and Mine is the cup of wine of life that is the cauldron of Cerridwen, that is the holy grail of immortality.
I give the knowledge of the spirit eternal, and beyond death I give peace and freedom and reunion with those that have gone before.
Nor do I demand aught of sacrifice, for behold, I am the Mother of all things and My love is poured out upon the earth.
Hear the words of the Star Goddess, the dust of Whose feet are the hosts of Heaven, whose body encircles the universe:
I Who am the beauty of the green earth and the white moon among the stars and the mysteries of the waters,
I call upon your soul to arise and come unto me.
For I am the soul of nature that gives life to the universe.
From Me all things proceed and unto Me they must return.
Let My worship be in the heart that rejoices, for behold, all acts of love and pleasure are My rituals.
Let there be beauty and strength, power and compassion, honor and humility, mirth and reverence within you.
And you who seek to know Me, know that the seeking and yearning will avail you not, unless you know the Mystery: for if that which you seek, you find not within yourself, you will never find it without.

For behold, I have been with you from the beginning, and I am That which is attained at the end of desire.

*Traditional by Doreen Valiente, as adapted by Starhawk (Starhawke 1979)*
Appendix 3

The wheel of the year

The story of the wheel of the year begins at Samhain with the sexual union of the goddess (in the triple aspect form of the wise Crone) and god in the Great Rite, where conception takes place amidst the darkness of the coming winter. At Yule the son/sun is born who was conceived at Samhain. The birth of the son reflects the occurrence of winter solstice, the longest night and shortest day, heralding the birth of the sun. The dawn after winter solstice represents the gradual ending of winter and the onset of longer days and shorter nights. At Candlemas/Imbolc is celebrated the festival of light, the growth of the sun/son, a time for purification and preparation as the earliest signs of spring begin to emerge and is reflected in the goddess taking the form of the Virgin/maiden of youth. Ostara marks the first day of spring, and falls on the spring equinox. The earth shows signs of birth and growth as spring flourishes with new life and warmth. Fertility is celebrated at Ostara, marked by the painting of eggs as fertility symbols and in the planting of new seeds in the garden. In ancient Greek mythology, spring equinox is the time when Persephone returns from the underworld to join her mother Demeter, who celebrates her return by decorating the world with springtime. The maiden aspect of the triple goddess is celebrated at this time, as a symbol of fertility, growth, youth and new beginnings. The son borne of the goddess and god grows at this time as he reaches his own sexual maturity.
The wheel then turns to Beltane, known in the northern hemisphere as May Day, popularly recognised in the may pole dance. The goddess as virgin and the son pursue each other amidst their sexual awakening and they are joined at Beltane. Beltane marks the height of spring, where life has flourished to its fullest. This is a time of celebration, social gatherings and frivolity. From Beltane the newly joined virgin and son consummate their marriage and conception takes place. As the child grows within her womb, so too the crops and flowers grow with the approach of the Summer Solstice, which inverts the winter solstice, and marks the height of the sun’s power on the longest day and shortest night. From here the days will gradually become shorter as the journey begins towards winter again. Summer solstice sees the transformation of the Virgin to Queen and maturing of the son into her King as they rule the lands together. The coming darkness is represented in the arrival of a challenger, a dark lord, who wishes to claim the Queen as his own. The challenger and the King battle, with the King succeeding, but receiving a wound to his side in the process. Lammas is celebrated next as a harvest festival. Crops would be gathered and the fruits of harvest are celebrated. Lammas is an Old English word meaning ‘loaf mass’, the reaping of what has been sown in spring. In the myth the King weakens from his battle injury, and the Queen gives birth to the child conceived at Beltane.

Now the wheel turns to autumn, and the autumnal equinox known as Mabon. At Mabon the harvest reaches its high point, offering abundance, but also shows signs of the decline of the sun and the gradual onset of winter, as the earth returns to slumber again. As the child grows and the Queen nurtures him, becoming the Mother aspect of the

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81 The Maypole is understood to represent fertility. Some see the pole as a phallus and the ribbons of the pole represent the vulva. Others understand the red and white ribbons to represent blood and sperm.
triple goddess, the weakening King sees he must battle his own son to maintain his power. As they battle, they realise they are only fighting themselves, and so as they strike, they raise their swords, each delivering a fatal blow to the other. They both die, returning to the Underworld from whence they came. The Queen’s grief at the loss of her lover and son reveals to her the cycles of life and the necessity of both birth and death, and through this knowledge, she becomes the wise Crone aspect of the triple goddess. Living alone and in contemplation until Samhain, the Crone prepares to enter the Underworld again to find her new lover/son. As the wheel turns, we return to Samhain, to begin the cycle over again.
Appendix 4

You know you’re a technopagan if…..

If your athame has a SCSI interface...
If your OBE's begin with a netsplit...
If your priest robes conceal a pocket protector...
If you calculate the phases of the moon with Windows '95...
If your altar has a keyboard...
If drawing down a circle is a POST (power on self test)...
If you call the Watch Towers on your cell-tell...
If you do most of your correspondence by email and sign off with Blessed Be...
If you don't call it a ritual, you call it a Macro...
If you end a circle with Ctrl-Alt-Del...
If you have ever attached ribbons to a May Pole using a staple gun...
If you invite the God and Goddess to come online...
If you keep a Disk of Shadows (with encrypted backups)...
If you participate in online rituals more than you do FTF...
If you refer to eclectic ritual as cross-platforming...
If your Beltane ritual includes more than one news group...
If your candles have batteries...
If your cauldron is a crock-pot...
If your deities include Murphy and Gates...
If your drumming is done on a CD player (pre-recorded)...
If your herbs are always mail-ordered (express, overnight)...
If your idea of a great retreat has a Computer City, electricity, and a TV nearby...
If your incense is by Glade...
If your magic wand is a light pen...
If your magical name, email address, and online name are all the same...
If your magical writing is done in binary code or C++...
If your pentacle is made of computer chips...
If your technician complains about the wax and incense ash on your motherboard...
If, instead of asking what tradition someone comes from, you ask what operating system they run...
If your Yule ritual involves defragmentation...
If your coven is spread over a 12,000 sq. mi. area...
If your Book of Shadows has a 6-digit version number...
If you refer to deities using 3-letter acronyms (ODN, LKI, THR)...
If you do cord magick with ethernet...
If you ritually down your server for Samhain...
If your altar cloth is a mouse pad...
If, when your quarter candles burn out, the UPS backup system kicks in...
If erecting the temple entails formatting more than 4 disks...
If casteing the circle changes an (int) to a (float)...
If your Star Trek screen-saver signals when your meditation period is over...
If your Beltane ritual includes more than one news group...
If passing the cakes and ale entails using a /me command...
If your search for truth involves regular expressions...
If your familiar is a computer mouse...
If you draw down the moon using a light-pen...
If your cone of power has a surge suppressor...
If your tarot cards multi-task...
If your daemons collect news for you...
If your crystal ball has a horizontal-hold control...
If you refer to solitary practice as a stand alone...
If you tap into the collective unconscious using Netscape...
If your favorite deity has a homepage...
If the address of your covenstead begins with http://...
and finally, if your circle is a token ring...

Well, you just might be a TechnoPagan!  

82 http://www.ecauldron.net/humor06.php (accessed April 20 2008)
Appendix 5

Thee Temple ov Psychick Youth (TOPY)

www.topy.net — Thee Temple ov Psychic Youth (TOPY) — has existed for over twenty three years, and has built an impressive following in its time. A number of texts have been published by TOPY for initiates and interested parties to understand the sigil system and the TOPY network. In similarity with Discordian.com, TOPY articulates a desire to not ‘sleepwalk’ through the world. They state that “We are thee inheritors ov a world on thee verge ov suicide. As such we are faced with thee task ov reconstructing life on this decaying but lovable planet- its ethics, cultures, behaviour etc; or else remain fuel for thee death machine ov human existence”83. They similarly emphasise personal growth and transformation, independence and solidarity, the importance of creativity and intelligence to help find a way to re-imagine the world unconstrained by inherited notions of the ontological state of the world.

TOPY emphasises personal magic(k) without deference to a notion of god or mysticism, instead focussing on the processes of the brain as a tool to be magic(k)ally manipulated. Part of the emphasis on the self includes an open attitude towards sexuality and the body, including masturbation as a personal ritual of initiation for TOPY followers.

83 http://www.topy.net/network_intro.html (accessed April 9 2007)
Appendix 6

Blessing of a Leatherman Tool

Technopagan Blessing for a Leatherman Tool (or any other Multi-plier)

I call upon the earth, its iron given to forge this Tool,
I call upon the hacker spirit, driving us to explore, understand,
   improve, and create,
I call upon the Goddess, mother of the twins we serve, nature and technology.

Blessed be this Tool,
May it help its owner through difficult situations,
May it provide the abilities that would otherwise be lacking,
May its blades remain sharp, its pliers strong, and its steel untarnished,
May it serve long years, not failing before its tasks are complete.

Bless that it never be used to wantonly destroy,
May its implements be used as they are able, not forced into roles that they cannot fulfill,
May its pliers not pinch living flesh, nor its blades cut it, nor its bone saw be applied to it, except in emergency field operations,
May it be used to strive against entropy, to build up more than to take apart.

Let us strive to be as this Tool, strong, capable, flexible,
With a wealth of hidden abilities to call upon when needed.

Blessed be this tool,
May it be used in the service of the Goddess.

[anoint Tool with lubricating oil]

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Bibliography
Bibliography


Green, Bruce Seth. "Some Assembly Required." In Buffy the Vampire Slayer, edited by Joss Whedon, 44 mins. USA, 1997.


———. *Technoculture, Cultural Politics (Minneapolis, Minn.) ; V.3*. Minneapolis: University of Minnesota Press, 1991.


