

The Enigma of Web Interfaces: Cultural Aspects of Web Site Design

by

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BSc (Hons) in Information Systems

Volume I

This thesis is presented for the degree of Doctor of Philosophy of Murdoch University

2011

Declaration:

I declare that this thesis is my own account of my research.

.....
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ABSTRACT

This thesis investigates the role of cultural differences in the design and usability of web sites. Specific factors that affect localisation and internationalisation of web sites and user preferences are studied. The overarching research question is: *Are there differences in usability of web sites for users from different cultures?*

There are three areas of interest in this research: (i) Human Computer Interaction (HCI), (ii) Culture, and (iii) Localisation/Internationalisation. *HCI* focuses on the cultural factors affecting the usability of web sites. *Culture* is discussed in the context of HCI. Geographically disparate people use the Internet through web browsers. They may come from different cultural backgrounds and are likely to have different perceptions due to their cultural influences, which may influence their preferences for aspects of web interfaces. Challenges and opportunities regarding *localisation and internationalisation* of web sites are also examined. The methodology for this research facilitates the study of the impacts of culture on HCI in the context of the design of web sites and usability, specifically in terms of localisation and internationalisation.

An explorative pilot study of the materials, procedures and analysis techniques was undertaken. Due to the small number of participants in the pilot study, only limited statistical analyses are provided.

In the main study, 301 participants were divided into three almost equal groups, based on their preferred language (Australian English; Mandarin; International [primarily American] English). Each group responded to two of three virtual restaurant web site versions constructed for the experiment: (i) a localised version for Australian English speakers, (ii) a localised version for Mandarin speakers, and (iii) an internationalised version for speakers of other languages. Detailed statistical analyses of the quantitative data were compared with results from qualitative analyses of participants' comments on experimental web site versions.

The results demonstrate that a web site that uses an International version of web design, text and web interface elements is more usable to International group participants. Participants who chose Australian English or Mandarin as their Preferred Language did not display significant preference for localised versions of the web site. The participants, being experienced and heavy users of the web, were perhaps expecting to use International English, since it has traditionally been the dominant web language.

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ACKNOWLEDGEMENTS

First and foremost, I must appreciate the most important and dearest people in my life, my mum, dad and younger brother for their love, patience, understanding and countless support in various aspects of my life. I am deeply grateful to them and I cannot thank them enough for all they have done for me, despite being aware of my endless tumultuous circumstances. Although we were miles apart during my PhD journey, just knowing that they are always there for me whenever I needed their comfort from my numerous unspoken troubles, propelled me forward because of the special bond among us. They have been my main “engines” and “cheer leading team” in life. I dedicate this thesis to them.

I must also express many thanks to my aunty (Doreen) here in Perth who has been bringing me bags of food as well as items from the shops on several occasions despite having a busy schedule herself. When she advertises the attributes of vegetables as sweet, crunchy and juicy, I totally agree with her because that is exactly how she cooks vegetables. To add to that, she has been taking me out for lunches, dinners and bought me things. She basically buys the whole shop each time she meets me as I would like to express it. She has also been housing some of my things and me when I need it as well as fetching me to and from the airport whenever I go back to Singapore for holidays. In a nutshell, she is an awesome aunty to me.

My PhD supervisors, Emeritus Associate Professor Fay Sudweeks and Adjunct Associate Professor Andrew Turk are the reasons why I came back to Murdoch University to pursue further studies after having obtained an undergraduate degree with honours a decade ago. I must express my heart-felt gratitude to my supervisors for their excellent guidance, advice, encouragement, multi-coloured pen massacres, effort in

accelerating my PhD completion and co-authoring with me in a research paper that gave me the opportunity to speak at an international conference held in Amsterdam in 2008. The passion they have for research and the way they manage their busy schedule has grown on me, and I aspire to be excellent researchers like them. As such, I have always looked up to them as the “mother and father of research”.

I must give many thanks to the staff at the School of IT. Dr Lance Fung and Dr Kevin Wong, for the tutoring opportunities they have given me, Dr William Kenworthy, Shri Rai and Dr Kevin Wong, for allowing me to advertise my research project to their students during lectures and tutorials, Dr Tanya McGill, for her advice on quantitative statistical analysis, and Sue and Rosie, for providing assistance in administrative matters.

Assistance On-Campus and Off-Campus

I must thank Cheryl Matthews (Murdoch International) for her kind assistance in generating several letters as proof of my enrolment status at Murdoch for various purposes. I must thank all the friendly and helpful staff/patrons (Murdoch Guild Sports & Recreation Centre) who have made my workouts at the gym enjoyable. I must thank Vanessa Fernandez-Kennedy (Murdoch Alumni) for her kind assistance in forwarding my advertisement to recruit participants for my research project. I must thank Ray (Metior Editor) for posting my advertisement to recruit participants for my research project in the student weekly newsletter. I must thank Andy Jenkins (Australia Computer Society) for forwarding my advertisement for my research project. I must thank Dr Hwee Ling Lim for her kind assistance in forwarding my advertisement for my research project to her colleagues at UAE in Dubai. I must thank my uncle (Casey) for advertising my research project to his church members and my dad for forwarding

my advertisement for my research project to his colleagues in various parts of the world. Last but not least, I must also thank all the participants in my research project for their time and effort in responding to my online experiment because the success of my research project will not be possible without them.

I must show my appreciation to my partners (Vasin Chooprayoon; Kowit Rapeepisarn; Janjira Payakpate) in the “Miracle PhD Coffee Club”. We live by a number of slogans, namely, “Don’t Procrastinate”, “Eat Your Way To A PhD”, “Red Wine Is Good For You”, “Don’t Worry, Be Happy”, “Sing To Relieve Stress”, “Workout In The Gym”, “Land of Inconvenience, Drought, Famine and Isolation” and “We Will Survive”. As a result, we have in our possession a very unique plastic container labelled “PhD Survival Materials”, which gives birth to magical survival materials (with compliments from Vincent, Ken and Jennifer). Through good times, bad times, in sickness, in health, sober times, tipsy times, full times, starving times, stressful times, challenging times and fulfilling times, we persevered, endeavoured and encouraged one another towards completing our PhDs.

There are a few other PhD friends whom I must thank for making my PhD experience richer. They are as follows:

Hwee Ling Lim (while she pursued her PhD) has been catching up with me over coffee at Sir Walter’s Café in Murdoch. Dr Susan Wong has been including me in her gym buddies group dinner and movie outings, inviting me to free food parties and a free musical, giving me dinner treats, sharing her PhD experience which included her white mulberry fruit harvest, and bringing along huge budgets of conversations whenever we catch up. Dr Christina Lee has been inviting me to take walks around the Swan River

accompanied by high-energy conversations, going for birthday celebrations, catching up over dinners, coffees, attending the Italian film festival and sharing interesting encounters during her PhD journey. Dr Christopher Wu has been chatting with me both online and in person, catching up over dinners and coffees. Goh Ong Sing (while he pursued his PhD) has been buying me lunches, driving the group of PhD friends for lunches off campus, and contributing to the entertaining lunch discussion topics.

My friends for a decade (in particular, Oi Bao Ying; Yeoh Siew Siew & Dr Alex Chong; Patricia Lee & Philip Lim; Sariah Sapongi & Jason Ho; Dr Vincent Lau & Dr Duoja) are very special people whom I have known since my college and undergraduate days in Perth, Western Australia. Sharing our joys, laughter, tears, sorrow, achievements, and failures has strengthened our friendship over countless lunches, dinners and special occasions. I must show my appreciation to this group of bosom friends who have stuck by me regardless of my life's dramatic episodes. They have also been relentlessly feeding me with lots of sumptuous cuisines (Singaporean, Malaysian, Indonesian, Thai, Korean, Japanese, Australian, American or Intercontinental) to appease my inhumane appetite which was magnified during my PhD years.

I must show my appreciation to my Thai friends in general (too many to mention) who have been so warm to me and have always included me in their social gatherings. I feel so comfortable in their presence such that I fit right in. I had the privilege to understand the culture, learn to speak a little Thai and learn to cook Thai dishes. In particular, I have mastered the raw papaya salad dish known as "Song Tum" because I have received a clear mandate from my Thai friends after preparing this dish for them.

I must also show my appreciation for friends made in Singapore and Australia (again, too many to mention) for all the online chats, offline chats, emails, face-to-face conversations, exercise sessions in the gym on campus, rides home, movies, coffees, lunches and dinners. These friends have been extremely supportive particularly, during my PhD journey.

Last but not least, I must thank the uncles and aunties (not related to me) here in Perth for their kind gestures, and the familiar faces on campus for their kind words of encouragement.

Thank you (“Ka Pun Ka”, “谢谢”, “Terima kasih”). God bless all of you.