## Ways of Seeing the World 不一樣的尺度 不一樣的世界



Prof. Li is awarded the prestigious Doctor of Science degree by his alma mater, the University of Glasgow. 李教授獲母校格拉斯哥大學 頒授科學博士學位。

Prof. Li Zhi-lin's fascination with the art of mapping began in his school years – after all, map, like music, is one of the most ancient languages in the world. Graduated from the Southwest Jiaotong University in the Chinese mainland in early 1980s, he subsequently studied his PhD from the University of Glasgow in Scotland, and began researching in digital mapping at the University of Newcastle upon Tyne while he was working as a postdoctoral research associate in the 1990s.

"The issue of 'scale' is at the heart of the art of mapping and all sciences," Prof. Li said, now teaching at PolyU Department of Land Surveying and Geo-Informatics. He joined the University in 1996 after working for various universities in the UK, Germany and Australia. "It has everything to do with what is made visible and what is hidden in a map, thus affecting the way we see the world we are living in." 理大土地測量及地理資訊學系李志林教授 對於地圖繪製這門學問的熱愛,始於他的 求學時代 地圖,就如音樂一樣,是世 界上最古老的溝通語言之一。李教授於八 零年代初在中國西南交通大學取得學士學 位,其後於蘇格蘭格拉斯哥大學 (University of Glasgow) 完成博士課程,繼而在九十年 代於紐卡素大學 (University of Newcastle upon Tyne) 任職博士後研究員,開展數碼測 圖方面的研究。

「『尺度』這個課題是地圖繪製及所有科學 的核心。」李教授說。他於一九九六年加入 理大前,曾在英國、德國及澳洲等地方工 作。「『尺度』決定地圖顯示或隱藏 甚麽 訊息,因而影響 我們對自己所生活的世界 的認知。」

「『尺度』是無所不在的。我們眼見的、所 用的一切,都建基於我們的世界觀。透過不 同的尺度,我們用不同的眼光去審視和記錄 我們所身處世界中的事物。」 "'Scale' is omnipresent in our world. Everything we see and everything we use is a result of a certain perception of the reality that we are living in. It is through the way of seeing that things are being perceived and recorded in our world."

The technology of digital mapping has opened new possibilities in mapping as it revolutionizes the discipline of map making. Whilst traditional maps are twodimensional and static with a fixed set of scale and variables, digital maps could be three-dimensional, dynamic and interactive as they allow users to adjust the scale and variables to be processed in the map.

For example, different shades of colors, combined with the function of animation, can be applied to detail the changes in rental value of a city during a given period. Users may simply click on a button to set the range of rental values and the period of time to be assessed and illustrated by the digital map device.

In his research on geo-informatics, Prof. Li has a particular passion in laying down the algorithmic foundation of multi-scale spatial representation in digital maps. In short, it is about the mathematic rules that govern what are to be reduced or included as one zooms in and out while using the digital maps, as detailed in Prof. Li's book, *Algorithmic Foundation of Multi-scale Spatial Representation*, published in 2007.

"With digitalization and personalization of map, zooming (multi-scale representation) technology becomes the key to the successful applications of digital maps," Prof. Li said. "For example, what to reduce when one downloads a map from a computer to a cell phone with a much smaller screen? What to include and what to omit as one uses the zoom in and zoom out functions to check out online maps, like those in the Google Map, for navigation?"

"If we could find out the mathematical/ algorithmic foundation behind the multiscale representation of spatial data, we don't need to frequently update maps at all scale and can speed up the process of updating smaller scale maps from alreadyupdated large scale maps, and make the updated information available to the mass users on demands." 數碼測圖這門科技為地圖繪製這門學科開拓 了各種可能性,並帶來了革命性的變化。傳 統的地圖是平面而靜態的,沿用一套固定的 尺度和視覺變量;數碼地圖可以是三維的, 且富有動態和互動性,可讓用者根據不同需 要而調校地圖的尺度和變量。

例如將不同深淺的顏色與動畫功能結合使用 時,一個城市於某段時期的租金變化就可於 數碼地圖上顯示出來。用者只需按一下鍵 盤,便可改變數碼地圖所測量的租金幅度和 時期,從而獲得不同的數據。

李教授在地理資訊研究方面,尤其熱衷於研 究如何為數碼測圖建立多尺度空間表達的算 法基礎。簡而言之,這就是為數碼測圖建立 數學與算法的規則,從而界定放大及縮小數 碼地圖的時候,如何取捨刪減或保留那些資 訊。有關方面的詳細學說,都已紀錄在李教 授於二零零七年出版的著作《多尺度空間表 達的算法基礎》(Algorithmic Foundation of Multi-scale Spatial Representation)內。

「隨著地圖趨向數碼化和個人化,縮放(多尺 度空間表達)技術將成為數碼地圖成功應用的 關鍵因素。」李教授說。「例如從電腦下載 地圖到顯示屏面積較小的手機時,應該包含 或刪減那些資訊?又例如利用Google 地圖等 網上地圖導航時把地圖放大、縮小,有甚麼 資訊應該被保留或刪減呢?」

> Prof. Li is internationally – recognized in the area of multi-scale representation of spatial data. 李教授在空間數據多尺度表達領域 享負盛名。





In Prof. Li's hands is the Gino Cassinis Award bestowed on him in 2008. 李教授於二零零八年榮獲Gino Cassinis獎項

Prof. Li's theories and algorithms in multi-scale representation of spatial data have since drawn international attention. One of his algorithms has been known as Li-Openshaw algorithm and has been researched intensively in international community. In his recent research monograph, he expanded operations in multi-scale representation from 12 to 40 and systematically documented his theories and algorithms for these 40 operations. In 2008, he received the Gino Cassinis Award from International Society for Photogrammetry and Remote Sensing (ISPRS), as his work "lays down an excellent mathematical/algorithmic foundation for multi-scale representation and digital map generalization". This year, he was conferred the degree of Doctor of Science by the University of Glasgow, for his internationally-recognized scholarship in the area of multi-scale representation of spatial data.

One can easily assume that, as a successful scholar, Prof. Li's life should be busy with paper work, research, teaching and conferences. However, when off work, the professor would find the time to enjoy the simple pleasures of life, including golfing, reading, and spending time with his wife and two sons.

"Research and study is only part of my life," he smiled. "It stems from a passion and curiosity for the world we are living in. I enjoy the exploration and reading to enrich myself, so as to see the world in a new dimension." 「如果可以為多尺度空間數據的表達建立好 數學或算法規則,我們便無需經常更新各種 比例尺的地圖,也就是,我們可從最新的大 比尺地圖直接更新小比率地圖。這個更新過 程可以加速,並讓公眾在任何時候都可以按 需要獲取最新資訊。」

李教授在空間數據的多尺度表達方面所提出 的理論及算法,在國際上享負盛名。當中, Li-Openshaw算法更被廣泛研究。他在最近 的專著中,把多尺度空間數據表達的操作由 十二個擴展至四十個,並系統地給出了該 四十個操作的算法。二零零八年,他榮獲國 際攝影測量與遙感學會頒發Gino Cassinis 獎項,以表彰他為空間數據多尺度表達及數 碼地圖綜合奠定了良好的數學/算法基礎。 今年,李教授更獲格拉斯哥大學頒授科學博 士學位,表揚他在空間數據多尺度表達方面 享譽國際的學術成就。

李教授作為一個成功的學者,日常生活充斥 文書工作、研究、教學及會議,忙得不可 開交。但在工作以外,李教授也會忙裡偷 閒,享受簡單的生活樂趣,包括打高爾夫 球、閱讀,還有與太太及兩名兒子共 天倫。

「研究和學習只是我生活的一部分。」李教 授笑說。「這源自對我們身處的世界的一份 熱愛和好奇心。我非常享受探索及閱讀的過 程,因為有助提升自我,讓我從嶄新的角度 去看這世界。」參

## A Passion for Hospitality Research and Education 熱誠投入 推動酒店及旅遊業教研工作

Prof. Cathy Hsu (middle) receiving the John Wiley & Sons Lifetime Research Achievement Award from Prof. Margaret E. "Mokie" Steiskal, Immediate Past President of I-CHRIE (right). 徐惠群教授 (中) 從國際酒店 餐飲及學術教育委員會前主席 Margaret E. "Mokie" Steiskal 教授 (右) 手中接過「John Wiley & Sons終身研究成就獎」。



The row of Coke cans from around the world displayed neatly beside the window in the office of Prof. Cathy Hsu, Associate Director and Professor of the School of Hotel and Tourism Management (SHTM), easily catches one's attention. They signify both her interest in travel and ties with the hospitality industry over the past 20 years.

A native of Taiwan, Prof. Hsu is renowned internationally for her diverse research on tourist behaviours. Since joining the School in 2001, she has expanded her scope of research and had more opportunities to exchange findings with academics in various parts of the world. "I try to carry something back each time," she said with a smile, referring to her favourite collection. "As our School became more well-known internationally, we often get invitations to speak at conferences. Psychologically everywhere is closer when you live in Hong Kong."

She could have remained in the United States, where she obtained her master's and doctoral degrees from Iowa State University in the 1980s. Before coming to Hong Kong, she had taught at Kansas State University. Prior to that, she was on faculty at Iowa State University for nine years.

Her decision to move to Hong Kong with her husband proved to be a fruitful one. It enabled her to conduct research on the burgeoning China market, at a time when SHTM was expanding its programmes in the Chinese mainland. The School is now offering postgraduate programmes in the tourist haven of Hangzhou and undergraduate courses in the historic city of Xi'an.

As the tourism industry in this part of the world experiences robust growth, Prof. Hsu believes more teaching and research opportunities will also emerge. "I share the belief that hospitality and tourism education will develop in Asia and may take over the American dominance that prevailed in the last century, because of the economic and tourism activities happening in Asia and the need for human resources to support the industry growth." 酒店及旅遊業管理學院副院長徐惠群教授辦 公室的窗台旁邊,整齊地擺放 一列世界 各地的可樂罐,這教人意會到她對旅遊的熱 愛,以及在過去二十年與酒店及旅遊業結下 不解之緣。

徐教授原籍台灣,她在旅客行為方面的多元 化研究是舉世聞名的。自二零零一年加入學 院後,徐教授的研究範圍更廣,並有更多機 會與世界各地的學者交流研究結果。「每次 外遊,我都帶一些特別的東西回來,」徐教 授看 她喜愛的收藏品笑說。「隨 學院在 國際間的知名度日漸提升,我們經常獲邀在 研討會上發表演說。身處香港,心理上覺得 與世界各地都很接近。」

八零年代,徐教授在愛荷華州立大學(Iowa State University)取得碩士及博士學位後, 在該校任教九年,其後又在堪薩斯州立大學 (Kansas State University)擔任教職,但她最 終選擇離開美國,來到香港。

事實上,徐教授與丈夫來港的決定是很有意 義的。當時學院正在中國內地增辦課程,正 好讓她就發展迅速的中國市場開展研究。時 至今日,學院已在旅遊勝地杭州開辦深造課 程,也在西安這個歷史悠久的城市開辦學士 學位課程。 Compared to the United States, she said, she also benefits from more abundant funding support here. The strong desire for academic qualifications among local students is impressive to her as well. But most of all, the fast-developing tourism industry in the region adds to the significance of her work. "The industry is changing so rapidly. We need to provide new information for it and in terms of teaching, most of the theories were developed in the Western countries and they are not necessarily directly applicable to Asia. There is room again for us to explore in the Asian context."

Her commitment to research is wellproven by the string of awards she has received thus far. In August 2009, she was honoured with the John Wiley & Sons Lifetime Research Achievement Award by the International Council on Hotel, Restaurant and Institutional Education (I-CHRIE), in recognition of her contributions to outstanding scholarship and research in hospitality and tourism.

There is no doubt about her extensive academic commitments, particularly those revolving around the areas of tourism destination marketing, tourist behaviors, service quality, and the economic and social impacts of casino gaming. Since 2002, she has been monitoring the travel motivation and destination preferences of outbound Chinese mainland travellers — a vital group of visitors to the local economy — the factors that drew them into Hong Kong, and their experiences while visiting here.

Listed in *Who's Who Among Asian Americans*, Prof. Hsu is also a member of 徐教授深信,中國地區旅遊業的茁壯發展會 帶來更多相關的教研機會。她表示:「我相 信,隨著亞洲地區的經濟及旅遊活動日趨活 躍,為支援行業的發展,對人力資源的需求 一定十分殷切,而酒店及旅遊業教育工作在 亞洲的發展或會取代上一個世紀美國在這方 面的領導優勢。」

徐教授表示,相比於美國,理大提供更充 裕的經費,而她亦很欣賞本地學生追求學術 資格的積極性。最關鍵的是,區域內的旅 遊業發展迅速,使她的工作更顯重要。她 說:「這行業的發展一日千里,在教學方 面,我們必須為學生提供新的資訊;但大部 分的理論都源自西方國家,未必適合直接應 用於亞洲,所以絕對有空間研發以亞洲為背 景的嶄新理論。」

徐教授對學術研究的熱誠為她帶來無數殊 榮。二零零九年八月,她獲國際酒店餐飲 及學術教育委員會 (I-CHRIE) 頒發「John Wiley & Sons終身研究成就獎」,表揚她在 教學及研究事業中對酒店及旅遊業發展所作 出的重要貢獻。

徐教授專注的研究項目包括:旅遊點景區發展及推廣、旅客行為、優質服務、以及賭場娛樂對經濟及社會的影響。自二零零二年起,她一直研究中國旅客的旅遊動力和對旅遊目的地的選擇,這群旅客對香港本土極之重要,徐教授希望了解他們來港的因素及在香港的體驗。

徐教授在她研究的學術領域舉足輕重,更 被列入《美籍亞裔名人錄》(Who's Who Among Asian Americans)。此外,她是國 際旅遊研究協會會員及《旅遊及觀光教學 雜誌》(Journal of Teaching in Travel and Tourism)的主編。

教學及行政工作以外,徐教授亦忙於進行多 個研究項目,包括一項研究中國內地長者旅 遊習慣的計劃。



Prof. Cathy Hsu giving a keynote speech on the research of hotel branding. 徐惠群教授與業界分享有關建立酒店品牌的研究。



Prof. Hsu supervising a PhD student. 徐教授正指導一位博士生。

the International Board for the Travel and Tourism Research Association, and the Editor-in-Chief of the *Journal of Teaching in Travel and Tourism*.

Amid her teaching and administrative duties, she has been kept busy by various research projects, including one on the travel habit of elderly Chinese people.

In Hangzhou, she interviewed groups of elderly visitors from across China with the goal of understanding how they perceived leisure and travel. Such study is unique because of the traumatic experiences many of the senior citizens went through during the turbulent times in China in the past. "A 70-year-old, for example, saw the birth of the People's Republic of China and went through the Cultural Revolution. I wanted to look at the impacts of those events on their reasons for travelling and the things they were interested in. Knowing the history of China helped me interpret what they told me," said Prof. Hsu with enthusiasm.

Although her own family has emigrated to the United States, her Putonghua skills and knowledge about Chinese culture and society are valuable for such research. "Culturally there are a lot of similarities between Taiwan and the Chinese mainland. This helped with the qualitative study we did, and enabled me to interview, interpret people's words with a better understanding of where they came from."

She did a seniors' travelling study in the States before, but the latest one was far more interesting because of the subjects' backgrounds. "The turbulent times did influence them in terms of the way they saw their country and leisure." She has every reason to expect her extensive research will facilitate further industry growth in the Chinese mainland.

In addition, the popular concept of branding forms the basis of her on-going study on hotels in the Chinese mainland, especially amid keen competition from prominent overseas hotel chains.

"Branding is a relatively new concept to hotels in the Chinese mainland. Sometimes for the sake of rapid expansion, the important factors that can strengthen their brands have been overlooked," explained Prof. Hsu, who has served as a consultant to various tourism organizations.

On the personal front, while enjoying the convenient lifestyle in Hong Kong, she is content with being able to balance her multiple work duties with family commitments. 徐教授在杭州訪問了來自中國不同省市的年 長旅客,以了解他們對消閒和旅遊的看法。 該研究的獨特之處,在於與中國年長一輩在 以往動蕩年代所經歷的創傷記憶有莫大關 係。「例如一位年邁七十的老人家經歷過文 化大革命,亦見證中華人民共和國的誕生; 我希望研究這些經歷對他們外遊動機的影響;亦希望尋找他們感興趣的事物。我對中 國歷史的認識有助我理解他們所訴說的往 事,」徐教授興奮地說。

雖然徐教授與家人早已移居美國,但她對中 國文化及社會的了解、以至她操普通話的 能力,都對其研究起了很大的幫助。她表 示:「台灣和中國內地在文化傳統上有很多 相似的地方,這有助我在這質性研究中訪 問不同背景的受訪者和理解他們所作的回 應。」

其實,徐教授早在美國時已進行過一項有關 長者旅遊的研究,但她認為該項研究中國內 地長者旅遊習慣的計劃有趣得多,原因在於 受訪者的不同背景和經歷。她表示:「動 蕩年代期間的經歷確實影響 他們對自己國 家、以至消閒行為的看法。」徐教授期望研 究結果有助中國旅遊業未來的發展。

此外,近年大行其道的的品牌推廣意念,更 成為她持續研究內地酒店業發展的基礎,尤 其面對海外大型連鎖式酒店的激烈競爭。

徐教授解釋:「品牌推廣對內地酒店來說是 一個新概念。很多時候,酒店急速擴張期 間,一些有助強化品牌的重要元素反被忽 略。」她是多個旅遊業機構的顧問。

徐教授享受香港的生活方式,她為在繁忙的 工作與家庭之間找到平衡而感到滿足。參