

Experimental and Cognitive Psychology in Taiwan- Observing the Case of the Department of Psychology at NTU

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This article celebrates the 60th anniversary of the publication of the *Chinese Journal of Psychology* (CJP, previously the *Acta Psychologica Taiwanica*) by providing a selective overview of experimental and cognitive psychology issues in Taiwan. The discussion is limited within the context of the Department of Psychology at National Taiwan University (NTU) where CJP was first published and continued for a long time. Under this context, we first looked into the dawning age of experimental psychology in Taiwan. Upon the launch of Taihoku Imperial University, the seventh of the Japanese Imperial Universities in series, in 1928, Taipei, Taiwan, a number of psychological research apparatus were acquired to echo with the then internationally trendy German Gestalt psychology thoughts and experimentation. However, this early start of experimental psychology in Taiwan was soon replaced by the subsequent research emphasis on the specifics of Taiwanese aborigines due to a Southern Expansion Policy of Japan. The research on Taiwanese aborigines was continued by the Department of Psychology at NTU after the replacement of Japanese rule by the current government. The experimental psychology research regained access to topics of international influence and indigenous uniqueness (e.g., the study of the cognitive processing of Chinese characters). An international research trend was gradually formed in Taiwan. This article examined research by the Department of Psychology at NTU on visual perception, cognitive processing of Chinese characters, attention and memory, behavioral decision making and others. The experimental psychology in Taiwan has been evolved to accommodate both international research trends as well as those highlighting indigenously meaningful topics. The *Chinese Journal of Psychology* will continue to play a critical role on these emerging studies.

Keywords: *experimental and cognitive psychology, indigenous research, international academic interaction, National Taiwan University, Taihoku Imperial University*

This article celebrates the 60th anniversary of the *Chinese Journal of Psychology* (CJP) by providing a selective overview of the history of experimental and cognitive psychology research in Taiwan. The discussion is limited to the context of the Department of Psychology at National Taiwan University (NTU), where the CJP was published from its birth in 1958 as *Acta Psychologica Taiwanica* through to 1982. The progress of the CJP has drawn momentum from the dynamic relationship between indigenously motivated research and targeted studies reflecting major international trends, especially those

emerging from the United States, Germany and Japan.

This review begins at the dawning age of experimental psychology in Taiwan. In 1928, Taihoku (Taipei) Imperial University was founded as the seventh of the Japanese Imperial Universities. A number of psychological research apparatuses were soon acquired for the pursuit of Gestalt psychology, based on the German theories that were then in vogue internationally. However, with Japan's Southern Expansion policy taking Taiwan as its initial home base, the flavor of these early stages of experimental psychology was soon replaced by a research emphasis

on Taiwanese aborigines. After the termination of the Japanese colonial government in 1945, studies concerning the behavioral aspects of aborigines and human perception continued in the Department of Psychology at the University, now renamed as NTU, through to the launch of *Acta Psychologica Taiwanica* in 1958. This milestone event marked the rebirth in Taiwanese scholars' access to international experimental psychology literature and a new platform for the pursuit and dissemination of unique local research.

In 1960, Dr. In-Mao Liu, who was already a renowned expert in classical and instrumental conditioning, began to teach in the Department of Psychology at NTU. He soon realized that a standardized Chinese language corpus and related linguistic statistics were urgently needed for the study of specific verbal learning and to resolve general experimental issues. Various types of language statistical corpora were published in the 1970s and thereafter by Professor Liu and his colleagues in the Department. Dr. Liu was also significant in the recognition of cognitive movements in the early 1970s, organizing the hosting of the First *Symposium on the Psychological Study of the Chinese Language* by the Department. After the Fourth Symposium was held in 1988, Liu, Chen and Chen published a book entitled *Cognitive Aspects of the Chinese Language* to accommodate most of the revised symposium papers. Now called the *International Conference on the Processing of East Asian Languages*, this series held its 17th Symposium in 2018. In view of the important role that Dr. In-Mao Liu has played in Taiwan experimental psychology, a family tree showing his students and their publications in the CJP is included in this article.

The Department of Psychology at NTU is the core institute for producing and maintaining the community of scholars pursuing this indigenous yet internationally recognized cognitive research into the Chinese language. Many researchers have followed in Dr. Liu's footsteps while developing different lines of cognitive research to tackle with a variety of difficult and delicate issues, such as the debate over the critical cognitive mechanism in Chinese language processing. Discrepant findings on this topic were frequently attributed to replicability

or reliability issues; other possibilities, such as the differences between simple and complex Chinese characters and the role of perceptual processing accompanying the recognition process, have not yet received due attention.

The study of visual perception can be dated back to the Taihoku Imperial University era, when Gestalt psychology was allocated the bulk of the research effort and resources. The study of perception remained intermittent, however, until the 1980s, when the Department of Psychology at NTU began to engage in a systematic program of education and research in the field. This was initially directed to stereopsis and the related retinal matching problem, but was soon followed by the development of full-scale visual perception research. The study of human visual perception has now become a much appreciated and highly influential strand of the Department's research activities.

Attention and memory are also among the most important research directions being taken by NTU Psychology faculty, with active international collaborations. Although many of the studies on attention and memory are published internationally, the CJP has continued to publish important language corpora and statistics, including the Chinese emotional stimuli database, which was the first of its kind.

In contrast, experimental psychologists in the Psychology Department at NTU have paid little, if any, attention to Freudian psychology. This may be partly attributed to the discovery of REM in the 1950s, which effectively rejected one of the most influential Freudian proposals, that dreams are driven by repressed desires. Although some Freudian concepts might be rejuvenated by recent findings in neuroscience, the research influence of Freud remains conspicuously absent from both the Department and the CJP.

Another research domain that has not attracted much attention from faculty of the NTU Department of Psychology is the study of judgment and decision making. This is in spite of the fact that some of the most important researchers in this area, such as Clyde Coombs (who was the advisor of Amos Tversky at the University of Michigan) and Daniel Kahneman, have paid scholarly

visits to Taiwan and engaged in dialogue with members of faculty at the Department. These discussions and subsequent exchanges of information were instrumental in the development of the study of Prospect Theory and the related Somatic Marker Hypothesis and Iowa Gambling Task.

Balancing the desire to be internationally connected while retaining indigenous characteristics, the research

topics examined by the experimental psychologists in the Psychology Department at NTU continue to evolve. The CJP not only maintains a faithful record of these struggles but also supports the pursuit of fundamental research in experimental and cognitive psychology as it continues to serve as one of the most important platforms for publishing psychological research in Taiwan.

