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Education

Doctor of Philosophy (PhD), University of California, San Diego, 1996.
Major: Psychology
Areas of Emphasis: Cognitive Psychology
Dissertation Title: Rules or Instances: Explorations of Associative Learning in Speeded Choice Response Tasks

Master of Science (MS, MSc), Institute of Psychology, Chinese Academy of Sciences, 1988.
Major: Psychology
Dissertation Title: Event-related brain potentials (ERPs) reflect mismatch between Chinese character and its mental template

Bachelor of Science (BS, BSc), Fudan University, 1983.
Major: Biology
Areas of Emphasis: Neurobiology

Published Intellectual Contributions

Lou, L. (forthcoming). Towards an experimental psychological pedagogy of observational depiction, Proceedings of the Representational Art Conference 2017 & 2018, California Lutheran University Press.

Lou, L. (2018). Artists' innocent eye as extended proximal mode of vision, *Art and Perception*, *6(1)*, 1-40. https://doi.org/10.1163/22134913-00002100

For on-line advance release see http://booksandjournals.brillonline.com/content/journals/22134913/advance.

Lou, L. (2008). Troxler effect with dichoptic stimulus presentations: Evidence for binocular inhibitory summation and interocular suppression, *Vision Research*, 48, 1514–1521.

Lou, L. (2007). Apparent afterimage size, Emmert's law and oculomotor adjustment, *Perception*, 36, 1214–1218.

Lou, L., & Chen, J. (2003). Attention and blind-spot phenomenology, *Psyche*, 9(2).

Lou, L. (2001). Effects of voluntary attention on structured afterimages, *Perception*, 30(12), 1439–1448.

Osman, A., Lou, L., Mullller-Gethmann, H., Rinkernauer, G., Mattes, S., & Ulrich, R. (2000). Mechanisms of speed-accuracy tradeoff: Evidence from covert motor processes, *Biological Psychology*, 51(2-3), 173–199.

Lou, L. (1999). Selective peripheral fading: Evidence for inhibitory sensory effect of attention, *Perception*, 28(4), 519–526.

Lou, L. (1999). Selective peripheral fading: How attention leads to loss of visual consciousness. *Toward a Science of Consciousness: The Third Tucson Debates and Discussions*, 189-196.

Fang, Z., Lou, L., & Kuang, P. (1998). Event related potentials of tone perception. *Acta Acoustica*, 23 (5), 466-472.

Spinks, J. A., & Lou, L. (1997). The development of psychological research in Hong Kong. *Bulletin of the Hong Kong Psychological Society*, 38-39, 55-74.

Lou, L. (1996). Sequential effects reflect unintended rule-like representations of association. *Proceedings of the 7th Midwest Artificial Intelligence and Cognitive Science Conference,* Bloomington, Indiana

Lou, L., Fan, S., & Kuang, P. (1989). Event-related brain potentials (ERPs) reflect mismatch between Chinese character and its mental template. *Acta Psychologica Sinica*, 21(3), 321-327.

Presentations

Lou, L. (Presenter & Author), “Head-to-mirror proportion error decreases in self-portraits that include background objects,” 7th Visual Science of Art Conference, Triste, Italy. (August 27, 2018)

Lou, L. (Presenter & Author), 5th Representational Art Conference (TRAC2018), “Towards an experimental psychological pedagogy of observational depiction,” Leeuwarden, the Netherlands. (May 3, 2018)

Lou, L. (Presenter & Author), Psychology Department Research Colloquium, GVSU, "Artists' innocent eye as extended proximal mode of vision." (October 3, 2017).

Lou, L. (Presenter & Author), International Conference of Teaching of Psychology, "Teaching scientific laws with Gestalt laws," Vancouver. (August 25, 2017).

Lou, L. (Presenter & Author), Grand Valley Artist Associates Monthly Talk Series, "Two Modes of Seeing in Observational Depiction", Grand Valley Artists, Grand Valley Artists, 1345 Monroe Ave. Grand Rapids. (February 10, 2017).

Lou, L. (Presenter & Author), 4rd Visual Science of Art Conference, "What could an artists’ innocent eye mean? Psychologically speaking?" Barcelona, Spain. (August 27, 2016).

Lou, L. GRCC Psychology Colloquia Series, "Do Visual Artists See the World Differently?" GRCC Psychology Department, Grand Rapids. (February 18, 2016).

Lou, L. (Presenter & Author), CLAS colloquium, "Towards a dual-modal theory of seeing in visual depiction," College of liberal arts and sciences, GVSU, GVSU. (October 16, 2015).

Lou, L. (Presenter & Author), 3rd Visual Science of Art Conference, "Towards a dual-modal theory of seeing in visual depiction", Liverpool, United Kingdom. (August 24, 2015).

Lou, L. (Presenter & Author), 5th Conference of Psychology and Social Harmony, "Between two modes of seeing: A psychological theory of observational depiction," Beijing, China. (May 23, 2015).

Lou, L. (Presenter & Author), Sabbatical show, "Between proximal and distal modes of seeing: A new psychological theory of observational visual depiction," CLAS, GVSU. (April 10, 2015).

Lou, L. (Presenter & Author), 2nd Visual Science Conference of Art, "What is the pictorial mode of perception?," Subcommittee of European Society of Vision Research, Belgrade, Serbia. (August 24, 2014).

Lou, L. (Presenter & Author), 4th Conference of Psychology and Social Harmony, "Can political orientations be perceived from faces?," Committee for CPSH, Suzhou. (May 17, 2014).

Lou, L. (Presenter Only), GVSU Psychology Department Research Colloquium, "How do people perceive political identities from faces," Psychology department, 308 PAD. (October 31, 2012).

Lou, L. The 30th European Conference on Visual Perception (ECVP2007), "Troxler Effect with Dichoptic Stimulus Presentations: Evidence for Binocular Inhibitory Summation," Arezzo, Italy. (2007).

Lou, L., The 10th Annual meeting of the Association for the Scientific Study of Consciousness (ASSC10), "Apparent afterimage size, Emmert’s law and the role of oculomotor adjustments in object-centered perception," St. Anna College, Oxford, UK. (2006).

Lou, L., Chen, J., The 17th Annual convention of the American Psychological Society, "Attention during adaptation neither delays nor weakens afterimages.," Los Angeles, California. (2005).

Lou, L., Chen, J., The 28th European Conference on Visual Perception (ECVP2005), "Effects of voluntary attention on negative afterimages during and after stimulus adaptation," A Coruna, Spain. (2005).

Lou, L., Toward a Science of Consciousness 2004 (Tucson VI, "How apparent is apparent afterimage size?," Tucson, Arizona. (2004).

Lou, L., The 44th Annual Meeting of the Psychonomic Society, "Apparent afterimage size: observations and a new explanation," Vancouver, Canada. (2003).

Lou, L., The 7th Annual meeting of the Association for the Scientific Study of Consciousness (ASSC7), "The role of voluntary attention in chromatic infusion of afterimages," Memphis, Tennessee. (2003).

Lou, L., The International Symposium of Cognitive Neuroscience, "Effects of voluntary attention on steady retinal images," Qingdao, China. (2002).

Lou, L., Chen, J., The 5th Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC5),, "Attention and blind-spot phenomenology," Duke University, North Carolina. (2001).

Lou, L., Chen, J., the 41st Annual Meeting of the Psychonomic Society, "Filling-in or finding out: Perception and attention at visual blind spot," New Orleans, Louisiana. (2000).

Lou, L., 40th Annual Meeting of the Psychonomic Society, "Attention-facilitated fading of negative afterimages," Los Angeles, California. (1999).

Lou, L., The 3rd Annual Meeting of the Association for the Scientific Study of Consciousness (ASSC3), "Voluntary control of negative afterimage fragmentation," London, Canada. (1999).

Lou, L., The Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO99, "Voluntary attention facilitates peripheral fading," Ft. Lauderdale, Florida. (1999).

West, R., Lou, L., Gao, D., The International Conference on the Application of Psychology to the Quality of Learning and Teaching, "Designing an electronic Chinese-English dictionary for enhanced learning," Hong Kong. (1998).

Lou, L., Toward a Science of consciousness (Tucson III), "Selective peripheral fading: A deleterious effect of sustained visual attention," Tucson, Arizona. (1998).

Lou, L., The 1st Conference of the Association for the Scientific Study of Consciousness (ASSC1), "Transient disappearance of conscious visual perception due to attention shift.," Claremont, California. (1997).

Lou, L., The 1996 Midwest Artificial Intelligence and Cognitive Science Conference, "Sequential effects reflect unintended rule-like representations of association," Bloomington, Indiana. (1996).

Osman, A., Lou, L., The 32nd Annual Meeting of the Psychonomic Society, "Selective attention and speed stress," San Francisco, California. (1991).

Lou, L., Kuang, P., The 1st Chinese Neural Information Processing and Neural Network Conference, "Individual differences in visual and phonological processing of Chinese characters," Beijing. (1990).

Ding, H., Lou, L., Beijing Symposium on Evoked Potentials and Electromyography (BSEE' 89, "Introversion-extroversion personality dimension and event-related brain potentials (ERPS).," Beijing. (1989).

Lou, L., The 6th Chinese Conference of Physiological Psychology, "N400 and phonological anticipation," Nanjing, China. (1989).

Art Exhibits

Lou, L., "Fixation and self portraiture," (Oil paintings and short essays), Obra Social "la Caixa", Barcelona, Spain. (August 25, 2016 - August 28, 2016).

Lou, L. “Jane”, “Tamara”, and “Nude with teal drapery”, Three oil paintings selected by jury into “Festival of arts”, West Michigan Annual Art Show, Grand Rapids, USA, 2015

Lou, L. “Poet” and “Pondering”, two oil paintings selected by jury into “Festival of arts”, West Michigan Annual Art Show, Grand Rapids, USA, 2014

Recent and On-going Research Projects

"The relationbship between drawing accuracy and perceptual constancy" (On-Going). (September 2017 - Present).

Previous researches on the influence of perceptual constancy on drawing errors were inconclusive: Some studies showed a negative correlation between the the two variables, whereas other studies failed to do so. I am conducting a systematic investigation on the issue by requiring participants to complete both a pictorial matching task and a drawing task. My hypothesis is the that the matching accuracy at very short but not longer stimulus presentation time predicts drawing accuracy. The drawing task involves copying a cube or drawing a real cube with a stylus on a tablet display.

"Artists' shared working experience: Descriptive studies of fine art instruction books" (On-Going). (December 2015 - Present).

To provide empirical support to my dual-modal visual perception theory of visual depiction, I am conducting a descriptive study of art instruction books and magazines published over the last century (limited in scope to representational fine art). I am predicting that the narratives gleamed from such books will appear to converge on two major themes, corresponding to the two modes of seeing in visual depiction that I have proposed: the distal or object mode, and the proximal or image mode.

"Reversible size scaling by perceived distance" (On-Going). (September 2015 - Present).

Perceived size and perceived distance are known to be closely related. Yet it remains a controversial issue how cognitive factors can influence perceived distance and thereby influence the perceived size (of image and object). I am investigating a new phenomenon that promises to shed light on the old and fundamental issue in visual perception.

"Perception of identities from faces" (On-Going). (February 2012 - Present).

The goal of this study is to understand how much and how human faces express identities that go beyond those tied to salient physical features such as sex and age. There has been an increasing body of research on this topic (see Penton-Voak et al (2006) for a review, and Rule & Ambady (2010) for a study similar in methodology to the study proposed here). Many recent studies suggest that human faces can express or reveal much more than many people have thought to be possible. Some of those studies need replications for their findings to be more widely accepted. Crucially, there remains a lack of understanding of how faces can reveal more than physical features. Some of the questions that can be raised include: Are such effects a matter of stereotype in the perceiver’s mind? Could experience be “deposited” on the face? Could it involve empathic reactions from the perceivers? Are people consciously aware of how they perceive the various identities of the faces? The Study will be the beginning of a series of studies aimed at answering these important questions.

"Observational depiction involves interplays between the proximal and distal modes of seeing". (August 2014 - September 2017).

Theories and empirical evidence on visual perception in observational depiction (drawing and painting) were reviewed. It is suggested that theorizing in this area must incorporate both controlled laboratory studies and artists’ shared experience. Similar to Kozbelt (2007), I found two main theories dominating the theorizing in this area: Gombrich’s (1960) schemata theory that emphasizes artists’ advantages by their extensive and refined repertoire of schemata or expectations of what to see in the original (scene or figure), and the “innocent eye hypothesis” (Ruskin, 1857; Fry, 1919; Edwards, 1979), according to which drawing errors are largely “contaminations” of the proximal images (consciously accessible images that retain attributes of the retinal images) by the distal biases reflecting what the drawer knows about the object being looked at. Partly inspired by professional artists’ working experience, it is proposed that an adequate theory of observational drawing must include the interplays between two modes of seeing---- the proximal mode and the distal mode. While the distal mode of seeing has been the focus of the mainstream vision research for decades and hardly needs explanation, the proximal mode of seeing does: there is a phenomenal similarity between the proximal mode of seeing and the mental imagery and they likely reply on the development of the theory of mind, in this case, the ability to attribute mental states to oneself. The benefits of a dual-mode seeing account of observational depiction lie in the

possibility of 1) explaining the apparent effectiveness of Betty Edwards' "right-brain" approach to teaching drawing despite of lack of convincing evidence for a positive relationship between drawing accuracy and the reduction of perceptual constancy errors and 2) explaining artists' strategies of working on 2-d or 3-d elements of the picture in different phases of depiction and how such strategies affect the quality of depiction; and 3) explaining the effects of both within-mode and between-mode perceptual learning and attention strategies separately. Finally, I suggest new issues to be explored within the theoretical framework of dual-mode seeing as well as the need to understand the architecture, processes and mechanisms of the visual system that substantiate the proximal mode of seeing.