Johnson Leu dissertation discusses the function of reminiscence of past places in cross generations conversation of Taiwanese family reunion. If the neighborhood place is preserved or the old photos of the place remain, the members of the family immediately share the story of the past, pass the knowledge and strengthen the social relationship. However most of the cases, places have changed and the photo of those places have not be taken and survived. Without those visual reference of the past places, it is quite difficult to revisit the memories and share the past experiences.

This project challenges this issue by designing a new visual tool to reconstruct the reminiscence of the past place and stimulating reminiscence of past experience of the older generation to elicit personal stories to be shared with younger family members. His system, called STREMIS, uses historic topographical data and reconstruct historic neighborhood houses. The images help older Taiwanese family members to revisit the past experience when they see the images in the past and generate the causal storytelling to offer the other family members.

The system was designed with an ethnographic research of the Taiwanese families and the analysis based on the fieldwork. Then the first prototype of the system was made. The images of the house provoked storytelling of the past than those of inside of the house. Then a special rendering system was coined with combination of the topographical data, historic aerial survey photographs and maps. And the first person view and 3D perspective were introduced to handle different kinds of images. The author added the last function of the system, non-photorealistic rendering to the system. Three components, Topographic overview, First Person perspective and non-photorealistic rendering, made the system.

When the author brought the system for the user study and showed the images generated from the system, the participants were impressed and the old members of the families started to tell their stories and to describe the past. Then, interaction between the family members became very active.

This system uses the novel concept of incorporating non-photorealistic rendering with visual reconstruction of past places in suburban Taiwan to generate artistic representation of the past neighborhood and as the user studies show the significance of this system for the Taiwanese family of remembering the past. I conclude that this dissertation is worth for the doctoral degree because the system the author developed the method to enrich the human experience of remembering the family past.