## Searching For Yupmuljil in the Korean Countryside by Aimee Lee

In 2008, I traveled to Korea on a U.S. Fulbright research grant to study traditional Korean papermaking. There was plenty that I knew about hanji, and more that I did not. But the one thing that I knew I could only find in Korea was its unique sheet formation technique. I had read about it, seen pictures, and researched its benefits to the finished sheet. But I had never seen it in action. What I knew was that it used a single bamboo screen on a wooden frame suspended by a single rope over the vat, with no deckle or additional frame.

Early in my research year, my advisor invited me to a paper mill to view the entire process of making hanji. Bo Kyung Kim of Fides International, who exports conservation hanji, drove us 4.5 hours from Seoul to Gyeongsangnam-do, a southeastern province of Korea. Less than thirty miles from the south coast, in the heart of farmland, was the last remaining paper mill in Euiryeong. The town was once full of paper mills that specialized in jangpanji, or oiled hanji for flooring. But when traditional Korean homes disappeared as the country rapidly modernized in the 1970s through the controversial New Village Movement, the demand for hanji to paper floors, walls, doors, and windows disappeared. Mills went out of business.

This mill is run by Shin Hyun Seh and his wife, and they employ two women from the village. Called Shin Hyun Seh Traditional Hanji, it produces some of the finest hanji in Korea. We began near huge bundles of dry bark from the paper mulberry tree, known in Korea as dak. The two women sat on a plastic tarp covering a concrete porch, using knives against wooden planks to scrape the outer black and green layers of bark off of the soaked bark to reveal the white inner bark, used to make hanji. We walked back through the mill's main building and into a courtyard area where bark is cooked in a large metal cauldron. Mr. Shin showed us how he made a caustic solution by pouring water into a ceramic container full of plant ash with a sieved bottom, suspended above the cauldron. Across the courtyard was a large sink filled with water where one woman picked tiny bits of remaining bark from the rinsed and cooked inner bark, piece by piece. Then both women demonstrated hand beating, each with a long wooden bat-like stick, macerating a large clump of fiber on a flat-topped rock. Most mills now use mechanical beaters.

Inside the main building, Mr. Shin showed us the hibiscus roots, or hwang chok kyu, that had been beaten to yield their mucilage, a gooey, clear substance that is integral to making hanji. In Korea, this formation aid is called dak pul, literally "mulberry glue." The vat was prepared with water, fully-beaten fiber, and dak pul, which he agitated with a long bamboo pole. Ideally, two people on opposite sides of the vat agitate in interlocking rhythm, but such manpower is scarce these days. Most vats today are equipped with an electric mixer inside the vat wall.

Mr. Shin started to make hanji. The first dip is called apmuljil, or "front water action." Holding the screen on top of the frame with just his thumbs on the bottom corners of the screen, he pushed the front end away from him, and swept it down to scoop up slurry, pulling it forward and up to let the slurry fall from the front of the screen to the back. Then he started yupmuljil, or "side water action." He dipped the entire left edge of the screen into the water at an angle to get fresh slurry, straightened the frame while the slurry sat on top of the screen, and then tipped the right side of the screen down to let the slurry rush off. He repeated this action with the right edge leading, left edge depositing, and continued side to side until he was satisfied with the thickness of the sheet. The final motion ended with a slight angling to the back corner on a diagonal so that all of the slurry tipped off.

He couched the sheet on a post to his right. Before every other new sheet, he placed a nylon thread about an inch away from the front edge of the sheet. The screen edge was guided by metal guards, and laid onto the post. After removing the screen from the post, he placed the screen back onto the frame, with the surface that the sheet was just on facing down. After making and couching another sheet, he would add another thread.

The thread comes down in between every *other* sheet, meaning two sheets of paper sit between threads. Hanji made in the webal or singlescreen method always consists of two sheets. Because of the first frontto-back dip, the front edge of each sheet is always slightly thicker than the back edge. To even this discrepancy, sheets are layered so that the front edge of the first sheet fuses with the back edge of the second sheet to make a perfectly balanced whole. This is why hanji is also called eumyangji or "moon sun paper." This is also why the screen is flipped each time a sheet is made: the bamboo screens are sewn so that the chain lines do not run down the entire length of the screen in the same position. Rather, the lines change positions at the center. This, coupled with the screen flip, ensure that chain lines will never fall on top of each other, avoiding doubly weak areas in the final sheet.

After being pressed in a hydraulic jack press, the post was taken outside to dry. In a vinyl-covered enclosure, one woman pulled sheets apart after pulling out the threads, and brushed each sheet onto both sides of smooth wooden boards that can dry four sheets at a time. The final step is dochim, similar to manual calendaring, where sheets are stamped in stacks by a machine that hammers paper against a smooth rock. Every tenth sheet is lightly dampened in the stack. Dochim compacts the fibers in the sheet, strengthens the paper, and adds sheen. It prevents excessive ink bleeding and acts as sizing. Then the sheets are loft dried.

Mr. Shin took us up the hills through patches of red pepper plants to show us the mulberry trees native to the area. At the end of the day, I took the bus back to Seoul. Over the next several months, I traveled to six operational mills in various parts of Korea; only about 26 remain in business today. I watched three other papermakers make hanji in the webal style, but mills rarely use this technique on a regular basis due to the intensive labor required.

In the winter of 2009, I apprenticed with Jang Seong Woo, the eldest son and 4<sup>th</sup>-generation papermaker at Jang Ji Bang. His father is the Gyeonggi-do Provincial Intangible Cultural Heritage holder in papermaking, and their family is friends with Mr. Shin. In such a small field, all of the papermakers know each other. In fact, Mr. Shin got married at the elder Mr. Jang's home many years ago. My own journey from visiting one hanji master at the southern end of the country to learning from another at the northern end of Korea was a difficult one, but worth all the trouble.

My teacher shared an incredible amount of history and stories with me about hanji during my apprenticeship. One that was particularly interesting was that in the past, yupmuljil was done by two papermakers at the same vat, with larger screens, each holding one end of the mould and dipping in unison. When I think about how hard it is to do webal technique alone, I am astounded by the idea that two people could match their rhythms well enough to do production runs together.

The most compelling part of this technique is how connected the papermaker must be with all the tools and materials at hand, in constant motion. With a standard-size screen ( $63 \times 93$ cm), vat ( $163 \times 182 \times 40$ cm), and a large amount of slurry in wave formations, there is a great deal of aural, visual, and bodily-intuited information to keep track of and adjust to in order to make consistent sheets of paper. Though physical strength is a must in this technique, so is timing: understanding when and at what angle to enter the water is crucial, as is gauging how much time you can hold the slurry on the screen before letting it slosh away. The technical aspects of Korean papermaking are impressive, and they lead to a beautiful, durable, and versatile finished product. Goryeoji once famed in East Asia as high-quality paper for art and archival use, hanji made in the webal technique is fine, tough, and has no dominant grain direction. For all of these reasons, I believe that it is an important tradition to preserve and share with the world.



Photo A. Yupmuljil, Korean Nagashizuki Aimee Lee was at Shin Hyun Seh Traditional Hanji (Mr. Shin Hyun Seh). Gyeongsangnam-do, South Korea, August 2008



Photo B. Aimee practices Yupmuljil, Korean Nagashizuki at the papermill of Mr. Jang Seong Woo and his family, called Jang Ji Bang, (🖾 🖄), Gyeonggi-do, South Korea, Winter 2009.



Photo C. "When grandfathers die I" (2009). Bark hanji, hanji base sheet; 55x57"by Aimee Lee

Aimee was an apprentice of Ms. Robbin Ami Silverberg in NYC, USA. Aimee was a Fulbright fellow in Korea studying Hanji (Korean Handmade Paper) and its culture, June 2008 – July 2009.

Aimee has photos on flickr related to hanji: <u>http://www.flickr.com/photos/moonaimee</u> Videos are englished on her Vimee reggis<u>http://vimee</u>

Videos are available on her Vimeo page: <u>http://vimeo.com/aimeelee</u> Her home page is: <u>http://aimeelee.net/</u>