S-49, Mediators of Science. Woman Translators of Scientific Texts 1600-1850 "Madame Lavoisier, a negotiator of the Republic of Letters"

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The era that I will cover in this symposium includes the 18th century, which is also known as the century of women. In this century many women flourished in various fields. Especially many outstanding translations of scientific texts, translated by women were published in the era. These women were the literally mediators of science, and largely contributed to the development of science. However, I would like to draw your attention whether we can consider these women who chose to do translation work, conducted the same role as male translators in that era. In other words, I would like to raise the issue that was "selection" by female translators and "selection" by male translators would not be made at the same level.

For example, Émilie du Châtelet (1706-1749), who is famous as the only French translator of Newton's *Principia*. Defined her chosen role which was a translator and/or introducer as a "Negotiator of the Republic of Letters," in the preface of translator in Mandeville's *The Fable of the Bees*; yet, while she admitted her role as important work she still was not perfectly satisfied with the position. Because she lamented that, due to prejudices from society, women could not receive sufficient education nor could they be given the opportunities to utilize their own talents in the same preface. For Du Châtelet, the role as a translator is only an option that she, as a female is denied the right to be a creator by society, and could only accept this under the current conditions. So we can not accept such "selection" as the same as that of a male. Hence, we need to be aware of the existence of gender bias.

There were a few women who were as aware of this problem as Du Châtelet, but when we carefully examine their texts, we can learn that similar problems existed. Here, I would like to look at the case of Marie-Anne Lavoisier (1758-1836). Marie Lavoisier is the wife of Antoine-Laurent Lavoisier (1743-1794), who was named the Father of Modern Chemistry, and also is a person of prominence in the Republic of Letters as a collaborator of his studies. She took experiment records of her husband's work, drew illustrations of experimental instruments in his book, and promoted his New Chemistry in her salon. For her, translation originated with private translation of English papers on chemistry and letters to her husband who was not good at English. Later, Marie Lavoisier (provably upon her husband's request) ended up publishing two translation works. The translations were; *An Essay on Phlogisiton (Essai sur le phlogistique)* and *On the Strength of Acids (De la force des acides)*, both by Kirwan (1733-1812), a Phlogistician who was against Lavoisier's theory. Therefore those works were not translations to promote the author's thoughts, but to rebut the thoughts. Marie Lavoisier completed the mission honorably. Especially, the former caused further refutations from Kirwan, but eventually it played a very important role in persuading him and many other Phlogisiticians to convert to Lavoisier's theory. In later years, Fourcroy (1755-1809), who was a fellow of Lavoisier, honored her contribution as a translation, chemists who were not good at English could not accurately understand the two theoretical systems that were being opposed in regard to combustion and acid.

Moreover, Marie Lavoisier, not only translated what was written, she wrote a preface from New Chemistry's perspective which was against Kirwan's preface and added three translator's notes that questioned Kirwan's experimental results. In this French translation, long refutations from Lavoisier and his fellows were also added. The formerly-mentioned Fourcroy was also one of rebutters. Marie Lavoisier was the only person whose name was not written in the translation with refutations, but it would be possible to define her as one of those rebutters. Looking at her additional works and block-prints of Lavoisier's *Traité élémantaire de chimie* of which the block-prints were signed by her as Paulze-Lavoisier, it is obvious that he did not limit her role only to translation in the chemical revolution. What did translation work mean to her?

When Marie Lavoisier heard that Kirwan and his fellows had been preparing further refutations against refutations from Lavoisier's group, she proposed Guyton de Morveau (1737-1816), a fellow of Lavoisier, to refutate against the Kirwans' as she translated the refutations again. Here, she considered that science translation is an important tool to make people acknowledge theses of her group. But, at the same time, Marie Lavoisier, like Du Châtelet, had an acute feeling that translation was not the work of creators. Because she told Saussure (1740-1799), a chemist who praised her translation and knowledge, that she was not the equivalent of the creative scholars

around her, and "I was nothing but good at translation." Unlike Du Châtelet who started to learn science and mathematics properly in her late 20's after she met Maupertuis (1698-1759), Marie Lavoisier, who married young, did not have late access to science. She started studying science in her early teens. However, without any role model of the same gender, she learned a lot of knowledge from her husband and his fellows who were, compared with her, extremely knowledgeable and much older than her. Because of this, Marie Lavoisier could not imagine herself as a creator, but on the other hand, she strongly inculcated the concept that creation was a great thing to be part of. In front of them, she was always what-she-called a "little girl."

Because of her respect toward creative geniuses and her knowledge about the practical situation and concrete results of scientific studies, the translation works done by Marie Lavoisier were excellent. And, it looks paradoxical at a glance; this excellence of translation is related closely with her low self-estimate in the field of science. In "the century of women" such "brilliant" women polished their talents in linguistics. A field where women can learn without going over the female gender boundaries , and at the same time send out a lot of excellent translation works to society. We should not forget the gender problem that is behind such translations of scientific works that were done by women in that era. It was a ray of light that was grasped by females, a gender which was eliminated in the center of scientific study due to social systems and norms, and one of valuable opportunities to let people know her own existence in the field of science.