Exhibiting Scientific and Technological Artifacts in History Museums: Cases of the National Museum of Korean Contemporary History and South Korea

Seong-Jun Kim

1. Introduction

The inclusion of Science and Technology (S&T) items in contemporary history museums seems to be increasing. This is due to the growing importance of S&T issues in contemporary society. The task, however, to incorporate scientific and technological artifacts in a history museum is not easy. There are several issues to consider: What is science and technology? What is the status of these fields throughout history? How they have been interpreted in the past, and what interpretation would be needed for the future? Last but not least, it is important to ask, what is the museum's role in this task?

In this presentation, I will analyze the matter of S&T issues in museums and provide suggestions. First, I begin by illustrating the need of the social aspects of S&T. Then, I will explore the public image of S&T over time in South Korea and what tasks remain ahead for better understanding of S&T. Lastly, I suggest that the history museum is a very good place for this object and that the exhibition of history museum should have more balanced exhibition composition by including social aspects of S&T.

2. Need for 'Science and Technology in Society' (STS)

In order to examine a way of exhibition of S&T in the museum, it is prior to understand social perception on S&T and recognize what kind of gap exists between the reality of S&T activity and public perception on it.

It is usually told that public perception on S&T still remains the same as in the early to mid-20th century. If we look at the actuality of scientific activity these days, scientists do not work alone as their predecessors, but work in a group, under the support of nongovernmental social unit (a company or a university) or nation, competing with international competitors. Thus, we can easily recognize that the early notions of S&T,

inherited from 19th century or early 20th century, that scientists or inventors are geniuses who can change the world through their research or inventions, is not true anymore.

Through the series of historical events in the 20th century, environment of scientific activity changed a lot as well as contents itself. There have been other considerable changes in the environment and the economic background surrounding scientific activity. Science came to be regarded as an activity creating profits if given appropriate funding and manpower, and it really showed such performances. As time goes by, economic element became inevitable for scientific activity.

One of the important social environments of scientific activity is the increased role of the government, which tried to use science for national goals in terms of economic development and military power. The government even succeeded in justifying the taxation for S&T and general public agreed on it. This was not just an economic problem, but a symbolic process: science even became a cultural capital which can easily mobilize the public.

Albeit these environment changes in scientific activity, public perception on S&T has not changed. Still, there is little understanding of the social aspects of science and technology. S&T studies, composed of history and philosophy of S&T, sociology and anthropology of S&T, and other studies on S&T, has been well developed and many scholars in this field produced fruitful research results. However, their influences on social perception of S&T are limited. General public in many countries still have public image of S&T, same as early-20th century. This gap is even more extreme in the cases of developing countries or recently developed countries like South Korea.

3. Public Image on Science and Technology in South Korea

Public perception on S&T in South Korea has been shaped according to its rapid process of modernization. Especially, in the latter half of 20th century, South Korea put its priority on economic development among many important policy goals. Influenced by such historical situation, public perception on S&T in South Korea contains unique Korean cultural elements.

First, a Korea-centered historic viewpoint caused the Korean public to have a limited viewpoint about S&T of South Korea. Although generally there are international interactions

in every step of S&T production and dissemination, the Korea-centered viewpoint put limitation on seeing the international character of S&T. Foreign technological items used by Korea were not regarded importantly by historians and only Korean-produced products were regarded as worth noting.

Secondly, the cultural background of S&T did not receive its appropriate attentions, although they have been important throughout Korean modern history. As an example, the enlightenment movement in the early 20th century was influenced by cultural aspects of S&T. The rationalization of society and institutions in the latter half of 20th century shows the cultural impact from S&T. However, these cultural phenomena were interpreted as being separate from S&T.

Third, orientation of regarding S&T separately from general history affected general perceptions on S&T. In order to explain contemporary history, people commonly examines the macro viewpoint of history: enlightenment, colonization, liberation, and modernization. From this point of view, S&T becomes minor item in history and only a few selected S&T items receive attention and are viewed as related to the larger events of history.

In actuality, however, there are many aspects of S&T that matter, even though they have only indirect or weak connection to so-called 'important historical issues.' Now it is impossible to write history without giving proper attention to S&T. For example, architecture, transportation and communication are essential to people's lives and society in general, so as in history. In contemporary society, the importance of ethical issues in biomedical sciences has recently begun to attract attention as well. Aerospace projects, which require a tremendous budget, also are understood as having general importance. Throughout all of history, we need to include these issues appropriately.

This awkward situation of separating S&T from history in general is the result of orientation understanding S&T issues without giving proper attention to social history of S&T. If social issues are also considered, that would be one-step toward a greater understanding of history in general. As such, what can a history museum can do to further this goal? We can discuss this matter more by considering situations in museum management.

4. Contemporary History Museum and STS

A history museum is a very appropriate place for an exhibit on 'S&T in Society.'

Books and videos have a tendency to show historical narratives in a linear manner. A museum, however, can overcome such linear narratives by showing the actual complex nature of history. We know that there are science museums, though they have a greater focus on providing an education about scientific developments than social aspects of S&T. Thus, a history museum is the best place to show the complex origins of S&T issues and how it fits into the history.

In South Korea, there has been no national history museum where main purpose is showing Korean history, and there have been little museums on contemporary history both in public and private. The opening of the National Museum of Korean Contemporary History is the important event to change this status quo.

However, reflecting the controversy between left-wing and right-wing historical viewpoint, the museum has little narratives to show social aspects of S&T. Although the museum has considerable artifacts of S&T, most of them are related to 'large-scale historical viewpoints,' such as war, development, export of Korean products, etc.

Part of the matter lies on the motive behind the exhibition composition in the museum. This museum has its agenda to show 'proud history' of Korean modernization, partly following the other museums dealing with traditional Korean culture. Thus, sometimes 'real history' is omitted and somewhat idealized histories are exhibited instead. However, Korean development followed a path far different from the standard linear model, which typically moves from science to technology to industry. Korean industries started by using applied technologies brought in from overseas and there was an attempt to catch-up through mimicry. Thus, if we want to exhibit Korean way of development, it is necessary to show the history of this Korean strategy of mimicking.

One possible way to show 'real history' of development is focusing on working-level actors rather than stressing the president, heads of a company, or general public. Not just showing harsh labor conditions, it will be possible to show representative fruits of engineers and scientists and illustrate the process of their invention and research. This can be another attention to the 'gray area' between social elites and general public.

This kind of approach will give ways of keeping balance of exhibition composition and, if useful, such can be applied to all processes of museum management from collection and exhibition to education, and research. By emphasizing the social aspects of S&T, it will be possible to give new historical viewpoint not based on viewpoint of linear development, but based on multiple and complex histories, thus providing people more balanced historical understanding.

5. Conclusion

As social importance of S&T is increasing, it is very timely that history museum should contain social aspects of S&T into its exhibition composition because there is still the gap between the public image and the reality of scientific activity. The history museum is uniquely qualified to offer several advantages in showing such considerations. Including social aspects of S&T will give history museum good effect on overcoming the linear history narratives and introducing various histories to the people.