

## Life, Science, and Power in History and Philosophy

Akihito Suzuki and Akinobu Takabayashi

© 2019 Ministry of Science and Technology, Taiwan

**Abstract** Osamu Kanamori (1954–2016) was a prolific author of science and technology studies in Japan in the late twentieth and early twenty-first centuries. He represented many new directions, which he originally learned from France, the United States, and Japan. He influenced histories of scientific ideas and STS in Japan and East Asia. Around the same period, a new history of medicine in modern Japan started to take off. Many historical studies of modern medicine in Japan are published in English. This special issue tries to examine the relationship between Kanamori's works and Japanese medical historians and medical sociologists. After extensively reviewing and summarizing the variety of themes and genres within the works of Kanamori, these four papers will discuss four topics of medical technology, infectious diseases, psychiatric war pensions, and bioethical sci-fi works which have all been inspired by the works of Kanamori. This special issue explores the extensive works of Kanamori and the new history of medicine in Japan and argues that the new history of medicine in the near future becomes a core academic discipline within the relationship of the philosophical discussion of medicine in society and culture.

**Keywords** history of medicine · bioethics · technology · public health · PTSD · sci-fi

When Osamu Kanamori (1954–2016) passed away in 2016, scholars of many disciplines, such as historians of science, historians of technology, sociologists of sciences, STS scholars, and perhaps those in many other fields, were shocked by the sense of losing such an enormously productive scholar. Kanamori was indeed prolific. He published sixteen monographs, edited, coedited, and coauthored thirteen books, and wrote numerous articles, papers, and essays which take about twenty pages in the list of

---

A. Suzuki  
Graduate School of Sociology, Keio University, Japan  
e-mail: akihitosuzuki2.0@gmail.com

---

A. Takabayashi  
Department of History, Rikkyo University, Japan  
e-mail: atakabayashi@rikkyo.ac.jp

his publications.<sup>1</sup> These works also exhibit sheer variety and multifariousness. Kanamori's works are based on the epistemological tradition in France, where he had received his PhD, the American cultural study of science, and Japanese criticisms of the development of science in the twentieth century. They also included other methodologies and materials from French, Anglo-American, and Japanese historiographies and materials. Kanamori was also able to create discussions, debates, and disputes in various academic genres of history and philosophy of science, cultural analysis of science and literature, and somewhat journalistic disputes between scientists and non-scientists. Kanamori thus represented the multiple faces of new studies of science based on the humanities and social sciences and their positioning in Japan in the late twentieth and the early twenty-first centuries (Okumura and Suzuki 2018).

Interestingly, the period of Kanamori's eminence also witnessed the rise of the history of medicine, sociology of medicine, medical anthropology, literature and medicine, and other components of medical humanities in Japan (Suzuki 2014). In Japan, studies of the history of medicine of modern Japan have been professionally based on history and other subjects in the humanities and social sciences, and they are now often expressed in English in academic monographs and many leading journals, including *EASTS* (Bay 2012, 2018; Suzuki 2012; Mikami 2015, 2018; Mihara 2016; Nakamura 2016; Takabayashi 2017; Donze 2018) Although this rise of a new history of medicine in Japan is a good incorporation of the influence of the Anglo-American history of medicine, in the US, Britain, and other countries, the history of medicine and other disciplines have reached a certain mature status by establishing an institutional teaching system and providing major textbooks (Elmer 2004; Brunton 2004; Jackson 2011; Jones et al. 2014; Cole et al. 2015). Nowadays, the history of medicine in English-speaking countries has reached the status of being a component of the medical humanities, with sociology, bioethics, anthropology, and literature, whose teaching is now established in medical schools and whose journals are essentially medical journals. In the English world, the history of medicine and other medical humanities disciplines are increasingly in a strong relationship with the training of doctors and the communication with patients and their families. An academic relationship between medicine, humanities, and social sciences still does not exist in Japan. Perhaps one of the most interesting signs is that numerous new historians of medicine in Japan have often taken inspiration from the works of Kanamori, who did not professionally study subjects of the medical humanities. Kanamori—as if he had been a powerful figure in the past—has influenced many scholars of the medical humanities in Japan. In other words, Kanamori had (and perhaps still has) covert connections to the networks. This invisible network is the basis of this special issue.

One of Kanamori's important contributions to the field of the history of science, technology, medicine, and STS in East Asia is giving historians and sociologists possible conceptual frameworks. There have been valuable suggestions from several scholars, but they have been either grandiose, short, or too focused (Needham 1969; Anderson 2007; Bray 2008). Kanamori's contact in his early career with French epistemology, intellectual history of scientific ideas, and cultural history of literature

<sup>1</sup> The PDF file of Kanamori's publications is available at the University of Tokyo Repository: repository.dl.itc.u-tokyo.ac.jp/?action=pages\_view\_main&active\_action=repository\_view\_main\_item\_detail&item\_id=49046&item\_no=1&page\_id=28&block\_id=31 (accessed 7 August 2018).

and arts has turned his analyses and arguments into more inspirational ones, even if parts may be misleading. His viewpoints have offered quite a few long-term and global perspectives which have mainly been supported by European intellectual, philosophical, and epistemological bases and North American perspectives. Kanamori's attempts have been one of very few steps to develop more global and long-term frameworks, not just something restricted to East Asia. Of course, we need well-established and solid studies of the history of science, technology, and medicine in a single country or several countries in East Asia as exemplified in many works (Elman 2008; Shin 2009, 2010; Liu 2008; Wu 2012; Wu and Wang 2016). Intellectual comparisons of two areas such as ancient Greece and China are providing exemplary works for new studies of modern East Asia (Kuriyama 1999; Lloyd and Sivin 2002). We need to build a global and long-term history of science, technology, and medicine using powerful frameworks which incorporate intellectual and material things.

This special issue thus tries to present evidence of invisible analogies between works of Kanamori and those of scholars of new medical humanities toward the addition of new directions to history of medicine and sociology of medicine to improve current medical education. This issue will show Kanamori's ability to inspire scholars to take the initiative and develop academic studies based on solid and professional work. Perhaps such invisible connections to Kanamori can become an important driving force of new science studies in Japan.

Below, we will first summarize the essay review of Kanamori's arguments in his monographs and the actual themes adopted by the four papers. Then, we discuss the themes of the relationship between Kanamori and the new medical humanities in Japan and will consider how to promote both Kanamori-style STS studies and a solid history of medicine.

"Osamu Kanamori and His Legacies of Epistemology, Criticism, and Cultural Study of Science" is an essay-review of the works of Kanamori by Daisuke Okumura and Akihito Suzuki. The review introduces Kanamori's sixteen monographs to readers. The works represent the interesting and versatile world of the late Kanamori, revealing many aspects of the myriad works of French epistemology, history of scientific ideas, and STS, among others. The versatility of Kanamori is simply amazing—from his linguistic multiplicity (French, English, and Japanese) to his various approaches to discussion (epistemology, history of scientific ideas, literature, and art) to his materials for various arguments (scientific texts, philosophy, and literature). Perhaps the most important in the context of this special issue is Kanamori's emphasis on the modern and contemporary periods in terms of the chronology of science, culture, and society. Kanamori emphasizes politics or the role of the state in the direction of science as the critical issue. Although Kanamori emphasized the Manhattan Project and the issue of politics and physical science, the Foucauldian emphasis of biopower in the modern period is another important issue in Kanamori's works. Politics and biomedicine are two major frameworks which every paper in this special issue will use. At the same time, each paper adds a few more elements, such as economics, administration, medical practice, and popular culture in order to frame their own subjects.

"Medical Technology in Use: A History of Clinical Thermometry in Modern Britain and Japan" is the title of Akinobu Takabayashi's paper, which deals with the spread of the medical technology for clinical thermometry in Britain and Japan in the modern period. One of the fundamental paradoxes of the globalization of modern medicine is

the close contact between life and technology or, rather, the tension between the living human body and the man-made and applied devices to understand the indices of life. Quite impressive is the impact of the revolutionary technological devices like the stethoscope and X-ray machines, as well as the additions of numerous technological devices such as the artificial radioisotope, electrotherapeutics, spirometer, and sphygmograph. The practice of medical technology has turned out to be a series of very complex issues of the nineteenth and twentieth centuries. The important trends have been the standardization of medical data, which departed from the experience of patients to the indices on the machines. This means dehumanization of a certain portion of clinical things; we already have criticism of technology-centered medicine in the age of machines, and the countries in the English-speaking world have established the medical humanities as a kind of literary, ethical, and artistic supplementary force. Another important emphasis is the rise of the powerful companies which sold medical technological devices to doctors and hospitals. In the Japanese context, Pierre-Yves Donze has explored the fundamental revolutions created by medical device companies such as the Shimazu Company in the selling of X-ray machines to influential academic clinics, hospitals, and doctors in the early twentieth century (Donze 2018). With these complex situations in mind, Takabayashi tries to incorporate two ideas: the comparison of the English and Japanese situations and the focus on the patient (or layperson) and society in the context of the clinical thermometer. The interplay of the power of the state, economy, gender, and the public of two countries in terms of medical technology presents an interesting example of a total history of medicine.

The paper by Akihito Suzuki, titled “Public Health, Laboratory Experiment, and Asymptomatic Carriers in Japan in ca. 1920–1950,” has similarly argued using a comparison of two countries, namely, the United States and Japan. Specifically, it compares the treatment of asymptomatic typhoid patients in the early twentieth century. For the American cases, Suzuki relied on Leavitt’s famous study of the lifetime confinement of Typhoid Mary in New York, which has become a notorious case in the context of HIV detection in homosexual individuals in the late twentieth century (Leavitt 1996). Our knowledge of asymptomatic typhoid and other infectious diseases in Japan was very limited. Thus, Suzuki started this project. Although Japanese society had some public health rules on such subjects, those rules were not a powerful part of Japanese medicine, and the animal experiments in such cases carried more influence. Although the Japanese public health system did not show sterile aspects to asymptomatic typhoid, its belief in the power of experiments had a strong connection to, if not causation of, the murderous human experiments committed by Unit 731 during the Second World War. Although this paper is somewhat critical of Kanamori’s use of Leavitt’s work, it has used this case as a development for understanding one aspect of animal experiments in Japanese medicine in the mid-twentieth century.

“Psychiatrists as Gatekeepers of War Expenditure: Diagnosis and Distribution of Military Pensions in Japan during the Asia-Pacific War” is the title of Eri Nakamura’s paper. It also follows the paths of the world wars and compares Western medical phenomena and Japanese counterparts. Nakamura examines war neurosis experienced by the Japanese Imperial Army in the Asia-Pacific War (1931–45). Although Japan had some war-neurotic patients during the Russo-Japanese war in 1904–5, Japan lacked the experience of the First World War, unlike countries like Britain, Germany, and France (Bourke 1996; Micale and Lerner 2001). In a series of works, Nakamura established

the existence of cases of war neurosis or PTSD during the later phase of the Asia-Pacific War with a major emphasis on the military use of young Japanese elites as psychiatrists. Following many important works on war neurosis in England, Ireland, and Germany, Nakamura took not just a medical disease perspective but also an important socioeconomic one (Lerner 2003; Reid 2011). Particularly important was the issue of war pensions for soldiers with neurosis. After the war, whether to admit the disorder as a disease or a malingering was closely connected to the notion of the war pension system and the protection of the state. Nakamura not only emphasized the existence of war neurosis but also showed the characterization of the idea to the state in a sophisticated way.

Kaori Sasaki's paper is titled "Bioethics between Imaginary and Reality: Tracing Science Fiction and Its Shaping of Transplant Medicine Protocols in Japan." Sasaki has followed Kanamori's views of the synchrony of sci-fi films and bioethical issues in the United States, as well as many examinations of the relationship of sci-fi stories and bioethics in the Anglo-American world. Her argument centers around the quite different correspondences in similar Japanese performances in the 1980s and 1990s. Sasaki picked two works: *Noh*, or the traditional drama of Japan, and manga, or anime, which are new Japanese medias centered around comics. In order to enrich the argument for a global stage, she chose to introduce two indigenous Japanese elements—one being very traditional, the other a very advanced genre. She also mentions influential philosophers, sociologists, and historians of biopolitics in Europe, the United States, and Japan, as the questions of brain death and transplant medicine were the subject of intense debates in Japan in the late twentieth century. Sasaki's paper thus responds to an argument of Kanamori by examining the relationship between Japan's unique sci-fi genre works and its bioethical considerations, which were very different from those in Western countries. The paper covers the Japanese case for organ transplantation, a case study of Japanese sci-fi works, and the further potential of the sci-fi genre to stimulate and/or expand bioethical considerations and the Japanese STS field.

We have so far summarized the themes of the essay-review of Kanamori's works and four papers that have been inspired by Kanamori's works. The next section will discuss why Kanamori was so crucial for the new history and sociology of medicine in Japan, even though he was neither a medical historian nor a medical sociologist.

As previously mentioned, the period of Kanamori's productivity witnessed the rise of the new history of medicine. The old history of medicine was practiced by medically qualified persons who wanted to either praise or condemn the medicine they were experiencing. The major targets of the praise or condemnation of the *old* history of medicine were usually doctors, nurses, the state, the military, or the administration of Japan. The *new* history of medicine has a much wider range and takes many more agents as components of medicine. The ordinary method often taken is the so-called Hippocratic triangle of doctor, patient, and disease, which are put in political, economic, cultural, social, and environmental frameworks. Since such historiographies have been by and large products of the English language history of medicine, in current-day Japan, monographs, PhDs, special issues, and academic articles have been published in English (Suzuki 2014).

The relationships between Kanamori's ideas and the new history of medicine in modern Japan or particularly in the twentieth century are somewhat complex. These two sectors share some relationships; in one sense, that is a natural phenomenon and

one can quote from a standard reference of the history of medicine in the twentieth century: “the history of medicine in the twentieth century is the history of the twentieth century” (Cooter and Pickstone 2003). One should recall, however, that Kanamori was not a historian of medicine. Kanamori’s specific works on the history of medicine are somewhat gloomy and dark and often had a fault-finding tendency toward one sector of medicine as in the old and critical history of medicine historiography. Technically speaking, Kanamori has not made a great influence on the history of medicine as a professional historian of medicine. On the other hand, all the authors of these four papers brought forth an influential or inspiring part of Kanamori’s works in various contexts, such as the societal use of Typhoid Mary, the crucial role of the state in the Second World War, and the relationship between sci-fi films and bioethics.

More important and solidly presented by four papers are the roles of the state, society, and macro-micro culture of Japan. Takabayashi picked up the relative strength of the Japanese state from the 1920s, which used a state-controlled style of mechanical production of medical thermometers while Nakamura concentrated on the military’s power in limiting wartime pensions and elite psychiatrists’ collaboration with the state. Suzuki tends to emphasize the microculture of elite university laboratories to consider asymptomatic typhoid. Another important point within the four papers is the comparison of Japan and specific European and North American countries. Instead of painting the influence of, or reference to, Western countries as globalization, all papers emphasized the importance of establishing a more clear vision of the origin of a certain medical concept from a certain Western country. In the discussion of nationalism in the nineteenth and twentieth centuries, we tend to distinguish “Western” and civic nationalism and “Eastern” and ethnic nationalism. Britain, France, and the United States represented Western nationalism, and Germany, Italy, and Japan represented Eastern nationalism until the end of the Second World War. From the late nineteenth century to mid-twentieth century, Japanese medicine was under the influence of several European and North American countries, in both Western and Eastern guises. Although Germany’s was by far the most important framework for academic medicine taught at universities and medical schools, the emphasis on the German connection was less concerned with reality than with a strong nostalgia or condemnation from medical historians and/or medical practitioners. Other countries played significant roles as well. Takabayashi used Britain, Suzuki and Sasaki used the United States, and Nakamura used Germany to gather materials. Britain was a leader in demographic indices and public health, while the United States contributed medical drugs—among many other specific things, such as psychoanalysis—which came from the United States to Japan in the early and mid-twentieth century. Instead of thinking of medicine in Japan as a German replica, we need to understand Japanese medicine as a mixture of Japanese ethnic situations and the influences from several different European countries. In so doing, we are able to identify which nations have influenced medicine in Japan.

Perhaps the most important and central questions for historians of medicine, sociologists of medicine, and scholars of other disciplines within the medical humanities is the construction of the disciplines which evaluate and judge medicine in the past and the present and pass on those historical and sociological insights for the betterment of present and future medicine. In Japan, where medicine or academic medicine is famously skilled and notoriously authoritarian, it might be hard to construct such an attitude in society. Historical, sociological, anthropological, and literary insights and

discussion may become dynamic, yet they are likely to remain in their own academic genres of history or sociology, unable to touch the crucial area of medicine. If one refers to Kanamori's lament about his experience in the dispute on science wars in Japan, medical historians might experience the counter criticism by doctors, who might claim that nondoctors should not say anything about medicine from the outside. New medical historians, who are not doctors but want to say something to contemporary Japanese medicine and society, have thus been attracted by Kanamori's inspirational comments on science, typhoid, World War II, and sci-fi films.

Kanamori has published work after work during his lifetime due to his diverse intellectual curiosities. For many academic historians, who live in a world of professionalization and specialization and who are busy reading digital copies of original materials and serious academic papers in different languages, Kanamori's style has had some distance. The intellectual historian has, however, provided several keys for the crucial development of their own works. Kanamori was thus a provocative, productive, and inspirational author on the borderline between the academic and nonacademic worlds. What is remarkable is that his emphasis on writing for the mass intelligent market did not preclude his place in the academic world. Positivist and empirical new histories of medicine in Japan need Kanamori's inspirational insights about science and the world in the twentieth century. Inspirational ideas and positivist solidarity are both coming in the new history of medicine in Japan.

This issue will thus provide a model for historians of medicine, science, and technology of other countries to fashion a new style of keeping two different approaches or attitudes. Intellectual inspiration and solid historical works should be combined in each country. By this new combination of provocative thinking and positivist analysis, many subdisciplines in the history of science, technology, and medicine will find new ways to pursue a bigger picture in multiple countries. Another important thing to note is to publish the arguments in each country in English. The exciting intersection between philosophy and history in Japan has been presented here in English as well, which might have been another dream of the late Kanamori.

## References

- Anderson, W. 2007. "How Far Can East Asian STS Go? A Commentary." *East Asian Science, Technology and Society* 1, no. 2: 249–50.
- Bay, A. R. 2012. *Beriberi in Modern Japan: The Making of a National Disease*. Rochester, NY: University of Rochester Press.
- Bay, A. R., ed. 2018. "New Directions in the History of Medicine in East Asia." Special issue, *Historia Scientiarum* 27, no. 2.
- Bourke, J. 1996. *Dismembering the Male: Men's Bodies, Britain and the Great War*. Chicago: University of Chicago Press.
- Bray, Francesca. 2008. "Constructing Intimacy: Technology, Family and Gender in East Asia." *East Asian Science, Technology and Society* 2, no. 2: 151–65.
- Brunton, D. 2004. *Medicine Transformed: Health, Disease and Society in Europe, 1800–1930*. Manchester, UK: Manchester University Press.
- Cole, T. R., et al. 2015. *Medical Humanities: An Introduction*. Cambridge: Cambridge University Press.
- Cooter, R. and Pickstone, J. 2003. *Companion to Medicine in the Twentieth Century*. London: Routledge.
- Donze, P.-Y. 2018. *Making Medicine a Business: X-Ray Technology, Global Competition, and the Transformation of the Japanese Medical System, 1895–1945*. Berlin: Springer.

- Elman, B. A. 2008. "Sinophiles and Sinophobes in Tokugawa Japan: Politics, Classicism, and Medicine during the Eighteenth Century." *East Asian Science, Technology and Society*, vol. 2, no. 1: 93–121.
- Elmer, P. 2004. *The Healing Arts: Health, Disease and Society in Europe, 1500–1800*. Manchester, UK: Manchester University Press.
- Jackson, M. 2011. *The Oxford Handbook of the History of Medicine*. New York: Oxford University Press.
- Jones, T., et al. 2014. *Health Humanities Reader*. New Brunswick, NJ: Rutgers University Press.
- Kuriyama, S. 1999. *The Expressiveness of the Body and the Divergence of Greek and Chinese Medicine*. New York: Zone Books.
- Leavitt, J. W. 1996. *Typhoid Mary: Captive to the Public's Health*. Boston: Beacon Press.
- Lerner, P. 2003. *Hysterical Men: War, Psychiatry, and the Politics of Trauma in Germany, 1890–1930*. Ithaca, NY: Cornell University Press.
- Lloyd, G. E. R., and Nathan Sivin. 2002. *The Way and the Word: Science and Medicine in Early China and Greece*. New Haven, CT: Yale University Press.
- Liu, S. 2008. "The Ripples of Rivalry: The Spread of Modern Medicine from Japan to Its Colonies." *East Asian Science, Technology and Society* 2, no. 1: 47–71.
- Micale, M., and Lerner, P. 2001. *Traumatic Past: History, Psychiatry, and Trauma in the Modern Age, 1870–1930*. New York: Cambridge University Press.
- Mihara, S. 2016. "Vitalism and neonatal medicine in Japan, 1901–1945." *Historia Scientiarum* 25, no. 2: 119–39.
- Mikami, K. 2015. "State-Supported Science and Imaginary Lock-in: The Case of Regenerative Medicine in Japan." *Science as Culture* 24, no. 2: 183–204.
- Mikami, K. 2018. "The Case of Inferred Doability: An Analysis of the Socio-institutional Background of the STAP Cell Scandal." *East Asian Science, Technology and Society* 12, no. 2: 123–42.
- Nakamura, E. 2016. "Invisible' War Trauma in Japan: Medicine, Society, and Military Psychiatric Casualties." *Historia Scientiarum* 25, no. 2: 140–60.
- Needham, Joseph. 1969. *The Grand Titration: Science and Society in East and West*. London: Allen and Unwin.
- Okumura, D., and Suzuki, A. 2018. "Osamu Kanamori and His Legacies on Epistemology, Criticism, and Cultural Study of Science." *East Asian Science, Technology and Society* 13, no. 1: 101–12.
- Reid, F. 2011. *Broken Men: Shell Shock, Treatment, and Recovery in Britain 1914–1930*. London: Continuum.
- Shin, D. 2009. "Hygiene, Medicine, and Modernity in Korea, 1876–1910." *East Asian Science, Technology and Society* 3, no. 1: 5–26.
- Shin, D. 2010. "How Commoners Became Consumers of Naturalistic Medicine in Korea, 1600–1800." *East Asian Science, Technology and Society* 4, no. 2: 275–301.
- Suzuki, Akihito, ed. 2012. "Social History of Modern Japan." Special issue, *Historia Scientiarum* 22, no. 2.
- Suzuki, Akihito. 2014. 「医学史の過去・現在・未来」 ("The Past, Present, and the Future of History of Medicine.") 『科学史研究』. *Japanese Journal of the History of Science* no. 269: 27–35.
- Takabayashi, A. 2017. "Surviving the Lunacy Act of 1890: English Psychiatrists and Professional Development during the Early Twentieth Century." *Medical History* 61, no. 2: 246–69.
- Wu, Y. 2012. "Disappearing Anger: Fujisawa Shigeru's Psychological Experiments on Aborigines in the Late Colonial Period." *East Asian Science, Technology and Society* 6, no. 2: 199–219.
- Wu, H., and Wen-Ji Wang. 2016. "Making and Mapping Psy Sciences in East and Southeast Asia." *East Asian Science, Technology and Society* 10, no. 2: 109–20.

**Akihito Suzuki** teaches social and cultural history of medicine at Keio University. He studies the history of psychiatry, infectious diseases, and patients' behavior. He is now completing a book which examines psychiatry, patients, and families in Tokyo in the earlier half of the twentieth century from the rich archive of a private psychiatric hospital.

**Akinobu Takabayashi** is associate professor of the Department of History, Rikkyo University, Japan. He studies and teaches the social history of medicine and psychiatry, having published an article in English for *Medical History* and a book on the psychiatric profession in early twentieth-century England from Misuzu Shobo in Japan.