

# Technological Transformation of Corporeal Existence: Philosophical Reflection on the Theory of Corporeality of the Kyoto School

Ayaki MONZEN  
*Kanazawa Seiryō University*

## Abstract

This study explores how the progress of “Gijutsu (art/technology)” impacts human transformation. Currently, technological literacy largely defines social relationships and life-long experiences. Therefore, school educational intents emphasize flexible updates of new technologies. This study reconsiders human ontological transformation through the systematic use of new tools and machineries in society based on the theory of corporeality of the Kyoto School.

**Key words:** Gijutsu (art/technology), tool, machinery, institution, Motomori KIMURA

## Introduction

Recently, the digital transformation (DX) of education has gained considerable attention. Under the Global and Innovation Gateway for All (GIGA) School concept, children learn by using digital learning devices such as tablets and forming friendships through various communicational applications. As literacy in information and communication technologies has become crucial to social relationships and life-long experiences, school educational intents encourage flexible updates of technological innovation.

However, is it reasonable for pedagogical discussions to incline toward effective teaching methods for technical changes? Thus, this study reconsiders human ontological transformation through the systematic use of “Gijutsu (art/technology)” in society. A technical “rut” has been established through educational curriculums to provide specific

---

## Correspondence:

Ayaki MONZEN, Kanazawa Seiryō University. Email: monzen@seiryō-u.ac.jp

physicality suitable for socially required progress. Then, this study aims to use the perspectives of the Kyoto School to gain new viewpoints on today's education. The purpose is to convert the uniformity of technical "ruts" to the diversity of technological "channels" to build creative connections in society. By focusing on descriptions by Motomori Kimura (1895-1946) and referring to Kiyoshi Miki (1897-1945), this study considers human corporeal potentiality.

## 1. Theory of corporeality according to the Kyoto School

Keiichi Noe evaluates the thoughts of Kitaro Nishida (1870-1945) as the foundation of philosophical discussions on human corporeality in Japan. According to Noe, Nishida shared the "global contemporariness" of thoughts with the phenomenologists of the time, while simultaneously identifying their tendencies and limitations to the "rut of Cartesian subjectivism," which was discussed based on the individual experience and consciousness of the subjective inner self (Noe, 1994, p. 84).

This rut, which Nishida pointed out in his contemporaries, provides a psychologistic and subjectivistic framework of human development and becomes the ground for techno-rationalistic models of education. From this perspective, educational arguments tend to be an effective methodology for the desired transformation for technical individuals.

In addition, under the intellectual influence of its members, the Kyoto School developed several arguments on human corporeality as a dynamic complexity between physical nature and human will (Yokoyama, 2005). Their discussions developed new viewpoints to critically examine human-centered, technical rationalism.

There are two main streams of this challenging discussion as follows: one was Nishida's philosophy and the other was Hajime Tanabe's (1885-1962) philosophy. Nishida's theory on corporeality was formed and deepened partly through his focus on art making, which vividly described the moment of "Koui-teki chokkan [acting-intuition: 行為的直観]." Tanabe's theory initiated the discussions on corporeality in the Kyoto School, which investigates the corresponding dual structure of human corporeality, namely the "inner," "ego-belonging" aspect and "outer," "transcendental" aspect.

Kimura formed his thoughts on corporeality under a hybrid influence of both these philosophies. Along with Nishida and Tanabe, Kimura developed his concept of "Gijutsu" and expanded it into a unique mode of presence as "Gijutsu-tekishintai [technological corporeality: 技術的身体]" and its root of "Rekishiteki shizen [historical nature: 歴史

的自然].”

## 2. Theory of technological corporality to cultivate the relationship between science and technology: Discussions by Motomori Kimura

In the famous article “Hyogen Ai [Expressive Love: 表現愛]” Part I, Kimura discusses human beings as corporeal existence closely related to the context of cultural formations as follows.

Culture is not human’s conquest against nature but must be, in its deepest essence, human’s formation of their actuality within the historical nature. In other words, culture is awareness as human beings through the cultivation of the historical nature. “Cultura,” in its profound and true sense, is nothing other than the cultivation of the historical nature ——that is to say, “Agricoltura.” (Kimura, 1997, p. 31)

In this discourse, he states that the human body is an active pioneering point of the creative will of the historical nature, partly cutting into physical materials. The concrete formation of human embodiment through physical work depends on the mind. Just as a sharp point of a chisel bites into a rock and gouges it out, people put their whole corporeal existences into difficult works. The unique characteristic of human corporeality emerges through the correspondence of physical and mental actions (Ibid., p. 34).

Kimura focuses on this narrative structure of human creative will for new cultures driven by embodiment works through cultivating the historical nature. The human body is considered to be a cord of continuing changes occurring between physical environments and the human will of socialites. In this sense, his idea that “awareness as human beings is embodied through cultivations of the historical nature” does not simply indicate the function of the “Seishin [spirit: 精神]” that is always human value-oriented.

In this context, the word “awareness” means the actual minds that come up with intuitive reflections accompanied by doing or acting in pre-linguistic ways. This reflection hits through physical tricks or pathological affections while applying technologies to some intention. This concrete insight is paraphrased by Kimura as “corporeal inspiration by hand works (including other bodily acts)” or “physical tact

works in corporeality.”

Such considerations suggest that humans as corporeal existence do not input readymade techniques but are gradually becoming unique and renewing their freshness by inquiring into environments.

Furthermore, Kimura’s theory of corporeality is characterized by original discussions on “Rishin-tekishintai [remote extension of the corporeality: 離身的身體].” He considered the cultural progress of science and technology from the perspective of global connection and communication. He regarded the theory of global corporeality as a key to reconstructing national education. In addition, he suggested his theory of world citizenship as a member of the Kyoto School through the concept of “Sekaishi-teki bunka-teki fuhen [world university in historical and cultural contexts: 世界史的文化的普遍].” This concept of university as the bottom of daily life was relevant to the renewal of “Gijutsu,” which enables the edge of rational inquiry. These arguments provide us with new viewpoints about human corporeality. As an “active tip of formative awareness” of the historical nature, human corporeality extends into physical surroundings to capture cultural innovations, making exchanges and contacts with different cultures (Kimura, 1946, p. 264, 282-283).

Kimura’s descriptions of remote extension of the corporeality include three routes of cultural interaction: the main concept “Michi [channels: 道]” can be explained in detail as “Koutsuu-unyu [transportation: 交通運輸],” “Tsuushin [communication: 通信],” and “Denpa-houdou [propagated report: 伝播報道].” These routes refer to the extended corporeality conveyed as mediums of technology. In using and enjoying the fruits of modern natural science, these routes unexpectedly and uncertainly transform human corporeality.

The following passage on “transportation” is remarkable as it indicates of technical use of science and technology. Scientific achievements and their applications in daily life always give birth to new technologies.

It should be noted that the transportation system is not merely a conveyor for convenient movements. Transportation has more meaning than a merely technical way of passing and moving. Theoretically, the transportation system itself is nothing more than a chisel-like machinery as a pioneer of new technological channels. (Ibid., p. 281)

In this study, the focus is on Kimura’s consideration of the viewpoint about the antagonistic dialogue between two aspects of human corporeality, one is an immanent

self and the other is the transcendental matter. In other words, the former is the bodily self under control while the latter is the living actuality beyond arbitrariness.

Kimura inherited the dual structure of corporeality from Tanabe's thoughts. The technological corporeality, while making a dialogue between its inner and outer aspects, is recreated thoroughly in daily practices. Thus, the technological corporeality is always open and embarking on new cultural possibilities.

However, Nishida's thoughts of "acting intuition" also definitively influenced Kimura's theory of corporeal remote extension. Nishida offered Kimura a unique paradoxical perspective. The point is that the corporeal self is dynamically activated, through using science and technology, realizing its characteristics or roles by permeations and immersions into the world. Nevertheless, this argument of human corporeality in symphony with its environment should not be identified with the spirit of self-loss or self-sacrifice.

The historical world forms and creates itself through human corporeality, and then human bodies are the rationalizing agency of several irrational events. Humans have their bodies as tools, and at the same time, they are always corporeal existences. To be immersed in the living world does not mean that human bodies disappear or become merely homogenized generically. Rather, the permeation or immersion into the world means that human bodies become deeply realized, self-satisfied, and openly aware of themselves by listening thoroughly to the bottom or edges of the body. (Nishida 2003, p. 47)

Kimura succeeded Nishida's understanding of the dual structure of human corporeality. According to Kimura, the aspect of "having a body as a tool" is interpreted as instrumental corporeality, and the aspect of "being a corporeal existence" is explained as technological corporeality (Kimura, 1997, p. 35). As a corporeal existence, humans work on the world through their bodily instrumentality to encounter different environments and, by grasping materials in response, gradually receive the outlines and limitations as individuals. Thus, human beings continue to be recreated with social relationships embedded in the situation of the time and place.

Following Tanabe and Nishida's philosophies, Kimura captures the tact of corporeal inspirations through hand works, expanding into tangible or intangible cultures established by science and technology.

Furthermore, Kimura discusses the historical and social corporeality related to the use of "tools" and "machinery." According to him, the tools around us are

“dialectical entities that are both self-negated bodies and self-negated substances.” He mentioned that tools are “the most reliable and experienced alter self of human expressive subjectivities,” which “always invokes a purpose or a plan for the human formative will concretely.” Tools are featured by “removability,” “substitutability,” and “publicness (subjective validity)” (ibid., pp. 37-39).

This argument alters the understanding of the use of tools. Human beings use a tool as a means to an end; however, in line with Kimura’s way of thinking, using a tool is revealed to be an interactive situation in which the tool calls upon the formability of bodies as “objectively projected will of outside.” The tool stimulates and forms the “expressive will,” conveying limitations or pressures from the environment. Kimura compared such a tool to a “corresponding partner of outside.”

In contrast to such a collaborative nature of tools, machineries are viewed as “negative bodies” or “objective bodies.” Machinery is a “bodily zero-point” that has neither power nor workability; however, it “actively regains its powerful motions through the double negation (the negation of the direct negation of point of effort) and positively recovers its subjectivity.” Kimura indicates that machineries accompany specific corporeality called “trans-corporeality” (ibid., pp. 40, 46). It is an “overall plan embodied as a complex unity of partial plans,” also an “architecture of plans,” under objective rationality. Machinery does not respond to human bodies, absorbing human corporeality, and working without reliable correspondences or relationships.

Kimura took the function of tools as his point of argument and focused on the “Kotsu [a knack, a hang: 骨、骨法]” and “Kokyu [a tact: 呼吸]” originally acquired before noticing practical corporeality. In addition, he focused on the human will to search for natural materials using corporeal inspirations (ibid., pp. 41-42). Under such arguments, he had a sense of crisis of the time in surrendering to the “great voice” of machinery, which brought profound qualitative changes in the human sense of art and morality.

Today people are living in the era of artificial intelligence (AI) networks that are involved with each other like complexes of invisible vast machinery. Faced with such technological transformations as corporeal existence, Kimura’s arguments on machinery can explore the issue of human transcendence. This aspect should be examined more positively and radically linked with social structure. Then, the next section refers to the theory of social corporeality by Kiyoshi Miki, who considered the technological formations of institutions.

### **3. Theory of social corporeality to explain institutional connections between science and technology: Discussions by Kiyoshi Miki**

In the article “Kousouryoku no Ronri [The Logic of Imagination: 構想力の論理]” Chapter I “Myth,” Miki explains “Logic of imagination” as the “imagination tied to nature, a nature in a subjective sense, in other words, to human pathos.” Moreover, he defines this subjective nature working as pathos or passions, “Shakai-teki shintai [social corporeality: 社会的身体] (Miki 1967b, p. 95).”

The social corporeality is supported mainly by collective liaisons of laborious interests, which enable us to form a variety of intuitions cooperatively. Although a social institution for technological development is taken as “Katachi [form: 形]” of labor-oriented negotiations, Miki attentively captures human occupations behind it. Social corporeal negotiations encourage to utilization of nature including pathos. His theory of corporeality explores this deepest aspect of human productivity from the perspective of the corporeal passion of nature.

According to him, a social institution that defines human productive acts is a “form,” which is defined by three points, as follows: (1) a mimetic character as “convention and fiction”; (2) a habitual and traditional character as “custom”; and (3) a legal, compulsory, and authoritative character as “mores” or “nomos.”

Based on the above, not only (3), which directly governs social life, but also (1) and (2) include sociality. (1) means “convenio (to come together, assemble),” which accompanies a social property of logos as “unity,” “agreement,” and “promise” among unspecified multiple people. In addition, (2) has a collective, natural, and inevitable property of pathos, distinguished from individual customs (ibid., pp. 102-103).

In Chapter 3 “Technology,” he describes the linkage between science and technology related to the institutional aspect of technology as follows.

Technology is created when humans remote and detach themselves from nature, and at the same time, through technology, they are bound to and return to nature. (ibid., p. 255)

This is quite ambivalent as a form of negotiation between nature and humans. Technology becomes more self-evident through those dual actions and their repetitions. By extension, it accompanies “the tendency to imitate oneself endlessly,” and then takes on a normative meaning as an institutional form.

Miki superficially distinguished science and technology. According to him, the

former is an experimental and critical activity to accumulate objective knowledge for freedom and to control over nature, whereas the latter is an activity to question the results of science among nature in practice and institutionalize them as customs. However, like Kimura, he also relies on Nishida's argument of "acting-intuition" and "seeing by doing," stating that science and technology emerge in an improvised way, and pointed out the multi-layered overlapping between science and technology.

Miki developed his theory of social corporeality at the point of "Gijutsu" to constrain and to be constrained by the forms of institutions. There are some suppressed or unknown gaps in the boundaries between new forms of institutions. In his article "Tetsugaku Nyumon [An Introduction to Philosophy: 哲学入門]" (1940), this discussion is redrawn under the phrase that "human technology succeeds the technology of nature." The phrase indicates social motivation for technology "Gijutsu" driven by an indefinite, demonic impulse. This demonic character of "Gijutsu" is reflected in the sentence that "at the root of the world lies infinite darkness, infinite impulse." Miki states and tries to indicate that social corporeality is linked deeply to technology as an institutional formation (Miki 1967b, pp. 163-166). He illustrates that, in the first place, institutional formation is not a solid contractual form of mutual benefits, but an open activation by a latent and potential force of unknown and unlimited formations.

Regarding the passionate form of unknowns, the concept of demonic formative force discussed by Nishida offers a clue to Miki, that is, an affected impulse of selflessness before the conscious distinguishment of objects. The force is over subjective controls. In this sense, social corporeality in Miki's institutional theory does not focus on objective and collaborative corporeality that shares general standards and common sense. Rather, his theory grasps the powerful impulsiveness highlighted by proactive and intent aspects through the diversity of living.

By referring to Miki, this report suggests that the social corporeality of institutional formations can bring an open, rather than self-centered or self-assertive, creativity. This creativity is apprehended as a tact to survive current restrictions or problems, passing their pathos to the changes that follow. Sometimes, this creativity may seem irrational. However, the impact is necessary for tolerant social concepts to avoid the uniform expansion of valid techniques for all.

## Conclusion

This report critically examined the tendency of education today, which



rationally drives children or newcomers to acquire the necessary techniques or skills for social life. The verification of the word “Gijutsu (art/technology)” has reaffirmed some principles of corresponding and emerging “channels” for the technological transformation usually covered by psychologistic and subjectivistic “ruts” for rational technical acquisitions.

Kimura’s theory of technological corporeality discusses a remote extension that penetrates into an environment like a “chisel-like” tool, launching new channels of “transportation,” “communication,” and “propagated report.” From this perspective, the technological transformation of human corporeality is not regarded as the formation of subjective individuals suitable for uniform techniques. Human corporeality is reconsidered as a medium that receives constraints or difficulties woven into its will, purposes, and motivations and then converts such unexpectedness into new keys to open the next channels of technology.

Miki examined the social corporeality related to social networks, which immediately replaces limitations or constraints with its driving force of institutional formation. His logic of form/formation focuses on the practical corporeality, which gains its social concreteness through conflicts arising from cultural differences and their mutual negations. Under his argument, human corporeality is reconsidered as a medium of open creativity for impulsiveness provided by the diversity of living.

The corporeal theories of the Kyoto School propose, first, a conceptual shift of the meaning of “Gijutsu” learning, from the previous value-accumulated view of techniques to the notable value-inquiring view of technologies. In the former, one is encouraged to simply acquire predetermined skills and desirable techniques, in the latter one is encouraged to gain trial tact derived from carefully examining motivations and processes of learning acquisitions.

Second, the Kyoto School’s arguments show the need to generate an interactive institutional design of social promotion to provide new technologies. Institutional design always prepares a premised outlook. Therefore, it should be formed with attentive and reflective thinking on unexpected difficulties or contradictions around the expected effects of new changes.

As above, education can overcome technical rationalism by attaching a reasonable value to possible or arising failures, conflicts, and imperfections of technical and technological changes. The key would be to convert such specific nuisances to active resources of coming technological transformations in accordance with the historical nature and social corporeality.

## References

- Kimura, M. (1997) *Hyogen Ai* [Expressive Love]. Tokyo: Kobushi Shobo.
- . (1946) *Kokka ni okeru Bunka to Kyoiku* [Culture and Education in the Nation State]. Tokyo: Iwanami Shoten.
- Miki, K. (1940/1967a) Tetsugaku Nyumon [An Introduction to Philosophy] in *Miki Kiyoshi Zenshu* [The Collected Works of Kiyoshi Miki] (Vol. 7). Tokyo: Iwanami Shoten.
- . (1937-1943/1967b) Kousouryoku no Ronri [The Logic of Imagination] in *Miki Kiyoshi Zenshu* [The Collected Works of Kiyoshi Miki] (Vol. 8). Tokyo: Iwanami Shoten.
- Nishida, K. (1936/2003) Ronri to Seimei [Logic and Life]. In *Nishida Kitaro Zenshu* [The Collected Works of Kitaro Nishida] (Vol. 8). Tokyo: Iwanami Shoten.
- Noe, K. (1994) Rekishi no naka no Shintai: Nishida Tetsugaku to Genshou-gaku [Human Corporeality in the History: Nishida's Philosophy and Phenomenology], In Ueda, S. (ed.), *Nishida Tetsugaku* [Nishida Philosophy: A Festschrift of the 50th Anniversary of the Death], Tokyo: Sobunsha.
- Yokoyama, T. (2005), Nihon-teki Shintai no Keisei [The Formation of the Japanese Theory of the Corporeality: Focusing on the “The Kyoto School”] in The University of Tokyo 21st Century COE Program (ed.), *UTCP Kenkyuu Ronshu* [UTCP Research Review] (No. 2). Tokyo: International Center of Exchange for Philosophy for Symbiosis (The University of Tokyo 21st Century COE Program).