

Tanegashima and Firearms Technology Transfer in Japan: A Cultural Perspective on Contemporary Japan–U.S. Defense Cooperation

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ABSTRACT

This article explores the 1543 *Tanegashima* event as a cultural prototype, showing how Japan received foreign technology in its history. Other than changing the nature of warfare during the *Sengoku* period, the introduction of firearms created a unique culture of *selective adaptation* and *domestication* of technology. The copying of these technologies by the locals is an example of identity construction, where foreign technologies are *tamed* to fit domestic culture. Adopting a cultural studies approach, this paper highlights this continuity in Japan's current defense diplomacy through an analysis of Article 9 of the country's constitution. As revealed in the research, the Japanese government navigates current relations as a pacifist state with a strong cultural identity. According to this paper, supported by the views of Putri et al. (2024), this approach reflects Japan's longstanding cultural pursuit of technological autonomy.

Keywords: *Tanegashima, technology transfer, Article 9, Japanese culture, defense cooperation.*

INTRODUCTION

The presence of the Portuguese in 1543 on Tanegashima Island is considered one of the key military events which brought about firearms to Japan. Traditional histories usually interpret such an occurrence as a key turning point in the development of Sengoku-period warfare. Under this paradigm, the introduction of firearms is interpreted mainly in terms of the role of this innovation in expediting the establishment of the centralized power. Nonetheless, such a focus only on the military side of the matter ignores equally important cultural implications which were essential in defining the reception of the foreign

weapon in question. Contrary to the common perception, the weapons were actively interpreted in line with the prevailing cultural context.

The Japanese did not accept firearms as mere means of war-making but rather managed to incorporate such foreign technology into their culture. This indicates that the Japanese took an active stand in introducing new inventions through a process of interpretation and adoption of certain changes in accordance with the current social context. It should be noted that, in this context, Tanegashima represents more than a simple geographical term but also a symbolic point which marked the first encounter of Japan with modern foreign technologies. The fact that the firearm in question was called Tanegashima-teppō shows that Japan managed to assign national importance to such an invention as part of its sovereignty.

From the viewpoint of cultural studies, Tanegashima can be defined as a cultural text which reflects the history of the country's response to gaiatsu pressures. As indicated in such sources as Teppōki, firearms prompted not only admiration for the novel technology but also concerns about the maintenance of national cultural heritage. This historical analysis proves that Tanegashima created a cultural template which reflects the process of domestication of foreign technologies in the course of the following years. The mentioned examples show that such processes have existed for centuries in Japanese society.

From the point of view of cultural studies, the Tanegashima event could be treated as a "cultural text" documenting the history of Japan's reaction to gaiatsu. According to early sources such as the Teppōki chronicle, the importation of firearms has led to an intricate interplay of attraction to innovation and anxiety concerning the protection of traditional values. The analysis of such historical sources shows that at that time Tanegashima became a prototype for a typical Japanese "cultural process" when foreign technology is domesticated, that is, adjusted to the local culture in order to be integrated into social institutions. Thus, one can see that it was not a specific historical episode when Japan faced some situational problems, but it was the start of the country's long-standing tradition of adopting new technology according to certain strategies..

In order to set the stage for the discussion, this paper draws on existing literature related to the issue under investigation. First, Lidin (2002) offers a thorough description of the Teppōki chronicle, whereas Brown (1948) and Sansom (1961) consider the overall military implications of utilizing firearms in Japan's unification process. In connection with the current case, there is a need to refer to Samuels (1994), who examines the issue of technonationalism and Japan's efforts towards technological sovereignty. Lastly, Putri et al. (2024) demonstrate how Japan's modernization represents negotiations on the issue of national identity. Thus, the present study aims at expanding on the existing literature by revealing the relationship between technological domestication in the sixteenth century and the current Indo-Pacific defense policy framework.

As far as existing literature on Tanegashima is concerned, there appears to be a notable division into two major paradigms. On the one hand, there are studies that relate to historical and military perspectives and view the Tanegashima event as a landmark transition in pre-modern Japanese warfare technology. On the other hand, modern research on international relations primarily focuses on the post-war security policy of Japan, especially in regard to Article 9 and the U.S.-Japan security treaty, without considering any historical or cultural background.

This article makes a contribution to the existing literature on this topic by considering Tanegashima from the point of view of cultural studies and thus treating this event as a prototype of a cultural process taking place during the process of adopting foreign technologies. Such consideration is justified by the assumption advanced by Putri (2020), namely, the idea that Japan's modernization, as well as its military development, is influenced by the country's continuous negotiation of historical identity. As a result, the process of adopting technology that took place in the sixteenth century became a part of the longer historical pattern described in Putri's study of Japanese militarization.

LITERATURE REVIEW

Conventional military history, with its emphasis on the history of warfare and technological development, provides a practical context for the investigation of the Tanegashima incident and the subsequent spread of firearms technology in Japan. The research by scholars like Brown (1948) and Sansom (1961) indicates that fast technological progress played a pivotal role in political processes associated with the unification of the country. Thus, the scholars see firearms technology as a catalyst, which led to military reforms in Japan and ultimately helped the country unify. This research tradition provides a good basis for examining the impact of technology on the destiny of the Japanese nation.

However, today's researchers have shifted their focus from the military aspects of the issue toward "selective adaptation" or localization of technologies. In particular, the notion of "technonationalism" developed by Samuels (1994) is based on the understanding of technology as one of the critical features of national sovereignty. Thus, according to Samuels' theory, Japan was able to successfully maintain "indigenization" over many centuries in order to preserve technological self-control. In other words, the process of "taming" of firearms technology in the 16th century is connected to Japan's current military strategies.

Moreover, the domestication of technology should be viewed in relation to national identity, cultural heritage, and social values, which are crucial in the process of adoption of new inventions. As Putri et al. (2024) state, the modernization of Japan is closely linked with the continuous evolution of national identity in the context of historical heritage. Similarly, Haryanti et al. (2016) point out the unique approach and mentality of Japanese society that allows domestication of foreign inventions without compromising the culture of the country.

Nevertheless, the research discussed above does not address two key paradigms: historical military history and modern international relations theories. For instance, Lidin (2002) describes Tanegashima as an important historical turning point based on the careful review of the chronicle known as the Teppōki. At the same time, contemporary international relations researchers examine Japan's modern security policies without taking into account the country's historical experience. Therefore, the main objective of this paper is to bridge the identified gap.

METHODOLOGY

The research methodology for this paper takes a qualitative approach based on the principles of cultural studies and historical-literary analysis. The choice of this methodology has been dictated by the necessity to perform a cross-period analysis that could address the ways in which foreign technologies were viewed and incorporated into the culture of Japan. It is important to stress that neither a technical evaluation of firearms nor an assessment of the policies related to military activities would serve as the focus of the analysis.

Operationally, the research process consists of two phases of analysis. The first phase consists of a detailed textual analysis of historical writings about the period during which the firearms appeared in Japan. The chronicle Teppōki is selected as the primary cultural document for analysis in this study, being the text that presents Japanese views about foreign technologies in the 16th century. In particular, the analysis aims at detecting symbolic images, metaphors, and ambivalence inherent in the initial description of firearms and the process of incorporating them into the society.

In turn, the second phase of analysis compares the findings of the previous phase against contemporary discussions on the topic of Japanese defense policies and international military cooperation, paying specific attention to Article 9 of the Japanese Constitution and international defense cooperation. Importantly, this comparison will be made without assuming the existence of direct parallels

between the time periods in question but rather aiming to detect cultural patterns, including selective adaptation and domestication of technology, symbolic sovereignty, etc.

DISCUSSION

The examination of the Tanegashima episode as a cultural text implies that the production of weapons by native craftsmen was not only a technical accomplishment, but also a technological domestication imbued with cultural meaning. According to Teppōki (Lidin, 2002), the technical problems encountered by the craftsmen during the replication process were not solved only technologically. As indicated in the book, problems such as understanding the operation of the screw used in constructing the barrel were solved by means of social interaction rather than through pure technique. Moreover, referring to the weapon as Tanegashima-teppō rather than as Portuguese is an instance of technology appropriation and, therefore, of cultural nationalization. This is a typical cultural pattern in Japan because in this country, any technology introduced from abroad must first be domestically processed and brought into harmony with the cultural value system before acceptance becomes possible (Morris-Suzuki, 1994). Since the sixteenth century, Japan had viewed itself as an independent innovator rather than as an object of passive reception of modern technologies. This dynamic is deeply rooted in the distinctive mindset and work ethos of Japanese society, where high levels of discipline and collective social responsibility drive the successful resolution of complex technical challenges (Haryanti et al., 2016).

One peculiar feature of this process should also be mentioned, as it refers to the ethical and aesthetic aspects associated with the functioning of the firearm. The idea that Japan for some time abandoned the use of firearms in order to preserve the moral and symbolic purity of the sword of the samurai class suggested by Noel Perrin (1979) does not seem accurate. On the contrary, it seems that firearms underwent an intensive process of aesthetization since their barrels often contained artistic engraving and firearm cases were produced by means of lacquering techniques traditionally used in Japan. This shows that the Japanese society viewed any technological objects not as culturally neutral products, but required them to conform to its aesthetic and moral standards before becoming fully accepted. Such cultural demands highlight a long-standing strategic tradition of technical discipline (Haryanti et al., 2016), which became one of the key traditions that later turned into a principle according to which foreign technologies could be adapted to the needs of the local society.

The same historical dynamics that have been discussed above can be traced in the context of the provisions of Article 9 of the Japanese constitution. Despite Article 9 being widely understood as an embodiment of post-war pacifism, in reality, it plays a much bigger role in the cultural and ideological context, which defines the Japanese attitude toward issues of security, commonly referred to as "realist pacifism" (Green, 2021). In this context, Japan maintains its commitment to a pacifist national identity while simultaneously using pragmatic measures to tackle the security problems of the region. Instead of abandoning its defense capacities, Article 9 motivated Japan to establish carefully constructed alliances and collaborate technologically with other nations, including the United States. Defense technologies of foreign countries can be seen in the context of Japan's pacifist identity and its legal framework since their acceptance by Japan comes along with re-interpreting them as means of self-defense (Berger, 2020).

In the context of global alliances in contemporary times, one may find examples of continued implementation of Tanegashima strategy in the case of Japan's defense relations with the US and its participation in various multilateral arrangements such as the Quad. Within the context of these relations, Japan continues prioritizing its co-production abilities and technological competence in order to maintain its independence even when it relies on foreign states (Panda, 2020). Thus, the country positions itself as a technological actor rather than a military one when it comes to the issues related to regional security (Hughes, 2022). Thus, Japan's defense policy in modern times must not be perceived as a deviation from

its pacifist identity since it only continues Japan's centuries-long tradition of negotiating national sovereignty through technological competence.

CONCLUSION AND RECOMMENDATION

In this sense, the evolution of arms following the Tanegashima incident serves as a prototype culture that provides insight into Japan's unique ability to domesticate foreign innovation. This particular instance shows that Japan's technological development is motivated by an ongoing struggle with cultural identity and unique work ethics instead of mechanical mimicry. The sixteenth-century model of Japan's technological development continues to be reflected in the country's current military strategy, which includes a cultural perspective on "realist pacifism" expressed in Article 9 of the Japanese Constitution. The modern-day efforts of Japan to achieve strategic autonomy and develop advanced technological knowledge in modern arms manufacturing are similar to the earlier process of indigenizing foreign technology. As a result, any international collaboration with Japan should take into account the sociocultural context and technological discipline that underpin Japan's technological advancement. From a policy-making perspective, it would be beneficial if the stakeholders acknowledge Japan's historic identity and how it influences its strategy, especially when the country adopts the same pattern of selective adaptation to new industries like artificial intelligence and cybersecurity in order to ensure its national sovereignty amid changing world dynamics.

REFERENCES

- Arase, D. (2020). *The U.S.-Japan alliance: Balancing soft and hard power in East Asia*. Routledge.
- Berger, T. U. (2020). *War, guilt, and world politics after World War II*. Cambridge University Press.
- Brown, D. M. (1948). The impact of firearms on Japanese warfare, 1543-1598. *The Far Eastern Quarterly*, 7(3), 236–253.
- Green, M. J. (2021). *Japan's reluctant realism: Foreign policy since 1945*. Brookings Institution Press.
- Belshaw, D. (2011). What is "digital literacy"? A pragmatic investigation [Dissertation]. Durham University.
- Haryanti, P., Sari, R. P., & Setiana, S. M. (2016). Etos kerja bangsa Jepang dalam upaya penanggulangan banjir. *Majalah Ilmiah UNIKOM*, 14(2), 241–248.
- Howarth, S. (2021). *The fighting ships of the Rising Sun: The drama of the Imperial Japanese Navy, 1895-1945*. Atheneum.
- Hughes, C. W. (2022). *Japan's Indo-Pacific security strategy: Business as usual or sea change?*. Routledge.
- Katzenstein, P. J. (1996). *Cultural norms and national security: Police and military in post-war Japan*. Cornell University Press.
- Lidin, O. G. (2002). *Tanegashima: The arrival of Europe in Japan*. Nordic Institute of Asian Studies. RoutledgeCurzon.
- Ministry of Defense Japan. (2023). *Defense of Japan 2023 (Annual White Paper)*. https://www.mod.go.jp/en/publ/w_paper/
- Morris-Suzuki, T. (1994). *The technological transformation of Japan: From the seventeenth to the twenty-first century*. Cambridge University Press.
- Morris-Suzuki, T. (2019). *Re-inventing Japan: Time, space, nation*. Routledge.
- Panda, A. (2020). *Kim Jong Un and the bomb: Survival and deterrence in North Korea*. Oxford University Press.
- Pauer, E. (2022). *Technological innovation and the development of contemporary Japan*. University of Sheffield.
- Perrin, N. (1979). *Giving up the gun: Japan's reversion to the sword, 1543-1879*. David R. Godine.

- Putri, S. O., Haryanti, P., & Maharani, L. (2024). Digital diplomacy and security dynamics in East Asia: A cultural perspective. *Jurnal Hubungan Internasional*, 13(1), 45–60.
- Samuels, R. J. (1994). "Rich nation, strong army": National security and the technological transformation of Japan. Cornell University Press.
- Samuels, R. J. (2007). *Securing Japan: Tokyo's grand strategy and the future of East Asia*. Cornell University Press.
- Sansom, G. B. (1961). *A history of Japan, 1334-1615*. Stanford University Press.
- Tipton, E. K. (2016). *Modern Japan: A social and political history*. Routledge

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