

Influences of religions on the Japanese conception of robots

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The studies on the Japanese conception of robots and artificial intelligence (AI) represent an example of the unexpected way cultural specificities influence people's emotions, thoughts, and behaviors^{1,2}. There is a general view of Western researchers that Japanese people have a strangely high affinity with robots³. While Americans associate advanced robots with the image of the *Terminators*, a killer robot⁴, Japanese tend to associate with Mighty Atom (Astro Boy), a beloved manga character⁵.

Other researchers have theorized the influence of Shintoism has led to a view among Japanese that even robots have spirits and hearts (*kokoro* in Japanese)⁶. As noted by Kitano (2006)⁷, a Japanese form of animism can explain the embrace of Japan toward robots. Jensen and Blok (2013)⁸ expanded the discussion on the role of Japanese animism and introduced the term "techno-animism," which helps make sense of Japan as a country where the boundaries between human, animal, spiritual, and mechanical being are blurred. Hagerty and Rubinov (2019) argued that these theories help to explain why Honda's robot, ASIMO were so warmly accepted by the Japanese public⁹.

It is clear that there are two cultural forces that shape Japanese perception of robots: the childhood association of robots with cute manga characters such as Doraemon or Astro

Boy; and the influence of Shintoism in how Japanese people ascribe the property of having a heart or an anima to even robots.¹⁰ In the case of artificial intelligence, it seems this more abstract, invisible form of intelligent machines and systems does not invoke the same feeling.

In a digital world where rapid social and institutions innovation must occur to adapt to the speed of the cyberspace, it is imperative for social sciences and humanities researchers to pay close attention to how the undercurrents of cultures and religions might influence the way people interact with the technological world.¹¹

References

1. Vuong, Q. H., Ho, M. T., Nguyen, H. K. T., Vuong, T. T., Tran, T., Hoang, K. L., ... & La, V. P. (2020). On how religions could accidentally incite lies and violence: Folktales as a cultural transmitter. *Palgrave Communications*, 6(1), 82.
2. Vuong, Q. H., Bui, Q. K., La, V. P., Vuong, T. T., Nguyen, V. H. T., Ho, M. T., ... & Ho, M. T. (2018). Cultural additivity: behavioural insights from the interaction of Confucianism, Buddhism and Taoism in folktales. *Palgrave Communications*, 4(1), 143.
3. Sone, Y. (2013). Robot double: Hiroshi Ishiguro's reflexive machines. In *Handbook of research on technoself: Identity in a technological society* (pp. 680-702). IGI Global.
4. Richardson, K. (2015). *An anthropology of robots and AI: annihilation anxiety and machines*. London, UK: Routledge.
5. Robertson, J. (2017). *Robo Sapiens Japonicus: Robots, Gender, Family, and the Japanese Nation*. US, California: University of California Press.
6. Katsuno, H. (2011). The robot's heart: Tinkering with humanity and intimacy in robot-building. *Japanese Studies*, 31(1), 93-109.

7. Kitano, N. (2006). "Rinri": An incitement towards the existence of robots in Japanese society. *Ethics in Robotics*, 6(12/2), 78-83.
8. Jensen, C. B., & Blok, A. (2013). Techno-animism in Japan: Shinto cosmograms, actor-network theory, and the enabling powers of non-human agencies. *Theory, Culture & Society*, 30(2), 84-115.
9. Hagerty, A., & Rubinov, I. (2019). Global AI ethics: A review of the social impacts and ethical implications of artificial intelligence. *arXiv preprint*, 1907.07892.
10. Wright, J. (2018). Tactile care, mechanical Hugs: Japanese caregivers and robotic lifting devices. *Asian Anthropology*, 17(1), 24-39.
11. La, V. P., & Vuong, Q. H. (2019). bayesvl: Visually Learning the Graphical Structure of Bayesian Networks and Performing MCMC with 'Stan'. *The Comprehensive R Archive Network (CRAN)*. Retrieved from: <https://cran.r-project.org/web/packages/bayesvl/index.html> (accessed on: August 31, 2020).