

## 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<sup>1-2</sup>. There is a general view of Western researchers that Japanese people have a strangely high affinity with robots<sup>3</sup>. While Americans associate advanced robots with the image of the *Terminators*, a killer robot<sup>4</sup>, Japanese tend to associate with Mighty Atom (Astro Boy), a beloved manga character<sup>5</sup>.

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)<sup>6</sup>. As noted by Kitano (2006)<sup>7</sup>, a Japanese form of animism can explain the embrace of Japan toward robots. Jensen and Blok (2013)<sup>8</sup> 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 public<sup>9</sup>.

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.<sup>10</sup> 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.<sup>11</sup>

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