

Translating “*natural selection*” in Japanese: from “*shizen tōta*” to “*shizen sentaku*”, and back?

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Abstract

This paper focuses on terminological issues related to the translation of Darwin’s concept of “*natural selection*” in Japanese. We analyze the historical fate of the different phrases used as translations, from the first attempts in the late 1870s until recent times. Our first finding is that the first part of the Japanese translations never changed during the period considered: “*natural*” was constantly rendered by “*shizen*”. By contrast, the Japanese terms for “*selection*” have dramatically changed over time. We identify some major breaks in the history of Japanese translations for “*natural selection*”. From the end of the 1870s to the early 1880s, several translations were suggested in books and periodicals: “*shizen kanbatsu*”, “*shizen tōta*”, “*tensen*”. Katō Hiroyuki adopted “*shizen tōta*” in 1882 and he undeniably played an important role in spreading this phrase as the standard translation for “*natural selection*”. The most common Japanese translation of the *Origin* during the first half of the 20th century (by Oka Asajirō in 1905) also used “*shizen tōta*”. A dramatic shift occurred after WWII, from “*tōta*” to “*sentaku*”. While a linear interpretation could suggest a move from a

“bad” translation to a better one, a closer analysis leads to more challenging insights. Especially we stress the role of the kanji restriction policy, which specified which kanji should be taught in schools and thus should be used in textbooks: “*tōta*” was not included in the list, which may have led to the good fortune of “*sentaku*” in the 1950–1960s. We think the hypothesis of the influence of Chinese translations is not a plausible one. As to conceptual differences between “*shizen tōta*” and “*sentaku*”, they remain unconvincing as both terms could be interpreted as a positive or negative process: there is no clear reason to prefer one term over the other from the strict point of view of their meanings or etymology. Then, turning to the way terms are used, we compare translations of natural selection with translations of artificial or sexual selection. First we turn to the field of thremmatology (breeders): there, “*tōta*” (sometimes spelled in hiragana instead of kanji) often bore the meaning of culling; since 1917, breeders often used “*sentaku*” as a translation for “*selection*”. However, quite surprisingly, breeders used two different terms for *selection* as a practice (“*senbatsu*”), and “*selection*” as in “*natural selection*” (“*shizen sentaku*”). Finally, we compare possible translations for “*sexual selection*” and “*mate choice*”: here again, there are some good reasons to favour “*tōta*” over “*sentaku*” to avoid lexical confusion.

Key words: natural selection, sexual selection, scientific translation, Darwin, Japanese language

This paper¹ takes a terminological perspective on the question of how Darwin’s ideas have been accepted and modified in Japan. Our aim is to contribute to the general reflection on nomadic concepts, and to the analysis of local and global science, especially with regards to the case of Darwin’s ideas (see for instance Glick 1972, Glick *et al.* 2001). We take the Japanese translation of Darwin’s main concept, “*natural selection*”, as a case study for clarifying some conceptual issues linked to the introduction of that idea in Japan. Our paper is a contribution to the flourishing field of translation studies in science (e.g., Montgomery 2000; Elshakry 2008, 2010).

Studying translations of Darwin’s masterpiece is often taken, at best, as an interesting pastime for historians obsessed with cultural diversity and the variety of contingencies that may affect (and often obstruct) the reception of “true” science. Such study is taken as a recreation that biologists may indulge in when they are close to retirement, but with no actual interest for biologists active in the field or in the lab. Besides, the vocabulary of “reception” suggests an Aristotelian dualism between matter and form, or passivity and activity, with a passive recipient “receiving” the impression of the active component: speaking of “reception” suggests that Japan is a sort of wax while *Darwinism* is a form of seal. This presentation is clearly flawed, since “Darwinism” is not an unchanging immaterial essence that may affect several kinds of inert substrates (Hull 1985). The local context is not only distorting the original conceptual framework. As we have shown earlier (Hoquet 2011), the local context clearly impacts on the original formulations by putting their clarity into question. Not unexpectedly, Darwin’s own reflection on the term he coined, “*natural selection*”, was clearly influenced by discussions related to the translation of his work in France or Germany (two foreign languages he could read). In the case of Japan, studies on the “reception” of Darwin’s ideas were characterized by an over-inflated focus on Japanese warped “social Darwinism”, an all-embracing term which historians and biologists tend to disentangle from “social Spencerism”².

Standard histories of Darwinism in Japan present it as a political and social theory (Shimao 1981; Nagazumi 1983). This paper suggests that this is not the only way to approach the topic of the reception of Darwin’s ideas in Japan, and it focuses on the terminological issues related to the translation of the Darwinian concept “*natural selection*” in Japanese.

Our aim in this paper is twofold: (1) to show that translations may actually and actively contribute to the general understanding of “Darwinism” and enlighten the conceptual issues related to key terms like “*selection*” (be it natural, sexual or artificial); (2) to compare the case of Japanese (a non-Indo-European language) with translations in French and German previously studied (Gliboff 2008; Hoquet 2011). Since the

1. In this paper, the names of Japanese and Chinese persons (including one of the authors) are given according to the Eastern order (family name first, followed by the individual’s name). For example, in 加藤弘之 (Japanese) and 馬君武 (Chinese), 加藤 (Katō) and 馬 (Ma) are the family names, and 弘之 (Hiroyuki) and 君武 (Junwu) are the individual names.
2. For instance, Roughgarden (2009). On the history of “Spencerian science”, see for instance Renwick (2009).