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## What is *kansei*?

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Termin *kansei* nie jest jednoznaczny, zwłaszcza jako pojęcie używane w dziedzinach technicznych. Etymologiczne badanie słowa kansei pozwala nam lepiej zrozumiec właściwe znaczenia tego słowa. Najbardziej znaczeniu *kansei* odpowiada słowo estetyka (*bigaku* or *kansei-ron*), stworzone przez niemieckiego filozofa A. G. Baumgartena w XVIII w.

#### 1. Introduction

Today Japanese origin word kansei is widely accepted in the world as a technical term in engineering, industrial design or other field. The reason is clear. It is difficult to find any appropriate term by which kansei could be replaced in other languages.

### 2. Etymology of Kansei

The word kansei was applied in engineering and designing first time probably in 1980s. However the origin of this word is much earlier. Shogakkan Dictionary of Japanese Language [1] quotes Ihara Saikaku's 井原西鶴 "Nanshoku masukagami 男色十寸鏡" (A tale of pederast) published in 1687 as the earliest use of the word kansei. In this case kansei is used as a verb together with a particle suru (kansei-suru), and its meaning < be strongly impressed > is slightly different from contemporary one. Shogakkan Dictionary quotes also "Tetsugaku jii 哲学字彙" (Dictionary of philosophical terms) published in 1881 where we can see a description "Sensibility – kansei". This translation seems closer to modern meaning of kansei.

## 3. Analysis of the word

The word kansei in Japanese consists of two Sino-Japanese characters kan 感 and sei 性. Nelson's Japanese Character Dictionary [2] explains each those characters as follows.

*Kan* 感 feeling, sensation, sentiment, sense, emotion; impression, intuition, perception, sensibility; influence; touch.

Sei 性 sex, gender; nature, attribute;
Sho 性 disposition, quality, purity; custom

Generally speaking every Sino-Japanese character has several readings which can be divided into two categories.: the on and the kun. The on is Sino-Japanese readings, whereas the kun is native Japanese. Two ways of on readings of the second character (性) sei and sho were introduced in different time as a part of different words. The same character could have different meaning according to its readings. Then the word composed of two characters kan 感 and sei 性 could have tens of meaning.

#### 4. Semantics

The most popular dictionary of Japanese language the Kojien 広辞苑 edited by Izuru Shinmura [2] explains *kansei* as follows:

kansei 感性 (sensibility < English > , Sinnlichkieit < German >

- 1. Receptivity of sensation or perception stimulated in the external world through sense organs.
- 2. Feeling, impulse or desire stimulated by sensation.
- 3. Sensuous desire which should be controlled by rational nature or animus quo.
- 4. Sensuous cognition as a material of thinking.

kansei-kai 感性界 『哲』 (mundus sensibilis <Latin>)

kansei-ron 感性論 『哲』 (Ästhetik < German > ) The theory of sensitive cognition systematised by Baumgarten as the aesthetics. In Kant's works Ästhetik is a theory of sensuous intuition which forms the foundation of the intellectual cognition.

The New Japanese-English Dictionary 新和英大事典 edited by Koh Masuda [4] translates *kansei* into English:

**kansei** 感性 n. [感覚力]sensitivity; sensibility; sensitiveness; the sense; [感受性] susceptibility;  $\P \sim \text{kai} \ \mathbb{R}$  [哲』 the material world; the world of sense; <独> Sinnenwelt.  $\P \sim \text{ron}$  論 [哲』 (a)esthetics.

We can find the word *kansei* also in the above mentioned The New Nelson Japanese-English Character Dictionary [3]. It is translated simply

kansei 感性 sensitivity, sensitiveness, sense.

## 5. Aesthetics

German philosopher Alexander Gottlieb Baumgarten (1714 – 1762) created the term aesthetics in his book "Aesthetica" (1750 – 1758). Baumgarten defined *Aesthetica* as *scientia cognitionis sensitiva* <Latin> from Greek *aisth'anesthai*, i.e. perception through sense organs. It is what *kansei* means.

However, in present days common understanding of the word aesthetics is given in any dictionary. For example, Longman Dictionary of Contemporary English  $3^{rd}$  ed. [5] says

aesthetics n [U] the study of beauty, especially beauty in art.

This convention was accepted in Japan too. The word aesthetics was translated into Japanese first time in 1883 as bigaku 美学 (study of beauty) by Nakae Chomin. In the same time the word kansei was used as a term which means sensitivity among Japanese philosophers. It came probably from German word "Sinnlichkeit" or its translation into English "sensibility" in "Critique of Pure Reason" (Kritik der reinen Vernunft) written by Immanuel Kant in 1781. The concept of Sinnlichkeit is opposed to Verstand or logos.

#### 6. Kansei in contexts

The word kansei is being used in various contexts. There are several field related to kansei, for example,

Kansei kogaku 感性工学 = kansei + engineering, technology, Kansei shakaigaku 感性社会学 = kansei + sociology, kansei joho shori 感性情報処理 = kansei + information processing.

#### Kansei information processing

Seiji Inokuchi [6] tried to map possible research topics of kansei information processing in the four dimensional space: science, technology or engineering, logic and emotion (see Fig 1.).

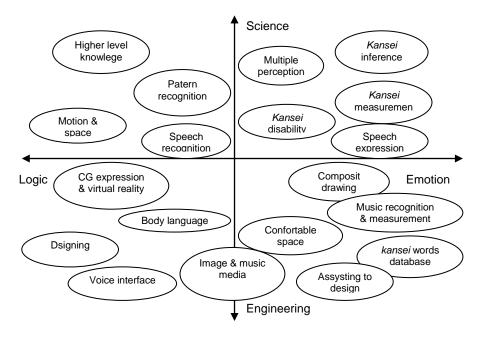


Fig. 1. Thematic map of kansei information processing (translated from S. Inokuchi [5])

*Kansei* Engineering Committee of Science Council of Japan published a report "**Roles** of *kansei* engineering in contemporary society" [7] last year. The committee gives a definition to *kansei*:

*Kansei* is an ability to communicate or exchange information between human and human, or human and surrounding environment, and furthermore, ability to establish communication relationship. Kansei engineering may establish better relationship between human – human or human – environment.

We can find several topics relating to kansei in this report such as

- · Kansei and brain science,
- · Kansei engineering and material science,
- · Kansei information technology,
- · *Kansei* engineering in the industry,
- · Kansei education,
- Kansei sociology.

## 7. Summary

The etymology of the word *kansei* is not exactly known. It seems that aesthetics or just aesthetic is more adequate translation of *kansei* rather than sensibility which applied in many dictionaries. In contexts of engineering or technology the *kansei* has somewhat wider sense, i.e. an ability to communicate with outer world.

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