Information Architecture Do (道)

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Abstract In this chapter, I discuss the state of information architecture as a professional occupation in Japan from the perspective of Edward Hall's distinction between high- and low-context cultures. I describe the Japanese cultural practices and the attitude towards the division of labor based on Hall's and use these to situate the professional development of information architecture as a practice in Japan. I then present the traditional Japanese educational method of learning skills called "do (道)", discuss Seigow Matsuoka's editorial engineering as a "do" form of information architecture, and introduce a possible "IA-do" approach to information architecture and information architecture education.

Japan's High-context Culture

In his "Beyond Culture", anthropologist Edward T. Hall situated the world's cultures along a spectrum from high context culture to low context culture (Hall 1976). Hall argued that, among others, China (at that time), Japan, the Arab countries, Greece, and Spain were highly context-dependent, while German-Switzerland, Germany, the Scandinavian countries, the United States, and France were less context-dependent.

In high-context cultures, the content of the communication is richer in unspoken content than in actual verbalized content. Hall cites the Japanese language as an extreme example of this. On the other hand, in low-context culture communication, only the content expressed in words has meaning as information, and unspoken content is usually either not conveyed or devoid of meaning. Hall mentions German as the most extreme example of a low-context language.

Table 1. High-context vs low-context cultures

High-context	Low-context
Long-lasting relationship	Shorter relationship
Exploiting context	Less dependent on context
Spoken agreements	Written agreements
Insiders and outsiders distinguished	Insiders and outsiders less distinguished
Cultural patterns ingrained, slow change	Cultural patterns change faster

For example, in everyday speech, characteristics such as not saying the subject or not explicitly saying what can be inferred from the situation are common in Japan. In English, when you call someone on the phone, you usually ask “May I speak to Mr. (or Ms.) A?”. On the other hand, in Japanese, you ask “Is Mr. (or Ms.) A there?” In Japanese, the goal is not to confirm his or her presence. The unspoken message is that “since I have called Mr. or Ms. A, it is clear that I want to talk to Mr. or Ms. A”, so you do not say the “may I speak” part. You only need to ask if Mr. or Ms. A is there.

This phenomenon can be seen in business, as well. In Japan, individuals tend to give more importance to their direct trust and experience and to disregard formalized contracts and frameworks.

It is also common in Japan to avoid explicitly stating things in the form of contracts. This can be seen in the use of the court system. As of 2009, the number of court cases per capita in Japan was one-eighth that of the United States, one-fifth of the United Kingdom and France, and one-third of Germany and South Korea (Japan Federation of Bar Association 2011.) This is because Japan values trust between individuals: if there is a problem, the parties will try to resolve it through discussion instead of directly take it to court.

High-context is also correlated to another characteristic Japanese workplace trait, in that people tend not to specify their work duties and do not like the division of labor (Nishimura 2014.) In many cases, company employees perform work under the title of “generalist” without separating into specialized positions. Knowledge

of the company's unique culture is prioritized over specialization in marketing or management.

In the next section, we will look at how this high-context culture has led to the rise of Japan's information architecture and has shaped its development.

Information Architecture in Japan

The concept and the term "information architecture" was first introduced in Japan with Richard Saul Wurman's book "Information Anxiety" (Wurman 1989) which was translated into Japanese in 1990 (Wurman 1990). Translation has its importance, since in Japan untranslated books have a slimmer chance of being read, and because, in this specific case, of the identity of the translator. While Wurman's work acquainted the Japanese with the terms "information architecture" and "information architect", at this stage they were understood to be concepts in a book rather than a field and a job title. The translator was editorial engineer Seigow Matsuoka, who went on to promote "editorial engineer" as a concept very similar to that of information architect. We will discuss Matsuoka and editorial engineering in more detail further on.

Around the year 2000, Internet use in Japan exceeded 16% of the population and entered what Rogers (1962) calls a period of diffusion. Website design and development became a popular activity with a professional side which was primarily the purview of advertising companies or system development companies. This led to initial business requirements that focused either on visual designers or system developers' roles only.

Around the same time global interactive agencies such as Razorfish, marchFirst, and Sapient began to expand into Japan. Better connected to the international developments that were happening in the USA and in Europe, these agencies had already internally created job positions for information architects. When they entered the Japanese market, the agencies did not localize their job titles, including that of information architect, or their methods: they brought these into the Japanese web design industry as they were. That meant that an increasingly large cohort of information architects was responsible for designing the site structure, was in charge of user research, and generically cared for all those aspects of design that fell outside of the visual designer's realm.

Books also played a significant role in popularising this new understanding of information architecture in relation to web design. Rosenfeld and Morville's (1998) and Garrett's (2002) books were translated and published in Japan in 1998

and 2005, respectively, and greatly contributed to that early promotion of information architecture in the country. Garrett's "elements of user experience" diagram, created in 2002, was translated into Japanese in that same year, prior to the book's translation. The diagram framed how practitioners situated information architecture in web design.

In 2003, "Web Creators", one of the leading magazines in the Japanese web design industry, published a special issue on information architecture, leading to the general recognition of the field in the Japanese design industry: by 2005, "information architecture" was an established term. On the other hand, the job title of "information architect" did not spread far in the industry. As mentioned earlier on, this can be attributed to a cultural disposition that does not value specialization and the division of labor: if a client company felt such a compartmentalization was unnecessary, and this was the norm because of the way web development started in Japan, it was common business practice for domestic agencies to accommodate the request to the extent it was possible. As a result of this tension between imported job roles and local preferences, it became common for a "web director" to be in charge of multiple structural tasks, including project management, production management, content direction, and information architecture. Thus, in Japanese web design, information architecture education has come to be recognized as something a web director should have. There are both pros and cons to this.

One of the cons is that the number of people who specialize in information architecture has not increased, and even today there are fewer opportunities to discuss information architecture in Japan. Another one is that a mature conversation has not coalesced on how to structure and carry out information architecture education in Japan, which in turn means that very little consideration has been given to those issues that specifically relate information architecture and Japanese language and culture. However, the creation of the web director role also resulted in a positive outcome, since, as the person primarily responsible for developing the website, they were put in charge of the site structure and were able to accurately connect site design to project goals, potentially resolving or minimizing a major point of friction and misalignment in large projects.

This corresponds to the point made by architect Joshua Prince-Ramus in his keynote at the 2007 ASIS&T Information Architecture Summit that architects must become project architects (Prince-Ramus 2007).

This contribution argues that now that digital products have become commonplace, we are even past the idea of the information architect as a project architect: information architecture is no longer a job title, but rather a fundamental

skill. Not only can the Japanese case be used as a precedent, but Japan also offers a very specific, "do"[1] approach to learning skills in a high-context situation.

"Do" Culture

In Japan, many fields exist whose name includes the word "do (道)", such as sa-do (茶道), ka-do (華道), kyu-do (弓道), ju-do (柔道), and so on, all in such areas as art and technique. The word "do" means "way", so "sa-do" means "the way of tea" and refers to the Japanese tea ceremony, "ka-do" means "the way of flowers" and refers to the art of flower arrangement, "kyu-do" means "the way of the bow" and refers to archery, and "ju-do" means "the way of the yawara" (柔: soft). This "do" culture is known to be characteristic of Japanese high-context culture (Suzuki 2011.)

"Do" is the process of training for the development of skills and also the process of training instructors. In any "do", the learner is initiated into a school and trains daily with one teacher to achieve certification. In "do", when someone masters a technique they become "Shihan" (the master), and as "Shihan" they can have a disciple. In general, though, the purpose of practice in "do" is not to improve one's skill, but rather to grow as a person. While a very common approach to learning in pre-modern Japan, "do" is today found only in the traditional arts. It has been criticized for its inefficiency when compared to modern education, and also from a human rights perspective, because of the inherent imbalance and often intimidating character that the master-student relationship assumes.

One of the primary characteristics of "do" is that it "enters from the kata (form)", meaning that, as German philosopher Eugen Herrigel explains, it is a method aiming at an unconditional mastery of the form where the master does not teach or reason, but only instructs (Herrigel 1848.)

Typically, when a beginner is introduced to the "do", he or she is tasked with repeatedly practicing the basic kata (form) until they master the movement and their body learns the technique. If a student were to ask how they should do it, the master does not teach them but only corrects their mistakes. This was the author's personal experience when learning sa-do (茶道): the tea master never taught me how to do it and forbade me to practice at home where he could not correct me.

Japanese linguist Toyama Shigehiko compares the relationship between modern education and "do" education to the one existing between a glider and an airplane (Toyama 1983): the glider type flies with the lead, while the airplane type flies by

[1] To be read "doh" and not to be confused with the verb "to do".

itself. According to Toyama, modern education is glider-type, in that the teacher leads and guides the students. Students can gain a wide range of knowledge, but they are mostly passive. Educators understand that this is not how learning is supposed to be but, in today's society, the method has proven to be valuable in terms of scale and investment.

In comparison, in the Japanese "do" style of education, students are frustrated because the master does not teach them. Toyama says the "do" masters knew from experience that such a situation would eventually benefit the students by fuelling the student's motivation to learn and their desire to "steal" the master's know-how and techniques from the daily practice of the "kata". This "do" system is why the traditional arts still show individuality despite being built on strong old traditions.

What can we learn from the "do", from starting from the form? Is "道" always inefficient? What does being expected to understand the meaning and reason for doing something ourselves do to our understanding of the meaning of what we are learning?

Editorial Engineering

In his seminal "Information Architects", Wurman defined the information architect as:

1. The individual who organizes the patterns inherent in data, making the complex clear.
2. A person who creates the structure or map of information which allows others to find their personal paths to knowledge.
3. The emerging 21st century professional occupation addressing the needs of the age focused upon clarity, human understanding, and the science of the organization of information (Wurman 1997).

Wurman was one of the closing keynote speakers at the 2010 ASIS&T Information Architecture Summit. During his plenary he stated that "what makes an information architect is an attitude. A desire, a passion to communicate systemically with rules and systems, and transfer information to another human being" (Wurman 2010). When we consider these definitions, Seigow Matsuoka and his editorial engineering really can be recast as a local, Japanese variation of information architecture.

After working for an advertising company, Matsuoka founded his own publishing company and launched the magazine "Yu" (遊: play) in 1971. He called it an "object magazine" and as the editor he carefully crafted it to transcend genres,

something that resulted in “Yu” having had a significant influence on Japanese art, philosophy, media, and design.

In the 1980s, Matsuoka proposed his concept of “editorial engineering” and established his own company, the Editorial Engineering Laboratory. Through the company, Matsuoka produces cultural projects and provides training for companies. He calls himself an “editorial engineer” and works on cross-cutting projects on culture, science, and information in Japan and internationally. Matsuoka’s editorial engineering is a comprehensive methodology that integrates human thinking, social communication systems, and creativity.

Editing as Handling

In editorial engineering, “editing” is not a specific occupational skill, but rather broadly refers to the handling of information. The activities that lie between receiving information and providing information, such as memory and recall, choice and action, recognition and expression, are all considered “editing”. It is a creative act that can be said to be the engine that runs behind the scenes of all types of communication. While there are clear parallels with Wurman’s centering on “understanding” as the central moment of information architecture, there is a significant difference between Matsuoka’s “editorial engineering” and the more information science-based roots of information architecture in the handling of “meaning”.

Matsuoka’s idea of “meaning” centers on human consciousness and emotions: he created editorial engineering to handle what he called “living information systems”, systems that generate and exchange information, emphasizing a dynamic, emergent side that was in direct opposition to the more formalist approaches based on symbolic data processing that could be found in information science at the time.

Matsuoka’s approach identifies “data” as having two distinct meanings: pure data, and the semantic information attached to the data itself. It then introduces a set of basic techniques for handling these data that are divided into five patterns: collection, selection, classification, school, and lineage, which are labeled “compile”. The techniques for dealing with the semantic part only are further patterned into fifty-nine categories: summary, model, order, and exchange, labeled as “edit”. These sixty-four “editing techniques” were derived from Matsuoka’s own experience.

The Editorial Engineering Laboratory offers an educational program centered on Matsuoka’s approach as “the School of ISIS Editing” (Interactive System of Inter

Scores). The school teaches a way of thinking rather than techniques that focus on specific technologies like the web, and is by and large attended by the general public rather than by designers, editors, or media professionals. Thirty thousand people have attended the basic program to date.

The program is offered as a training course for individuals and companies, and many Japanese companies in the manufacturing, financial, and trading industries have adopted it for management training. A unique feature of the program to this day is that, together with more traditional lectures and workshops, the advanced course incorporates a "do" type of teaching based on unexplained experience. For example, students would practice the traditional Japanese art of "Noh" (能) under a "Noh master", and experience the actual training of a monk at Koya-san, the headquarters of Japan's Shingon Esoteric Buddhism.

For Matsuoka, these experiences are necessary for students to obtain an "editorial" perspective for themselves, and constitute a "do" approach.

Information Architecture "Do"

Matsuoka's "do" approach to education could not only be cast as a type of information architecture in itself, but illuminates two important and complementary facets of the current conversations dealing with the field, in Japan and internationally: that of education, and that of the outcomes. In these terms, we could say we have both an experiential type of information architecture education, and an experiential information architecture.

An experiential approach to education in information architecture could follow Matsuoka's "do" approach and recast its processes and methods so that students become the ones responsible for shaping up their own perspective through experience.

An experiential approach to information architecture would suggest that when designing a specific information architecture, the primary goal should be to allow users to find their own answers in the experience, rather than presenting them with answers.

Both of these aspects resonate strongly with the Japanese high-context cultural landscape. Information architecture has already been conceptualized and integrated into the Japanese industry not as a profession, as a job role, but rather as an outlook that is needed by everyone. Practitioners, entrepreneurs, and researchers need information architecture as an attitude, not as a technique. To master such an attitude of structure and order, a "do" type of education could

benefit the global community and the maturation of the field. Instead of providing predetermined paths through content to facilitate understanding, a design approach anchored to a less complex and less connected information landscape, an information architecture-do approach would radically rebalance the relationship between designers and users. Ultimately, it would lead to designing information architectures that support self-determined, self-driven comprehension in a world of information that has no boundaries of device, place, amount, space or time.

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