

How do American and Japanese quality approaches vary? As the analogy used in this article points out, the intention of achieving quality may be similar, but the approaches reflect important cultural differences.

American Versus Japanese Quality

Let the Noodle be the Noodle

Gregory H. Watson

Often the subtle meanings of significant concepts are hidden by cultural differences. It was in 1991 that I first heard Dr. Noriaki Kano describe the differences between “A” and “J” quality—where A stood for the American approach and J for the Japanese approach—American verses Japanese quality.¹ I have heard him speak about this difference on several occasions since that time, but recently I finally understood what he meant. It only took this student 28 years to learn this lesson from his master teacher!

Let me try to explain the difference so others don't need to wait so long to gain understanding of this profound concept. When Kano spoke about cultural differences, he compared how the Eastern world uses two pieces of wood to hold the food, while the Western world uses a spoon. Although this may seem to be a trivial cultural difference, there is a deep implication from its underlying meaning. We need to dig deeper into these two cultures and perceive the implications of their actions from different angles to understand how this comparison provides a foundation for understanding the two quality approaches.

Let's start by considering the haiku, “Do not seek to follow in the footsteps of the old masters, seek instead what these masters sought,” Matsuo Bashō.² This profound message provides a philosophical foundation for Kano's thought process.

When I tried to use my interpretation of the footsteps which Kano described, I became lost in the surface analogies and missed what was at the core of his distinctions. So, let's take a moment to set aside the difference in the utensils and focus instead on the eating processes. Let us consider the A verses J difference using the analogy of eating food but thinking about the process of eating rather than focusing on the implements that are the objects or tools for eating. As with any type of investigation into processes, we can gain greater understanding how a product evolves as the process transforms inputs to generate it. We can illustrate the distinction between the two cultures by evaluating the process of eating noodles, a food that is common in both cultures. Specifically, I'll use spaghetti bolognese as the example for the American process and udon soup for the Japanese culture.



What does the spoon contribute to eating the spaghetti? The spoon helps to control the process, maintaining order and avoiding chaos. The diner is able to master the art of eating the spaghetti without dropping the noodle covered with tomato sauce. The spoon needs a resource—the fork. The fork pierces the spaghetti and is twirled tightly within the shallow bowl of the spoon. The spaghetti is embraced by the tines of the fork. Then the fork is lifted to the mouth for consumption. Of course, some sauce is errant and must be wiped from the mouth of the diner to preserve good etiquette. What happens in this circumstance? The process of eating and the design of the food have been constructed to accommodate an underlying cultural attitude about eating—the diner must control the situation. So, the noodle must be cooked into a pliable form for wrapping around the fork as guided by the spoon. The sauce must be thick enough to help the noodles adhere to each other and facilitate the noodle-wrapping activity so that excess noodles can drop harmlessly into the bowl and do not soil the diner’s clothing while he/she sits in a straight vertical position maintaining control over the entire process. The spoon is a guide for facilitating the noodle distribution process.

So how is the Japanese process for eating noodles different and what rationale supports that difference? The udon noodle is very thick compared to a spaghetti noodle, and it can be picked up by the chopsticks which serve as pincers. It takes time, however, for the diner to grab each noodle individually and transfer it to his/her mouth. The Japanese, therefore, devised a more efficient system; it involves bringing the bowl close to the mouth and using the chopsticks to guide the noodles into the mouth along with the broth. Culturally, this is very distinct from the American approach to eating noodles, and it typically would be considered an impolite method in America. In Japan, this method is accepted (and now is generally accepted in all cultures) as a normal practice for eating udon, and the chopsticks are used as a guide to facilitate the noodle distribution process.

Let’s now consider how the distinct processes for eating noodles provide insights regarding the two cultures’ underlying principles regarding quality. First, we’ll analyze the American way of eating noodles with a spoon, which is driven by the diner’s attempt to control the noodles. This process places the bowl of food in a subservient position

with respect to the diner, who is positioned as being more important than the bowl. The eating process must avoid any actions that would diminish the relative standing of the diner to the bowl, such as bringing his/her head closer to the bowl of spaghetti. The diner dominates the noodle, which becomes an object, rather than an individual contributor to the process.

On the other hand, the Japanese process is much more egalitarian, and there is greater harmony between the noodle and the diner. The diner does not consider him/herself to be superior to the noodle, but he/she eats using a mutually supportive system and shows respect for the noodle by bowing his/her head to the bowl and applying energy to the process. In this case, the noodle is not controlled, and it has an equal opportunity to escape the chopsticks and momentarily avoid consumption. This ability to choose the time of consumption must give great peace to the noodles as they are not forced by the tines of a fork into a controlled delivery process! The Japanese process lets the noodle be the noodle—self-sufficient in its own right and free from the manipulative control of an external master—the fork.

How does this analogy apply to managing a process or creating improvement? The American process has a strong “do-act” bias with respect to the noodle, which is mandated to participate to act only when the fork exercises control. This process is executed in a linear way—a step-by-step process where the fork loads the food, and the diner then consumes the spaghetti in repetitive cycles. This is a familiar approach to American quality management that relies on linear, step-by-step processes that are executed by one operator at a time to attain the desired output. The Japanese approach also may appear to be linear, but its meaning is very subtle and hidden by its unique cultural context. The seemingly linear pattern is actually a dynamic set of events.

How are These Cultural Differences Evidenced in 5S Processes?

For example, consider the linear way that Americans implement the 5S approach. Each step is taken individually in order to institute a sound housekeeping system for daily management.^{3,4} Although the 5S process that originated in Japan also seems to be linear, a deeper exploration of its design intentions, based on the original kanji

Table 1: 5S Terminology and Meaning

Japanese Term	English Equivalent	Meaning of the Step
Seiri (整理)	Sort	Remove the unnecessary
Seiton (整頓)	Systematize	Place work into order
Seisou (清掃)	Sanitize	Clean the work station
Seiketsu (清潔)	Standardize	Develop standardized work
Shitsuke (躰)	Sustain	Maintain the standard

pictograms (viewed by many Americans as mysterious brush strokes), rather their interpretive romaji text, can add substantial insights regarding the cultural differences associated with implementation of 5S in America and Japan (see Table 1).

At first, everything seems aligned and in order (the American way); however, examining the original Japanese characters gives a subtle hint that this observation is incorrect. Although the first four terms in this flow all begin with the romaji word “sei,” kanji uses two different characters for the same term—整 and 清. What does the original Japanese 5S step really mean and how is it different than the American approach? The logical interpretation of the romaji is clear and actionable for Americans. Unfortunately, it doesn’t help us understand the true original intentions of this Japanese method, and that can undermine our attempts to emulate the process. The Japanese approach follows the advice of Miyamoto Musashi, “Step-by-step walk the 1,000-mile road.”⁵ So, let’s review these terms and their underlying cultural meanings.

- *Seiri* (整理)—The first term, “sei” (整), means to bring chaos into order while the second term, “ri” (理), describes the method applied—a thinking process of setting logical categories and making decisions about what to do with them—rationalization or streamlining of the work, so the process operates in its most straightforward state or condition. Typically, American culture reduces this concept to sorting and removing unnecessary things associated with the process, which is far more limited.
- *Seiton* (整頓)—In this step, the “sei” term is the same as in “Seiri,” but, the second term has changed to “ton” (頓), which has a medical connotation, referring to medicine that takes effect immediately. When combined, this means that work should be organized so that necessary things can be accessed immediately. Typically,

Americans reduce this idea to “organize,” “set in order,” or some similarly simplistic term.

- *Seisou* (清掃)—The character representing “sei” in the romaji term “seisou” is different (清 instead of 整), and it implies the idea of purity or spotlessness. It is combined with “sou” (掃), which means to sweep, exterminate, or clear away. Americans typically call this “sweep,” “sanitize,” or “clean and inspect,” but that misses the real meaning. When cleaning a house, there typically are two levels of performance—rough-cut cleaning or sweeping out the major dirt (e.g., what children bring inside on a muddy day), which is the level implied in *seisou*.
- *Seiketsu* (清潔)—Here the character for “sei” again relates to the state of being pure, but it is combined with “ketsu” (潔), which also means cleaning but in a deeper and more hygienic sense—sanitary, virtuous, immaculate. It also has a medical implication as in the sanitization and sealing of medical instruments, so they are packaged and ready for an operation. Interestingly, Americans seem to miss the mark on this term when they translate this step to “standardize” and seek to force the development of a work standard—a form of control. Actually, this should involve a deeper form of cleaning—the spring-cleaning that occurs after a long winter and is used to air out old odors and make a home feel fresh. Interpreting this term as “standardize” is somewhat monolithic and may be associated with standards such as those set by the International Organization for Standardization and published to foster global compliance. In the Japanese culture, standards are developed over time—beginning with easy and simple ideas that gradually become more defined as they are proven in practice.⁶
- *Shitsuke* (躰)—The final “S” in the system is “shitsuke” (躰), which means discipline, training,

or teaching manners. Americans describe this as “sustain,” implying that it is the state of consistently performing and improving. Again, this misses the mark; the Japanese culture, where kaizen is not limited to one step but is a dynamic cycle that integrates the standardize-do-check-act process of daily management with the plan-do-check-act (PDCA) change management process.

How do the 5-S steps actually operate in Japan? Most importantly, their combined effect is not linear. For example, when an elementary school teacher in Japan wants students to deal with their messy desks, he/she would say: “seiri-seiton,” combining the two terms for organizing chaos into a shared activity rather than a linear, sequential flow. Likewise, the third and fourth steps of the 5-S process share the same kanji word for “sei” meaning “pure” and represent two types of cleaning. The first gets a work area into suitable condition for daily use, while the second returns the equipment to its standard operating condition (making it like new)—an activity associated with eliminating the root cause(s) of the equipment failure by applying total productive maintenance.⁶

These cultural observations raise important questions. Who does what, when, where, and why in the Japanese approach? Can we define this 5-S concept more thoroughly, so it is operationally consistent and coherent within the American framework for process management? Just as the Japanese teacher admonishes the students “seiri-seisou,” the Japanese supervisor encourages the workers as evidenced by the requirement that some observation or study takes place prior to initiation of the 5-S process. Taiichi Ohno recommended that PDCA begin with “check” because insight needs to be gained from reflection before starting the cycle.⁶

Taiichi Ohno commented: “Within common sense there are things that we think are correct because of our misconceptions.”⁶ It is time that the Americans learn to interpret the meaning behind the Japanese cultural contributions to quality in order to gain the profound knowledge that the

masters offer. Just as noodles should be allowed to be noodles, people should be encouraged to work together in a coherent system, guided by their leader without being mandated to perform in a way that ignores the benefits of leveraging all system of resources.

References

1. Noriaki Kano, “Sweating for Quality,” presentation at the 1991 GOALQPC Quality Conference.
2. Matsuo Bashō, *Basho: The Complete Haiku*, translated by Jane Reichhold, Kondansha, 2008.
3. Takashi Osada, *The 5S's: Five Keys to a Total Quality Environment*, Asian Productivity Organization, 1991.
4. Hiroyuki Hirano (1995), *The Five Pillars of the Visual Workplace: The Sourcebook for 5S Implementation*, Productivity Press, 1995.
5. Miyamoto Musashi, *The Book of Five Rings*, translated by Victor Harris, The Overlook Press, 1974.
6. Taiichi Ohno, *Workplace Management*, Productivity Press, 1988.



Gregory H. Watson

Gregory H. Watson, is Past-Chair and Fellow of the American Society for Quality (ASQ) and Past-Chair and honorary member of the International Academy for Quality (IAQ). He is a recipient of the ASQ Distinguished Service Medal and the IAQ Founders Medal. Watson was the first non-Japanese individual to receive the W. Edwards Deming Award for Promotion and Dissemination (Overseas) of Japanese Total Quality Management, which was presented by the Union of Japanese Scientists and Engineers in 2009. He has been elected an honorary member to 16 national quality organizations. Watson is the author of 10 books and more than 600 other publications related to the subject of quality. He can be reached at greg@excellence.fi.