The Toyota Kata Backstory

The original Toyota Kata research my colleagues and I did ran from 2004 to 2009 and is summarized in the book *Toyota Kata*.\(^1\) It was driven by these two questions:

1. What are the unseen managerial routines and thinking that lie behind Toyota’s success with continuous improvement and adaption?
2. How can other companies develop similar routines and thinking in their organizations?

We knew something different was going on at Toyota, and we believed it lay in Toyota’s management approach. But that system was not visible to visitors. My colleague, Professor Jeffrey Liker, put it well during a 2010 interview on the National Public Radio program *This American Life* about the Toyota-led NUMMI joint venture between Toyota and General Motors:

*There was no vocabulary, even, to explain it. So I remember, one of the GM managers was ordered, from a very senior level—it came from a vice president—to make a GM plant look like NUMMI. And he said, “I want you to go there with cameras and take a picture of every square inch. And whatever you take a picture of, I want it to look like that in our plant. There should be no excuse for why we’re different than NUMMI, why our quality is lower, why our productivity isn’t as high, because you’re going to copy everything you see.”*

*Immediately, this guy knew that was crazy. We can’t copy employee motivation, we can’t copy good relationships between the union and management. That’s not something you can copy, and you can’t even take a photograph of it.*\(^2\)

We know from long experience in the Lean community that “copy the artifacts” approaches have a poor record for generating the kind of continuous improvement we see at Toyota. The Toyota Kata research was an attempt to better understand the *culture of improvement* that lay below the surface.

My colleagues and I began by interviewing Toyota people, but it quickly became apparent that they had difficulty articulating and explaining the patterns of their thinking and routines. I believe this is because such patterns represent the customary, habitual way of doing

\(^{1}\) Rother, Mike, *Toyota Kata, Managing People for Improvement, Adaptiveness, and Superior Results*, 2009 McGraw-Hill.

\(^{2}\) Professor Jeffrey Liker, excerpt from Episode 403, “NUMMI,” *This American Life*, aired March 26, 2010.
things in an organization, and are thus somewhat invisible to those carrying them out. This may be true for managers in any management system.

We had to figure it out ourselves by experimenting in factory and managerial settings. Five companies agreed to provide long-term test sites, and several additional companies became sites for shorter, specific trials. The experimenting involved applying technical and managerial Toyota practices and paying particular attention to what did not work as intended, investigating why, adjusting, and trying again. During that six-year investigation I also periodically met with Toyota-group sites, Toyota suppliers, and Toyota employees, to observe them and to discuss our interim findings. These discussions would often influence the character of our next trials.

Part of the research challenge was that each Toyota manager has his or her own style. Coaching at Toyota is not prestructured and is not necessarily daily. There is no formal coaching protocol and no protocol for daily practice, though that frequency is desired. Yet when you study what various Toyota managers do long enough, a common pattern of thinking and acting does emerge, which is taught at all levels inside Toyota. The content of what people work on naturally differs from area to area and level to level, as can each manager’s approach, but the basic thinking pattern the managers are teaching is the same. After numerous tests and observations, we began to see a pattern of thinking and behavior in the way that Toyota managers work with their people, which is different from traditional Western command-and-control management routines.

We came to see that Toyota’s management approach involves teaching all organization members a scientific approach and mindset that can be applied to an infinite number of challenges and objectives. Toyota wants its people to work scientifically, instead of jumping to conclusions. The teaching happens through coached application practice (currently called “on-the-job development” at Toyota) in the course of normal daily work, which creates a deliberate, shared way of working throughout the organization.

Seeing what’s behind Toyota’s management approach helps explain why simply reverse engineering the visible Lean techniques at Toyota doesn’t work. Those practices happen to be solutions Toyota is using at this moment in time. What is more important is how Toyota develops its people to arrive at this moment and begin preparing for tomorrow. The learned scientific way of thinking and working is the invisible context within which Toyota’s visible solutions are developed, function, and evolve. We would do well to adopt a similar way of working, rather than just trying to copy Toyota’s tools and solutions.

Researchers usually try to represent the phenomenon they are studying with a model. I depicted the pattern of thinking and behavior that Toyota teaches with a four-step
behavior model that I called the “Improvement Kata.” I gave it this name because of the connection between Toyota’s management approach and the concept of Kata—meaning *a way of doing things* and *practice routines*—in Japanese culture.

**Focusing on Question 2**

We now had a model of what Toyota does. While this addressed the first research question, *What are the unseen managerial routines and thinking that lie behind Toyota’s success with continuous improvement and adaptation?* it did not address the second: *How can other companies develop similar routines and thinking in their organizations?* It didn’t take long to realize that just sharing the four-step Improvement Kata model, even in great detail, does not generate new ways of thinking and acting. As a result, since publication of the book *Toyota Kata* in 2009, we have focused almost exclusively on that second research question.

We had seen that at Toyota the choreography of the desired scientific thinking pattern lies inside the heads of Toyota’s seasoned coaches: its managers. Most other organizations do not have that. Toyota is working to *preserve* its culture and has many experienced coaches among its managers. Other organizations need to *modify* their culture and do not yet have managers with experience in coaching the scientific-thinking way. It’s another example of how you can’t just copy Toyota. Teams and organizations, even inside Toyota, will require coached practice to build those skills. And effective practice often starts with some simple routines.

Based on the details of what we observed Toyota managers doing, we have been evolving a set of practice routines—called “Starter Kata”—to systematize the practice that is handled implicitly inside Toyota’s culture. These Starter Kata make the process explicit, teachable, and transferable to compensate for the fact that most organizations do not yet have a strong surrounding organizational culture of scientific thinking.

The set of practice routines in this book has evolved through trials and daily use at hundreds of different organizations, growing into a popular, non-Toyota-specific approach. It’s no longer about copying Toyota, but about emulating the intention and developing our own way.