Speech to the Academy of Management, 2007 Annual Meeting

It is a great honor and pleasure to be here today, and to speak to the Academy. I would like to first thank the International Management Division of the Academy of Management for giving me this opportunity. I also would like to thank my colleagues and collaborators who have been supporting my research.

Eleanor told me that I would have to pay for this award, that is, by making a presentation about how I have developed my ideas and my work. I'm not good at doing such a thing because I'm the kind of person who always wants to look ahead. Actually, it's just that I don't have a very good memory. But I will try my best.

Starting my career

Looking back, I think that I came to be interested in management and organization while I was working at Fuji Electric in 1958, where I performed in a variety of jobs in just nine years; in personnel, marketing, the labor union, the corporate university, and then in corporate planning responsible for financing subsidiaries. In the 1960s, new theories and methods were introduced to Japan from the U.S. one after another, such as quality control, theory Y, participative management and so on. When the corporate university at Fuji Electric invited instructors who used the Harvard case method to introduce these latest theories and concepts, I saw that Japanese management was quite outdated and felt a sense of crisis. So at the age of 32, I decided to leave the company and study in the U.S. Even then, I had the ambition to develop a new, original theory because I thought that we needed a made-in-Japan theory, rather than just borrowing theories from the U.S.

Berkeley years

So I went to the University of California, at Berkeley. The Berkeley years had a great impact on my life. We were very poor because I had lost almost all our money in a bad investment, but we had a lot of fun and I learned a great deal. It was also at

Berkeley that I met my collaborator, Hirotaka Takeuchi.

The reason why I went to Berkeley was that it was the first to offer me a place and I thought that it would be a great place to study. Berkeley had a reputation for its theoretical approach in management. I took marketing as my major for a master's degree under Professor Francesco M. Nicosia, whose major contribution was conceptualization of the consumer decision process from the perspective of information processing. In fact, the foreword to his most famous book, "Consumer Decision Processes" was written by Herbert A. Simon. Professor Nicosia was famous for being philosophical and hard to understand. For my master's thesis, I wrote about Paul Lazarsfeld's latent structure analysis for measuring the structure of consumer cognition. You probably won't believe that I used such a complicated statistical method for this, and I must confess, the result was that I finally understood that I did not understand what it was all about. However, for some reason, Professor Nicosia recommended me for continued study in the doctoral program.

At the doctoral level, I took sociology as my second major. I attended a course on theory construction conducted jointly by Neil Smelser and Arthur Stinchcombe called "Basic Theories and Methods in Sociology." In one year, they had taught me how theory should be constructed, and I learned research methodology through case study of ten great theories. Sometimes the authors were invited to speak about the real challenges and problems they had to overcome. Smelser analyzed from the theoretical perspective, Stinchcombe analyzed from the methodological perspective, and they synthesized their views. This process itself corresponds to cognitive apprenticeship in the art of theory construction. To this day, I feel that this course made me who I am as a scholar. I was really lucky because the course by these two professors was only offered once in 1970. At the end of it, each student was required to present their own theory, however primitive it was. My proposal eventually became my doctoral dissertation, which was about centralization and decentralization in the organization and titled "Organization and Market". Based on the concept of requisite variety by Ashby, it examined how organizations cope with the variety of information and decision burdens that the environment generates. At that time, I was very much a Simonian, that is, I worked in the information-processing paradigm.

From domestic orientation to global orientation

After graduating from Berkeley in 1972 with a PhD, I returned to Japan, not to Tokyo but to Nagoya, the third largest city in Japan. Nanzan University had offered me a position in their new department of management. Working at Nanzan, I was busy producing papers about Japanese firms and I wasn't paying much attention to global business. Then came another opportunity. I was invited to a research workshop on globalization in Brussels in the late 1970's, initiated by Gunnar Hedland and Eleanor Westney. It was attended by such bright scholars as Yves Doz, Sumantra Ghoshal, and C.K. Prahalad. Working with Gunnar later, we produced a joint paper, "Models of Knowledge Management in the West and Japan," published in 1993. Gunnar was a very nice guy and I still fondly remember our fireside chats and his not-so-good piano playing while I was visiting his home. Gunnar introduced me to Seija Kulki, with whom I later worked at the Center of Knowledge and Innovation Research in Helsinki.

The workshop in Brussels had opened up a new perspective for me on globalization. So I started working with other Japanese scholars on research into the different management styles of Japanese and U.S. companies. The result was published in 1985 as "Strategic and Evolutionary Management: A U.S.-Japan Comparison of Strategy and Organization" co-authored with Tadao Kagono, now a professor at Kobe University, and other collaborators. The finding was that Japanese firms tend to favor strategy that is long-term and evolutionary. However, they were not good at making drastic changes nor efficient in the use of resources. I think that this is still true and is creating some of the problems that Japanese firms face today.

From information-processing to knowledge/innovation-creation

One of the greatest turning points of my academic career came when I participated in a Harvard Business School colloquium on productivity and technology, organized by Abernathy, Hayes, and Clark, in 1984. It was then that I left the information-processing paradigm and started working in the knowledge paradigm. While I was doing research on innovation processes at Japanese companies with colleagues at Hitotsubashi University, Hirotaka Takeuchi and Kenichi Imai, I realized that the innovation process cannot be explained solely by the information-processing model because it is a passive model that explains how a firm adapts itself to complexity in the environment. I felt that innovation was something more proactive. So, I proposed the concept of "information creation" in which a firm is viewed as an entity that evolves intentionally through information creation, rather than just adapting to the environment.

But I was still not fully satisfied with this concept, because it did not include human factors such as commitment, will, emotion, and strong belief; the subjectivities that Simon had insisted on removing from the decision-making premises. But I felt all of these seemed to be very important for innovation processes. Then, with a hint from others at the Harvard colloquium, I came to realize that it was knowledge, not information that we should be dealing with. In 1985, we published "The New New Product Development Game" in the Harvard Business Review. Later, I developed the concept further in the 1991 article in the Harvard Business Review, "The Knowledge-creating Company," and we wrote the book of the same title in 1995. Since then, I have been devoting my academic life to establishing a theory that explains firms' activities from the viewpoint of knowledge creation.

From OB to Strategy

My interest also expanded from organizational behavior to strategy. For example, "Enabling Knowledge Creation," the title of an article I wrote with Georg von Krogh and Kaz Ichijo, discusses knowledge creation in strategic management.

I first became interested in strategy while teaching at the National Defense Academy in Japan from 1979 to 1982, where I did research on Japanese military organizations and their strategies. Later, with colleagues at the National Defense Academy, we did a research project on military failures, which we published in a book called “Essence of Failure,” in which we identified concepts such as “overadaptation to past success”, “unlearning” and “self-innovation.” For example, during World War Two the Japanese navy relied heavily on huge battleships with big guns because they had been the key factors for Japanese victory in the Russo-Japanese War. However, these battleships were of no use against the air fighters and aircraft carriers that the U.S. navy aggressively used after Pearl Harbor. By the same token, the bayonet charge、which the Japanese army had also heavily relied on in the Russo-Japanese War was of no use against the air-ground task force of the U.S. Marine Corp. Our book explains how we create knowledge from failures and how it is difficult to change behavior after success. To this day, it is the book that sells the most among my books in Japanese. I guess Japanese are more interested in failure than knowledge. Anyway, nearly 20 years later, the same team wrote “Essence of Strategy” in which we studied the strategy and leadership of the wartime leaders. I identified several abilities for turning things around that are common to the great leaders of the war, such as Churchill in the Battle of Britain. Churchill’s role model was Edmond Burke, who wrote the book “Reflections on the Revolution in France.” In this book, Burke emphasized the importance of prudence, originating in the concept Aristotle called *phronesis*.

From Strategy to the Theory of the Knowledge-creating Firm and the Concept of Phronesis

Another turning point was working with David J. Teece at U.C. Berkley in 1989, when we taught a course together about innovation. David and I worked together to host the Knowledge Forum at Berkeley for five years, where academics such as Peter Senge and Otto Scharmer and practitioners such as Yotato Kobayashi, the fomer CEO of Fuji Xerox, shared their issues and ideas concerning knowledge. From David I learned from the economist’s viewpoint, which led me to write a series of papers on the knowledge-based theory of the firm with Ryoko Toyama. David and I often talked about issues of strategic management and our concerns about current MBA education, which seems to place too much emphasis on ‘objectivity’ and rational analysis. Strategy from that perspective is about planning to adapt to an environment and/or utilizing inimitable resources to meet the short-term goal of maximizing value for shareholders. But, this view of strategy neglects the fact that strategy is about creating a future, not only the company's own but also that of the world in which it exists, that is to say, a common good. Strategy must embrace its knowledge-creating aspects, which involve human subjectivity such as beliefs, dreams and values that aim for the common good. This calls for practical wisdom of a special kind, first identified by Aristotle as *phronesis*. While researching the concept of phronesis in social science, I came across Alasdair MacIntyre and his book "After Virtue." He contributed to revitalizing the concept of phronesis in the modern world, emphasizing the importance of virtue and ethics.

Greek philosophy may sound a bit distant from business management, but let me explain. Roughly translated today as prudence, ethics, practical wisdom or practical rationality, phronesis is generally understood as the ability to determine and undertake the best action in a specific situation to serve the common good. In other words, it is the high-quality tacit knowledge acquired from practical experience that enables one to make prudent decisions and take action appropriate to each situation, guided by values and ethics. Briefly stated, phronesis is a very important aspect of leadership. And leaders of knowledge-creating firms need phronesis because management is not only science but also art and craft, as Henry Mintzberg said. The situation that each manager faces is different from every other, and he or she has to take action appropriate to that situation, not only to maximize profit but to serve the common good.

Phronesis is acquired through the effort to perfect one's craft, which makes one a virtuous artisan. I have defined the following six abilities of the phronetic leader: 1. the ability to make judgments and act for the common good; 2. to share context with others to create *ba*; 3. to grasp the essence of particular situations; 4. to conceptualize particular situations as universal; 5. to use any necessary means to actualize concepts, and finally, the ability to foster phronesis in others to build a resilient organization. In short, phronetic leaders have to be able to synthesize particulars and universals, achieved in the continuing spiral of the SECI process.

Alfred North Whitehead once said that philosophy is like a poem. Philosophy must define universal principles and at the same time explain the most particular and concrete facts. Poetry is a contradictory act of art that utilizes words as a tool, which themselves are abstract; poets and philosophers alike must express with words that which is apart from the "actual" but comes close to the "actual" itself. Phronetic leaders are the same; they grasp the essence of particulars and conceptualize them into universals that, in turn, make reality actual. The study of management is the same; it is an act of art to convert the actual into the abstract to make actuality vivid in reflection.

I believe that one of the great artists in our field was Peter Drucker, who was able to grasp the essence of particulars to build universal theory. I plan to study why Drucker was able to see what others could not see, while at the Drucker School at Claremont Graduate University, where I am now a Distinguished Drucker Scholar in Residence,

Process Theory of the firm

The most recent development in the theory of knowledge creation is in its relation to process philosophy, namely the theories of Alfred North Whitehead. Whitehead stated that "all things flow." By the way, when I visited the headquarters of Hoechst in Frankfurt together with Minof Dierkes, with whom I was working on a project about company transformation, I saw the phrase, "Phanta Rhei" (all things flow) on the wall behind the receptionist. I was very much impressed. Whitehead said the world is made up of events on occasions of experience rather than of things that endure. In short, the world is made of processes, not substances. And every entity in the world exists, not alone, but in relation to others. We are affected by and are affecting others.

We believe that knowledge is process, not substance, and we are trying to incorporate the process view into the book we are currently writing.

Live and let live

Looking back at my academic trail, I see the variety of topics and areas I have been dealing with, starting with marketing, then information processing, organization and its behaviors, sociology, theory construction and methodology, knowledge creation, innovation, strategy, leadership, virtue and ethics, and now processes. I don't think I ever had a concrete agenda for my life or a long range plan. Rather, it has been a network of processes created from the contexts and encounters with people. I was probably half reacting and half proacting to the environment at any particular moment, working on the topic that was most interesting to me. Looking back, I find myself living the timely time, the flow of the "here and now" relationship with various others. Through such flow, I can say I have relentlessly pursued excellence, or, at least, I have tried. I have been pursuing "knowledge creation," which is still evolving and progressing.

I have come to the conclusion that the knowledge-creating firm is the company that synthesizes ontology, that is, "how to be" or "for what purpose do we live", with epistemology or "how to know" or "what is truth." Through such synthesis, knowledge-creating firms change themselves and their environment. Management in such a firm is viewed as "a way of life" not a money-making tool. I think what I have been up to in my life is the same, synthesizing this and that, creating new meanings of myself and of the environment. The process of identifying and creating the theory of knowledge creation has been the way of my life, and will continue to be so.

Concluding words

To conclude my presentation, I would like to give thanks again to everyone I have encountered and everyone here today. I again thank the Academy of Management for this occasion. And, I must also thank my family, my two daughters and especially my wife, for putting up with me for 47 years. Some say that I wouldn't survive without her even for a day, since I'm such an absent-minded professor. I don't know, but maybe that's just the evidence that we can't exist alone in this world.

Thank you.