

Japan

Culture, Knowledge and Economic Development

2007-07-23

Introduction

Scott Adams once stated that “in Japan, employees occasionally work themselves to death. It's called Karoshi. I don't want that to happen to anybody in my department. The trick is to take a break as soon as you see a bright light and hear dead relatives beckon.”¹ What does Scott's remark have to do with economic development? As we will discover throughout the paper, it has a lot more to do with economic development than you might think. In this paper, we will discuss how Japanese culture affected Japan's economic development path and how, in the case of Tsukuba Science City, the cultural context provided the basis for knowledge development and its economic utilization.

Culture

I will not attempt to make a precise definition of culture. I will discuss “culture” in terms of a stream of cultural processes with uncertain places and boundaries; not a fixed body of traditions, meaning, or other elements, but culture as something that is constantly 'in the making'-an ever-changing outcome of social and economic processes and struggles.² I would like to take my place along Jones, who argued that the relationship between culture and economics is one of reciprocity. That means economics is not divorced from the cultural context and culture is not exempt from economic influence.³ Since the framework of this paper is limited, I will focus on the question of how the Japanese cultural context influenced its economic development. I will assume that culture can affect economic behavior by influencing how actors define their interests, by containing their efforts on their own behalf or by shaping a group's capacity to mobilize.⁴ I will discuss this by looking concretely at some of the most significant cultural factors that led to the rapid economic development of Japan throughout the 20th century.

Hasegawa, a leading Japanese scholar of commerce at Nihon University, has developed a cultural typology to describe how cultural factors have played an important role in Japan's economic development throughout the 20th century. I will crystallize three features out of Hasegawa's typology. Firstly, that the Japanese culture is defined by natural religion with a materialistic orientation. Secondly, that the social order has historically evolved as having a strong group orientation and thirdly, that the social order is essentially centralist and obedient.⁵ These mentioned factors are not meant to be mutually exclusive and they should also not be perceived in isolation of Western cultural attributes which have come more to the forefront in the recent decades. However, they can be interpreted as having had a considerable influence on Japan's economic development path.

Indeed, Japan's naturalist religious orientation (Shintoism, which is a distinct religion but has elements of Confucianism, Buddhism, Taoism, Christianity) shows an emphasis on the current happenings in the world, strongly pointing towards materialism. Interestingly, pure Confucianism or Buddhism and to some extent Taoism, consider commercial profiteering as vice rather than virtue. We should therefore, not neglect the fact that historically, the sects with the strongest realistic character spread the most rapidly.⁶ As a matter of fact, the Japanese have utilized every advocated religion for the purpose of this-world interest, which has contributed greatly to the country's economic development because they consider profit seeking and large corporate organizations as

¹ <http://thinkexist.com/quotes/scott_adams/> July 17th 2007.

² Sokefeld, Martin. 1999. "Debating self, identity and culture in anthropology. *Current Anthropology* 40 (4): p. 429.

³ Jones, Eric: Culture and its Relationship to Economic Change, *Journal of Institutional and Theoretical Economics*; 1995 p. 276

⁴ DiMaggio, Paul: Culture and Economy, in Smelser, N. J. and Swedberg, R. (eds.) *The Handbook of Economic Sociology*: 1994

⁵ Hasegawa, Hiroyuki, *The International Executive*, Vol. 37 (5) 1995

⁶ Hayashi, Makoto and Yoshihara, Kazuo *Japanese Journal of Religious Studies*, 1988 15/24

something of high societal value and something to strive for. A great number of talented people choose to enter the business world or to become government employees who participate in the decision making of the state, which in turn deals with business issues. Because of the priority of profit seeking, economic and entrepreneurial activities can be activated.⁷ Consequently, Japan has a favorable business climate that has provided a solid basis for its fast economic development.

Japanese culture is characterized by a strong group orientation. Familism, the emperor system, and loyalty (that is, political value) are said to result from Confucian ideology. Yet, Confucian elements were present before it was appointed as a national religion during the Tokugawa era. Rather, the idea that people's consciousness of the society, organizations, and community should have priority has evolved as strong feature of Japanese society over time.⁸ This feature is an important part of the Japanese economic development throughout the 20th century. In Japan, firms are perceived as micro-communities that deliver a collective value to both the employees and the society at large. More than in Western companies, Japanese companies show their responsibility to the workers by providing on-the-job training or education, company residences and recreational facilities, athletic events for families, year-end parties, and special care provisions for retired employees. In response, employees express their loyalty and work long hours often without additional pay, foregoing time for their families.⁹ This led to a high productivity and thus a higher level of economic development.

Further more, an important aspect of this group orientation is a situation in which mutual reliance between employees and the firm occurs. Japanese management is characterized by stable industrial relations, growth of the firm, and priority of obligation over right. This concept of priority of the obligation to the collectivity has legitimized the belief that the firm should be eternal and thus has made it easier for firms to seek long-term profits, for example, through the mutual holding of stocks.¹⁰ Thus Japanese firms have typically pursued sustainable long term growth strategies, which have contributed to Japanese economic development.

The centralist and obedient features of Japanese society that historically evolved out of the strong notion of the emperor as the harmonic centre of the country's political affairs can be found as a indicator throughout the 20th century. The government played a central role in building up the economy and Japan's citizen's followed obediently. An important aspect of top-down reform and guidance is manifested in Gyoseisido (administrative guidance), which leads to the guidance of the private economy through cooperative relationships between private and public sectors. Indeed, Japanese economic success has often been described as a product of the organizing skill of the Japanese state.¹¹ The government has guided the private sector in the direction necessary for economic growth, adopted a policy of industrial structure, and aimed at smooth structural transformation of individual industries. These policies may be called a Japanese model, because Asian newly industrializing economies have accomplished fast economic development, to varying degrees, by using policymaking quite similar.¹²

⁷ Hasagewa, *ibid.*

⁸ Nakamura, Hajime: *History of Japanese Thought*. London: Kegan Paul, 2002

⁹ Hasagewa, *Ibid*

¹⁰ Krauss, Ellis, *Political Economy: Policymaking and Industrial Policy in Japan* PS: Political Science and Politics, Vol. 25, No. 1. (Mar., 1992), pp. 44-57.

¹¹ Biggart, Nicole Woosey: *Explaining Asian Economic Organization: Toward a Weberian Institutional Perspective* Theory and Society, Vol. 20, No. 2. (Apr., 1991), pp. 199-232.

¹² Hasagewa, *Ibid*

Knowledge

Having established that cultural factors played an important role in Japan's economic development we will now turn to the knowledge factor which we will discuss in a cultural context. In his book *The Gifts of Athena* Mokyr outlines two types of useful knowledge. Firstly, "propositional knowledge" which he labels as omega knowledge and which consists of the stock of "beliefs about natural phenomena and regularities." Secondly, "prescriptive knowledge" or lambda knowledge which consists of the set of instructions or techniques for applying propositional knowledge in economic production. The evolution of useful human knowledge thus involves, first, additions to omega (making discoveries), second, mapping omega into lambda (inventing applications) and, third, selecting "best-practice" techniques from among the set of feasible ones.¹³

As explained earlier, the centralist and obedient attributes of Japanese culture has led to a strong role of the government which has played an important role in contributing to Japan's economic development. We will now look at the example of the Tsukuba Science City, to explore how the Japanese government has actively pursued both the development of omega and lambda knowledge to generate economic growth.

Tsukuba Science City is very well known in Japan. It is a municipal complex of research laboratories and more than 40% of Japanese government research manpower are concentrated in the community. Prior to being build at the end of the 1970's it was in the planning stages for more than 20 years and it represents roughly a \$10 billion investment of public funds. Its development was a top priority and initiative coming from the upper echelons of power in Japan. Right from the beginning, academic institutions in Tsukuba adopted an innovative scholastic approach with an organizational mode prevalent in the United States. The university has 26 research institutes which cover most disciplines of the physical, biological, and social sciences.¹⁴

An important characteristic of Japanese research is its devotion to generating practical applications of scientific theory through an abundance of empirical data. The research institute of the Ministry of Construction at Tsukuba exemplifies this approach. The Public Works Research Institute is the national center for civil engineering. There is no equivalent elsewhere in terms of size, breadth of interest, or quality of facilities. The institute consists of 48 buildings and test plots. It has a test track more than 6 km long including a large tunnel where design standards for roads can be evaluated. We can extrapolate from this example, that as an economic growth strategy, the government not only actively invested in the creation of omega knowledge but also provided a direct link to lambda knowledge by creating facilities that allowed the quick utilization of knowledge for innovative applications. Ultimately, this not only represents the creation of knowledge as an economic development factor but also the fact that the context of Japanese culture, which is characterized by an active and centralized role of the state, played an important role in its formation and orientation.

Conclusion

In conclusion, it must be stated that by examining some of the most significant Japanese cultural factors, it is clear that Japan's economic development path was greatly influenced by its cultural attributes. Further more, the cultural aspect of a centralized and active role of the state can be found as a driving factor for knowledge development which ultimately results in the practical utilization of knowledge. It should be no wonder, then, that Japan's economy has grown so rapidly, when the culturally induced group orientation and sense of obligation drives some employees so far as to even sacrificing their lives for their companies.

¹³ Mokyr, Joel, *The Gifts of Athena: Historical Origins of the Knowledge Economy*. Princeton and Oxford: Princeton University Press, 2002

¹⁴ Bloom, Justin and Asano, Shinsuke *Tsukuba Science City: Japan Tries Planned Innovation*, Science, Vol. 212, 12 June 1981

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