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Transference, Part I: Transferring
Singaporean Institutions to Suzhou, China**

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Transferring Singaporean Institutions to Suzhou, China**

by

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Institutional Innovation and the Prospects for Transference

By John W. Thomas*

PART I: Transferring Singaporean Institutions to Suzhou, China

In February 1994, China's Vice Premier Li Lanqing and Singapore's Senior Minister Lee Kuan Yew signed a highly publicized agreement to create a new industrial park and residential community in Suzhou, China. The presence of Premier Li Ping and Prime Minister Goh Chok Tong looking on as witnesses emphasized the importance of the endeavor to both countries.

Modeled after Singapore's highly successful industrial-residential communities, this ambitious plan called for the transformation of agricultural lands outside the municipality of Suzhou into an industrial community. Infrastructure would include public housing, shopping centers, and parks. A social security system and health facilities would be established for a community of 600,000 residents. All these would be modeled on Singapore's experience and managed efficiently, with safeguards against corruption. Organized as a public joint venture, the plan committed the partners to invest US\$20 billion over a period of twenty years, with Singapore providing 65% of the financing and the primary responsibility for management.

The Chinese welcomed the partnership. They looked to Singapore as a model of development even as they welcomed greater Singaporean investment. The Singaporeans saw it as a unique opportunity to demonstrate the effectiveness of their model of development on a much larger platform. They also welcomed the opportunity to expand their economic role in the region. At the time of the signing, the leaders of both countries were confident of the joint venture's success. Lee Kuan Yew stated, "We can guarantee that the agreement we have reached with China about Suzhou will be honored (Teng, P.2)." He would later add, "Here we will defend our quality, because here, our reputation is at stake."¹

What went wrong?

Barely more than five years later—in June 1999—the Singapore Government recognized that the project was badly behind schedule and that cost overruns were reaching unsustainable levels. Singapore would hand over majority control to their Chinese counterparts. *The Straits Times* reported, “Singapore will cut its stake in the massive project to 35% from 65% and hand over the management of the Park on January 1, 2001 (Chan, 1999).”

What went unstated was that Singapore’s objective of demonstrating the effectiveness of its model of development had been unsuccessful, and the program’s objectives were being scaled back to a degree that would make Suzhou into little more than a conventional industrial park. In his memoirs, Lee Kuan Yew would describe the Suzhou debacle as “a chastening experience (Lee, 2000, p. 723).”

What Singapore and China tried to do in Suzhou was to transfer a set of innovative institutions to a new context. This in itself wasn’t a unique aspiration. In a world of global competition and readily available information, policy makers regularly scour the international scene for relevant experiences they might adopt to their own domestic needs. There exists a powerful and convenient assumption among them that success is transferable: that innovative institutions that thrive in one environment can be made to do so in another. As a result, the practice of institutional transference is becoming increasingly common.

However, while the communications revolution has exponentially increased possibilities for identification of successful experiences, the problem of selection has at the same time become much more complex and challenging. While the exchange of innovation can make a valuable contribution to development, the Suzhou case suggests, that innovative institutions succeed only when they are well fitted to their new context. Therefore the policy maker confronts the task of assessing whether institutions that have succeeded elsewhere will succeed in his nation’s context. In the absence of any evaluative framework, policy makers are tempted to import

institutions to address national problems without any means of systematically assessing their fitness. Using the China/Singapore experience in Suzhou as a centerpiece and focusing mainly on institutions, this article identifies the factors that need to be taken into account in the transference process.

Institutions are defined as a complex set of bundled activities, generally embodied in organizations, underpinned by values that are necessary to their effectiveness. The institutions considered are classed as “innovative” if they were developed in the originating country and successfully dealt with problems and issues they were designed to confront. This analysis is intended for policy makers and their advisers and teachers of public policy with stakes in the success of institutional transference, all of whom may need a better understanding of the causes of success and failure in the attempt to transfer institutions.

Institutional transference in historic practice

For centuries, this pattern of transfer has provided important development opportunities for many nations. David Landes’s *The Wealth and Poverty of Nations* (Landes, 1998) provides evidence of how much the economically successful nations selectively adopt the innovations and experiences of other nations. Japan, in the second half of the 19th century, deliberately investigated and adopted western institutions (Westney, 1987). Specifically, Japan studied European and American models of government and private organizations and adopted them for its own use. It used French and German models for the organization of its military, American and Belgian models for its banking system, and British models for the postal system. For enterprises from newspapers to textiles to shipbuilding, the Japanese drew lessons about management organization from the Europeans and Americans. Noteworthy about Japan’s experience is its meticulous method of studying different foreign models before selecting one, and then modifying the model in practice to fit its own context. For example, Japan emulated the

highly centralized police system of France in significant ways, but decentralized its own institution.

“Development is the marriage of openness and the reciprocal exchange of innovation” concludes Alain Peyrefitte in *The Immobile Empire*, (Peyrefitte, 1992, p. 552) his study of China in the 18th century. Countries that have the luxury of innovation need sufficient time and plentiful resources, for the cost of innovation is high and the results uncertain. This is a luxury most low- and medium-income countries do not have. Yet innovation is not the only road to economic growth and political power. As Peyrefitte makes clear, reciprocal exchange of is also critical. Nye and Keohane point out that the “fast follower” that is able to quickly adapt the innovations of others to its own context may often do better than the “first mover” does (Keohane, Nye, 1999).

In the early 20th century, many nations shared financial and trade institutions extensively. This is evident in the analogous functions and operational modes of ministries of finance and of central banks to their counterparts in other nations. From the 1950s onward, there was a proliferation of development based on transferred models. National planning commissions and semi-autonomous organizations that performed production or infrastructure development functions were often shared in common. The 1960s and '70s witnessed widespread adoption of the model of community development and its successor, integrated rural development. Recently, models of micro-finance lending institutions, based on innovators such as the Grameen Bank in Bangladesh and the Bank Rakyat Indonesia, have been widely transferred, as have legal institutions. As Schauer notes, “The last ten years have seen an exponential increase in the volume of legal transplantation, the process by which laws and legal institutions developed in one country are then adopted by another (Schauer, 2000).”

Today, not only does the explosion of information and easy travel facilitate institutional transfers, but multi- and bi-lateral aid donors and non-governmental agencies also have actively promoted the practice. Most nations consider it a priority to show off its successful

institutions, and support educational site visits by public and private officials. When successful institutions are identified, aid is frequently available to facilitate their transference.

The widespread belief in the universal applicability of successful institutions in a global society with one dominant economic system further accelerates institutional transference. When trade and competition are considered primary sources of growth, and government's role becomes more technical and complex, then universally applicable solutions become highly seductive. Such solutions are fostered by aid or IMF conditionality, and are regularly promoted by international consultants. The consulting domain has growing rapidly on the belief in the efficacy of transference. Consulting firms like KPMG, Pricewaterhouse Coopers, or Arthur Anderson, non-profit consultants, and university faculty, provide advice to countries on issues from tax systems, to privatization and government restructuring all predicated on the assumption that successful institutions can be transferred and success in the originating country is more important than context.

Significantly, however, common optimism regarding the transferability of successful institutions often overlooks the critical importance of adapting transferred institutions to the local environment. The case of Suzhou is a vivid example of the importance of context.

Selected relevant literature

The principal work on transference is that of Richard Rose. His article, "What is Lesson Drawing?" (Rose, 1991)" and his book, *Lesson-Drawing in Public Policy: A Guide to Learning Across Time and Space*, (Rose, 1993) are important because they introduce the concept of prospective analysis. His concept is so broad that it provides only a limited framework for the policy maker confronted with specific choices regarding transfer decisions. This article focuses on institutional transference rather than Rose's more comprehensive concept. However, Chapter 6 of his book *Contingencies in Lesson Drawing* offers seven useful hypotheses for thinking about the

transfer of large lessons, some of which are reflected in the findings of this article and can usefully be studied by policy makers.

In *Public Choices and Policy Change*, Merilee Grindle and I assert that the contexts of policy choice (societal pressures and interests, historical context, international context, economic conditions, administrative capacity, and other policies) will exert a powerful influence on the consideration of any proposed policy (Grindle, Thomas, 1991). While this work emphasizes the importance of context, it is not explicitly a framework for considering the appropriateness of external experience to a particular situation.

In the spirit of Richard Rose, Eugene Bardach addresses some of the broader issues of transferring experience. He provides useful guidelines in Part 3 of his recent book, *A Practical Guide for Policy Analysis*. (Bardach, 2000) Bardach's focus is not explicitly on international transfers, but many of his suggestions for assessing "smart practices" will be useful to policy makers.

A relevant analysis with a slightly different focus, but one which provides a useful framework, is Richard Neustadt and Ernest May's *Thinking in Time: The Uses of History for Decision Makers*. (Neustadt and May, 1986) All these works point in useful directions, but they do not provide a framework that a pressured public servant or organization head might use. The analysis of the Suzhou case provides data necessary to suggest such a framework.

The Suzhou case in detail

Singapore and China came to Suzhou with substantial knowledge of each other and a strong sense of kinship. They shared a common ethnicity, culture, and language. Lee Kuan Yew was known to have commented that, as Asians, they could work out differences without resorting to the legal systems or complex contracts often employed by western firms. The countries shared economic interests. Singapore was China's seventh-largest trading partner and fourth largest

foreign investor, and China was Singapore's sixth-largest trading partner. The two countries accorded the China-Singapore Suzhou Industrial Park (CS-SIP) top-level political support and made clear statements that Suzhou's success was a top policy priority.

China and Singapore explore mutual interests²

At the beginning of the 1990s, both Singapore and China were giving top policy priority to economic growth. Caught up in the excitement of the "Asian Miracle," both were looking to the future and for ways they could continue to accelerate their growth. Singapore was looking for external investment opportunities that would help it transcend the constraints of its small geographic size, and China was seeking foreign investment and technology to accelerate its growth and its adoption of market economics. Singapore's economic growth in the beginning of the 1990s was averaging almost 10%. China was also growing rapidly, reaching an unprecedented growth rate of 13% in 1993.

Singapore was concerned that its small land size and population would limit future growth and was looking outward for economic opportunities. The "growth triangle" strategy of combining Singaporean capital and management with Malaysian and Indonesia land and labor to enable all three countries to maintain a competitive edge was losing dynamism from Singapore's perspective because of growth in Malaysia and Indonesia. By the early 1990s, Singapore was broadening its prospects by looking for investment opportunities in other areas of Asia. Vietnam and China were rapidly transitioning from communist to capitalist economies, entering the world trading system, and actively seeking foreign investment. Singapore, with large capital reserves, responded. A priority target for investments were industrial parks in the region such as Vietnam-Singapore Industrial Park in Vietnam, Wuxi-Singapore Industrial Park in China, and Batamindo Industrial Park in Indonesia. In fiscal 1995-96, through the public Jurong Town Corporation, Singapore doubled its commitment in regional investments to US\$105 million for 11 joint ventures in China, Indonesia, Thailand, Taiwan, and Vietnam.³ China, however, with its huge population and new markets, seemed to offer the brightest prospects.

For China, long trapped in communist underdevelopment, the rapid growth of the 1980s and '90s was a transforming experience. China's emergence as a major world power was grounded in its economic success. It actively sought foreign investment to fuel its growth, always careful to ensure that such investment was on its own terms and conditions and came from sources it considered friendly.

China had a longstanding interest in the Singapore model of development. In 1978, China's "Paramount Leader," Deng Xiao Ping, visited Singapore and noted its "good public order" (Teng, p.1). In Singapore, Deng saw "a capitalist version of the communist dream" (Ibid.), as S. Rajaratnam, former Senior Minister in the Singapore Government, put it. In 1992, during a tour of the Shenzhen special economic zone in southern China, Deng remarked, "Singapore enjoys good social order and is well-managed. We should tap on their experience and learn how to manage better than them (Ibid.)." The recommendation of the Paramount Leader was taken as a virtual directive, and Chinese delegations began visiting the Jurong Town Corporation, the builder and manager of industrial estates in Singapore and the region, to learn as much as they could about Singapore's industrial development.

In 1990 Lee Kuan Yew, Singapore's powerful leader and Prime Minister for 31 years, stepped aside to become Senior Minister. He remained highly influential, but left the details of running the government to the new Prime Minister and focused his energies on overseeing policies that promoted Singapore's interests internationally and articulating Asia's larger role in the world. He made frequent visits to China promoting the special Singapore-China relationship. He was received warmly and honored by the Chinese, who were eager to encourage Singaporean investment and interested in Singapore's model of economic development. A prominent Taiwanese venture capitalist commented, "Lee Kuan Yew is the lead bulldozer for Singapore. Where he goes, everyone follows."⁴

Designing a China-Singapore joint venture

In 1992, Lee Kuan Yew visited Suzhou, and the then-mayor, Zhang Xinsheng, proposed that Singapore invest 10% of its US\$50 billion surplus to develop Suzhou in the model of Singapore. Through his contact with Deng Xiao Ping's son, Deng Pufang, he could get, he said, "special treatment so your investments will succeed (Lee, 2000, pp. 719-721)." For China, such a venture would mean more Singaporean investment, and Singapore's involvement would help the project serve as a magnet for foreign firms that eager to invest but that had been concerned about corruption, connections, and efficiency in the Chinese business environment. A Singapore-run industrial park would provide a predictable secure environment for firms that might otherwise not to invest in China.

But the proposal went beyond investment. It was to create in China what Deng Xiao Ping had admired about Singapore: a model of honest and efficient management linked to social welfare systems and an accompanying community with a high quality of life.

For Singapore, while the proposal did offer the opportunity for further investment in China, its importance went beyond that. It would provide a demonstration project for the Singapore model of development in a much larger international arena. If the Singapore model worked in China, it would confirm that it clearly had universal validity and could no longer be dismissed as applicable only in Singapore's unique context. This concept appealed to both Lee Kuan Yew and the top Chinese leadership.

Suzhou appeared an excellent location for the joint venture. Situated 55 miles west of Shanghai in Jiangsu, China's richest province, Suzhou is a beautiful and historic city known for its cultural and intellectual heritage. Research institutions, universities, polytechnics, and vocational schools in the vicinity would ensure a supply of skilled workers. Suzhou is well served by a modern expressway connecting it to Shanghai; a railway line; waterways, and an international airport.

With Suzhou chosen to be the location, China and Singapore began to work out the specific plans. CS-SIP was to be organized as a public joint venture with Singapore holding 65% of the shares and China 35%. Twenty billion dollars, provided in rough proportion to their shares over 20 years, was to create a 70 square kilometer park modeled on Singapore's residential industrial communities. The community would support a residential population of 600,000 and provide employment for 360,000 workers. Predominantly foreign private investors were expected to lease land and build factories. The formal agreement was signed in February 1994.

Five flaws in the design

The power of mutual interest and enthusiasm caused leaders and planners on both sides to make assumptions based on their own experiences. In certain cases they overlooked important differences between China and Singapore that needed to be taken into account, and in other cases they minimized the magnitude of the challenges CS-SIP would face. The five most significant of these are identified here.

1. *Differences in the size of the countries and the organization of their governments.* High-level political backing was seemingly one of CS-SIP's strongest assets. The project had the strong support both of Chinese President Jiang Zemin and Singaporean Senior Minister Lee Kuan Yew, as well as the national leaders ranked immediately below them. However, in emphasizing the commonalities of the two countries, not enough importance was attached to the differences in size between the two countries and governments and how that would affect the structure and operations of the joint venture.

Singapore, one of the smaller countries in the world, essentially has a one-layer government. China, one of the largest, has five distinct levels of government. Although the system is nominally centralized and hierarchical, the Chinese understood that both distance and government capacity conferred considerable autonomy on lower layers of government. The perceptions of the leaders from each country had been shaped by their own successful experiences with their own systems. The Singaporeans had only a limited sense of the

implications of China's size; as an indication of this, Singapore's population of 3 million was far less than the 5.8 million population of Suzhou alone.

A senior Singaporean from the Economic Development Board later noted that while CS-SIP was a government-to-government project, what was considered important at the national level in China might not be deemed so at the local level. This was an issue simply not encountered in Singapore (Teng, P. 3). Suzhou officials had achieved status by having suggested this national project, but they had been marginalized thereafter; they were not even central players in the decision to locate CS-SIP in Suzhou. The photographs of the signing of the CS-SIP agreement contained in the official brochure provide visual confirmation of this. In the first two rows are top national officials of Singapore and China. If any Suzhou officials were present, they were in the third row or further back. The second page of the Chinese language version also a picture of Lee Kuan Yew and Jiang Zemin seated formally but in cordial conversation. The Singaporean leadership's assumption was that what mattered was support from the top levels of Chinese government, because that was what mattered in Singapore. That assumption proved to be a serious obstacle to success, for it was the Suzhou municipal officials, not the country's top leaders, who were to assume management responsibilities on the Chinese side.

2. Differing standards of assessing success. Mutual interests in economic development are a powerful incentive. But success is assessed at an operational level. Little noted in the planning stage was the fact that when it came to establishing priorities and taking action at that level, China and Singapore had rather different priorities, and, therefore, differing measures by which to evaluate progress.

For the Chinese, CS-SIP's success would be measured by the inflow of new investment and the development of good physical infrastructure. The Singaporeans had more complex and ambitious goals that included less concrete measures of success. For instance, the inculcation of new management skills and values; the creation of a dynamic community with a high quality of life, to draw the most

skilled workers and keep them content; and the creation of a sophisticated grouping of interrelated Singapore-style institutions that would be transferable not only beyond Singapore, but also beyond Suzhou.

3. *Differences in the scale between the Suzhou project and previous similar projects.* In 1995-96, Singapore invested US\$105 million in 11 joint ventures in four countries in Southeast Asia region and in China. That indicates the scale of Singapore's regional investments. In Suzhou, they were proposing to invest a minimum of US\$13 billion in a single program. In Suzhou, Singapore was committing itself to something on a scale they had never conceived of before, and that clearly went far beyond its previous experience.

4. *Local competition.* In planning CS-SIP, little account was taken of potential competition. There were four other authorized industrial parks and export processing zones in China. Of particular importance were the Singapore-Wuxi industrial park, 100 miles west of Suzhou, and Shanghai's huge new satellite city, Pudong, across the Whampoa River from Shanghai. Both of these were in an advanced stage of development by the mid 1990s. Although CS-SIP was intended to do something qualitatively different from the existing industrial parks, to succeed it had to successfully compete with them financially.

Even closer to home was an even more important potential rival. On just the other side of Suzhou city was the Suzhou New District (SND), which had been designed to be an international science and technology park. SND did not seem to figure in anyone's calculations initially. However, the proximity of SND would turn out to loom far larger in determining the fate of CS-SIP than anyone at the highest ranks of either government had suspected.

5. *The difference between the perceived and the actual difficulty of the project.* Perhaps because the prospects for the joint venture were so exciting, or the fact neither country had a tradition of raising hard questions with top leaders once their minds were made up, or because neither country had much practice in hard realities of transferring institutions, the partners in CS-SIP appeared to seriously

underestimate the difficulty of what they were trying to do. The joint venture undertook the formidable task of transferring values and behavior patterns. Implanting Singapore's "clean" management in historically corrupt China was daunting enough. Persuading workers to leave their homes in Suzhou and move to a new city under construction, and to persuade them to trust in social welfare systems which were entirely new and run by foreigners, would at the very least take a long time. The novel idea that establishing and developing social amenities for workers was a legitimate cost of doing business, and that workers' quality of life would eventually enhance productivity, was a notion that was both literally and figuratively foreign to Chinese businesses. Finally, both countries seem to have proceeded on the assumption that change could occur swiftly in isolation: that CS-SIP could be developed quickly and operated independently of the country surrounding it. Little account seems to have been taken of these difficulties in establishing the time frame for developing CS-SIP.

Competition between CS-SIP and SND

Planned, built, financed, and operated by Suzhou municipality, the Suzhou New District (SND), completed in 1992, was, according to its brochure, "The window of Chinese reform and opening up...(with a)...highly efficient management system...(and)...bustling commercial centres."⁵

The problem for CS-SIP was that both CS-SIP and SND came under the administration of the Suzhou municipal government. The issues of the competition between the two frequently reverberated through the joint CS-SIP venture, poisoning other aspects of the relationship. It is the issue that arose most frequently in discussions about the joint venture and probably caused the greatest number of misunderstandings and hard feelings between the Chinese and Singaporeans involved. It was constantly invoked, sometimes with limited validity, as contributing to other problems, from cost overruns to worker settlement patterns. Problems of this type were an inevitable part of such an ambitious venture and would have arisen without SND, yet such was the emotional nature of that competition that much was attributed to it.

The Singaporean leadership believed that success depended in significant measure on the willingness of the local officials to focus their energy and resources on the development of the joint venture. One of the Singaporean CEOs pointed out that the concepts of social order and social and economic administration are ideas that are intangible and difficult to grasp. In his view, this necessitated Suzhou officials focusing on the development of CS-SIP. He stated bluntly, "SND is a distraction. Time has been wasted" (Teng, PP. 3-4).

The Chinese side did not see SND this way. Chen Deming, the mayor of Suzhou, asserted that the competition was healthy. "It will urge both the Chinese and Singaporeans to work even harder so that the park will be able to compete with other parks in China" (Ibid, p. 4)." Besides, they argued, CS-SIP had a better marketing strategy and thus should not have been too concerned about the competition.

Suzhou officials felt they could balance priorities between the CS-SIP and SND; Singapore officials disagreed. Singaporeans felt Suzhou officials were promoting SND ahead of CS-SIP. One example frequently cited was something Suzhou Vice Mayor Wang Jin Hua had told a group of German investors in Bonn in the presence of the German Special Commissioner appointed by Chancellor Helmut Kohl to foster tripartite economic co-operation between Singapore, Germany, and China. He said that the German investors should put their investments in the SND, which had the full backing of the Suzhou government, and that they did not need to go through Singapore to invest in China.

How these differences were handled proved a further irritant. The Deputy Mayor of Suzhou and members of the municipal staff complained to visitors that Singaporeans did things very differently than the Chinese.⁶ He said when the Singaporeans were unhappy they communicated directly with Lee Kuan Yew, who would fly off to see President Jiang Zemin, in effect going over the heads of the local authorities. The Suzhou municipal officials felt that, in China, it was an appropriate and courteous procedure to go to the people with whom you had concerns and see if the problems could be worked

out, and that Singapore's approaches to the Chinese President had distressed them and caused them to lose face. But even the Suzhou officials' complaints had been met with rebukes: in response to one such complaint, Jiang Zemin had sent the Mayor of Suzhou away on a years leave of absence to the Harvard Business School.

Also, in an interview with the Television Broadcasting Corp. of Singapore, Suzhou officials, including Mayor Chen Deming, criticized Singapore for discussing unresolved issues with the media. "When we have a problem, we do not expose the problem to the media, while the Singapore side seems to have the habit of raising issues to the press before the problem is resolved (Teng, P.4)." Yang Xiaotang, Suzhou Party Secretary, did not see the reason for the fuss about SND. He said that SND had been established earlier and in fact "paved the way for CS-SIP." He also took issue with the Singapore press for using the old Chinese expression, "The mountains are high and the emperor is far away," as a way of explaining the behavior of the Suzhou officials. "It is politically disrespectful," he said. "Our political cadres are known for their loyalty to the Communist Party and President Jiang Zemin, as well as their steadfast adherence to the policies of the Party."⁷

Clearly, initial harmony turned to distrust and mutual recrimination as the program progressed—and the suspicion created by this competitiveness undoubtedly made other differences more difficult to solve. With hindsight, although SND constantly emerges as an irritant to participants from both nations, it doesn't seem to be the key factor determining the final outcome of the joint venture. Yet it is not possible to analyze the CS-SIP experience without understanding the conflict.

Software transfer

President Jiang Zemin stated at the outset that the purpose CS-SIP was "to accumulate new experience for the development of mutually beneficial economic and technical co-operation between China and the rest of the world."⁸ This theme—of Singapore enhancing the attractiveness of China to foreign investors—was picked up (with some hyperbole) in the opening sentence of the new Park's brochure:

“When the huge Chinese market beckons but the unfamiliar environment is a concern, your most trusted partner is ready to link you to this growth opportunity in an environment you are familiar with, the China-Singapore Industrial Park (CS-SIP).”

Software was defined as “The sharing of Singapore’s successful public administration and economic management experience with the Chinese authorities so that they can formulate pro-business policies in CS-SIP, and govern with transparency and efficiency.”⁹ For the Singaporeans, good management was more than just the efficient management of the enterprise. Integral to their view was the concept of creating a prosperous community with good housing, enlightened accompanying social systems, and a high quality of life for its residents. In Singapore these were all related, and the Singaporeans correctly understood them as being a crucial element of Singapore’s own success. Most Singaporeans thought CS-SIP was to be a new model of industrial park that would eventually be duplicated throughout China, and that the unique Singaporean flavor embodied in the software transfer was the heart of the advantage CS-SIP was to have over its competitors.

The Software Transfer Agreement signed in 1994 covered areas such as land-use planning and development, building control, environmental regulation, planning and management of industrial estates, new towns and public utilities management, and labor management. The goal was specifically stated by Chan Soo Sen, the first Chief Executive Office (CEO) of the China Singapore Suzhou Development Co. Inc. (CSSD) “We want to promote Singaporean characteristics: pro-business, efficient and clean.”¹⁰ Over time, six hundred Chinese officials were sent to Singapore for training.

Software-related issues

Any ambitious program presents unexpected and challenging issues. Land tenure reclamation and cost, economic incentives on the local level in Suzhou, and the underestimation of the difficulty of community building quickly became difficult and divisive issues.

In the initial agreement between China and Singapore, it was stated that investors in CS-SIP would be given a 70-year lease on their land. When the first investors arrived, however, the Chinese management committee, SIPAC, said it could only grant a fifty year lease, pointing out that Chinese law stipulated that 50 years was the maximum lease allowed. Despite many exchanges and much conflict, land tenure remained an unsettled issue between the two sides for quite a while, the Singaporeans feeling that China had reneged on its commitment and the Chinese feeling the Singaporeans wanted special privileges.

The cost of developing land at CS-SIP turned out to be another difficult issue. In order to get a large tract of land that could be developed from scratch to meet the programs needs, Singapore decided on an area east of old Suzhou. The tract was prime farmland not particularly suited for industrial and commercial development. The choice involved significant unanticipated costs for CS-SIP. The first involved payment for the acquisition of the land. Under Chinese law, the acquisition of farmland had to include payments for the cost of relocating displaced farmers, including the cost of constructing new residences, and compensation for lost productivity. The second and more significant cost was that of land reclamation and preparation. Because the land was in a low-lying area, it required an average of 2.62 meters of earth fill (over a 70 square kilometer area!) to raise it to a level above that of the worst flood recorded in the area in 100 years and to make it suitable for industrial and commercial activity.¹¹ These remedies led to very substantial cost overruns.

The comparative cost of leasing land at CS-SIP and SND was one more issue that exacerbated that conflict. SND had been developed on higher ground west of the city that was more suitable for high-density industrial and commercial activity. SND offered land to investors at US\$36 per square meter. Because of the high cost of acquiring and developing land, plus the costs of community building, CS-SIP had to charge US\$65 per square meter. At one point some Singaporeans also claimed that one reason SND could charge less for land was that the infrastructure development for SND had been subsidized by the municipal government, a complex issue since

tax revenues from SND went to the municipal government while those from CS-SIP did not.

Financial incentives at the local level may have also served to undermine smooth cooperation in the joint venture. Because CS-SIP enjoyed special government-to-government status, Singapore was able to establish a financial structure that gave CS-SIP a great deal of fiscal autonomy. Instead of the standard formula where tax revenues generated at the local level accrued to the local government, most of the local revenues generated by CS-SIP stayed with the management rather than going to the municipal government of Suzhou. By contrast, all the revenue generated by the economic activity at SND went to the Suzhou government, a factor that contributed to the Suzhou officials' limited enthusiasm for CS-SIP.

Community building may have been another area where the initial plans had been somewhat Utopian, or at least under-researched. According to the plan, the workers in the enterprises located in CS-SIP would live there with their families. CS-SIP was to become an integrated satellite city with a population of 600,000. Development of attractive housing on the model of Singapore's Housing Development Authority was a priority. Residents would be covered by the social security structure adopted from Singapore and enjoy the benefits of parks and recreation facilities.

The amenities contributing to the quality of life at CS-SIP were to be one of the attractions of the park, but they also contributed to the high cost of land. Yet in the first years of the joint venture, as workers in the initial enterprises were drawn from Suzhou city and the surrounding towns and countryside, very few workers chose to live in the park, preferring to commute from their existing residences. When queried, many pointed out that Suzhou was a thriving and attractive city, and that many workers already had extended family where they lived and saw little reason to move to a new city under construction. Obviously, building a new city and making it a vibrant community and an attractive place to live is a long-term process.

The issue of competition also clouded this discussion. When the residential population growth in the park lagged well behind initial estimates, CS-SIP officials suggested that Suzhou officials might not be doing enough to encourage workers to move to the park and might be giving SND preference in local infrastructure development, particularly in the provision of public transportation. No direct evidence ever substantiated this claim, but it was one more corrosive element in the relationship. Ultimately, the disappointing residential population numbers in the park were cited as one reason why CS-SIP was not succeeding as expected.

Assessing progress

The assessment of the joint venture's progress was important, for it shaped the attitudes and decision of the leadership and the workers. Despite Deng Xiao Ping's view of the value of the Singapore model, the Chinese concern was for economic activity. For the Singaporeans, any industrial park could generate economic activity. They were more interested in something larger but less tangible—the transfer of institutions that they believed would ultimately result in more investment, higher quality of life, and a clear demonstration of the broader applicability of the Singapore model of development. David Lim, the second CEO of CSSD, noted that the Chinese used very concrete measures of progress, such as groundbreaking, the building of roads, and the erecting of buildings. To the Singaporeans “The appropriate measure was insuring that you had a good foundation, and a good plan, and that the concept was robust...things you cannot see, but are in your mind” (Teng, P. 3). Lim Chee Onn, Chairman of the Singapore consortium, felt that local officials had lost sight of the original goal. “They have become too engrossed with the excitement of physical development, which is only a means to an end...it becomes like any other commercial park. We did not go into SIP for the purpose of investment, but for the Chinese officials to try out some of the policies in the way the government ought to be run” (Ibid., pp. 3-4).

Zhao Dasheng, head of the Chinese Software Transfer Office, summarized the complexity and difficulty of what the joint venture was trying to accomplish. “We have adopted the Singapore Central

Provident Fund, (CPF), learnt about the Housing Development Board (HDB) program and neighborhood centers, but these are only the visible adaptations of the software. More importantly are the ideas that will help the transformation of the old system to the new.” While understanding the importance of software transfer, he also captured the complexity of transplanting institutions into a new context. “...We have to combine them [the Singapore organizations] with the Chinese condition just as Singapore’s experience is the product of Singapore’s adaptation of experience from other countries. For example, laws in SIP must be consistent with Central Government law. With regard to the tenure of land, the municipal government has no authority to approve a 70-year land lease. We are still working with the Central Government on this issue. We also cannot give an administrative order to resettle those in the old Suzhou city in SIP. SIP is attractive to the younger people. In future, the younger people will move there. Our Singapore friends must be more patient” (Ibid., p. 4).

As the investment began to flow, and decisions made on-site, the differing goals of the Chinese national government, the Suzhou municipal government, and the Singapore government surfaced. The old Chinese saying, “Same bed, different dreams!” seemed to summarize the situation.

Management structure

The management of CS-SIP had high quality-talent: Singapore assigned senior public servants to leadership roles in the program, and China’s officials working there were among its best. The leadership of CS-SIP had autonomy, and the program was well financed. Yet the complexity of the organization managing CS-SIP appears to have exacerbated problems of coordination and competition.

The decisions as to what is an appropriate management structure were obviously influenced by the experiences and perceptions of the decision makers, and for the Chinese and Singaporeans, these were very different. The obstacles to institutional transference, or software,

as it was called, are enormous, yet there is little evidence that this issue was in the minds of the planners when they designed the management structure. Both appeared to use a private sector joint-venture model, and to give little thought to how the Suzhou context differed from that of Singapore.

CS-SIP was developed and managed by seven organizations created for the purpose. A look at these organizations and the official statements of their responsibilities provides evidence of structural complexity and lack of clear differentiation of responsibility between them. These organizations are listed by functions and the role of each briefly described. The descriptions are from the CS-SIP English language brochure or the program's website.¹²

The two formal joint venture partners—the umbrella organizations:

China: The China Suzhou Industrial Park Co., Ltd. (CSIPC) was the Chinese consortium joint venture partner (the counterpart to Singapore's SSTD). It was comprised of 11 Chinese state owned corporations at the national, provincial, and municipal levels.

Singapore: The Singapore-Suzhou Township Development Pte, Ltd. (SSTD) was the Singaporean consortium joint venture partner (the counterpart to China's CSIPC). It consisted of 20 Singaporean corporations and four international ones. SSTD was the driving force behind the project, bringing Singapore's experience in developing and managing industrial parks to Suzhou.

The operating organizations:

The China-Singapore Suzhou Industrial Park Development Corp, Ltd. (CSSD) was the principle operating organization. It was formally a 65/35 joint venture between the Singapore-led consortium SSTD and the Chinese consortium CSIPC.

The Suzhou Industrial Park Administrative Committee (SIPAC) was the Chinese authority governing the Park. Headed by the Mayor of Suzhou, it was empowered by the Beijing central authorities to approve investment with no upper financial limits.

The Singapore Software Project Office (SSPO) was the Singaporean office in Suzhou responsible for software transfer and coordination of the software-training program.

The national and local level steering committees:

National Level: The China-Singapore Joint Steering Committee (JSC) was the political committee responsible for the major issues of adapting Singapore's economic and public administration experience to the Park. Co-chaired by China's Vice Premier and Singapore's Deputy Prime Minister, its members included ministers and vice ministers from the two countries.

Local Level: The China-Singapore Joint Working Committee (JWC) was responsible for looking into the challenges and issues facing the industrial park's development.

This complex and overlapping set of management organizations must inevitably have been a source of difficulties. There must have been disagreement on authority, responsibility, and lines of communications that made an already formidable task even more challenging. Lim Neo Chian, the last CEO of CSSD, commented that the structure and the 35% partnership gave the Chinese insufficient stake in the success of CS-SIP and that, over time, they took less responsibility and increasingly saw its performance as a Singapore's responsibility.¹³ The competition between CS-SIP and SND contributed to this as well. The mayor of Suzhou was the Director of the SIPAC, while the vice-mayor of Suzhou was the Director of the Suzhou New District (SND) Administrative Committee. The structure of responsibility for Suzhou municipal officials virtually

institutionalized divided loyalties at best and outright conflict at worst.

Both Chinese and Singaporean officials in Suzhou had to confront these obstacles, which worsened over time. One effect was that the Chinese and Singaporeans increasingly related to their own national organizations, complicating the problems of communication. Visitors reported that if arrangements to visit CS-SIP were made through Chinese channels, it was possible to meet with Suzhou municipal officials and receive a briefing from the Chinese at CSSD, but difficult to get an appointment with anyone at SSTD or with Singapore officials working at CSSD. Apparently, when the requests for meetings came from the Chinese side, either the Chinese made minimal efforts to obtain the appointments with the Singaporeans (perhaps preferring that the visitor hear the Chinese side of the story), or the Singaporeans were reluctant to meet with someone whose visit appeared sponsored by the Chinese.¹⁴ Whatever the reason, it was clear that over time the two groups became less comfortable working together.

When Suzhou attracted international attention, it only served to underline the problems already in existence. Singapore sent an elite group of senior civil servants to lead their work in Suzhou. Their role was to demonstrate how Singapore had developed so successfully. In January 1998, *The Economist* wrote regarding CS-SIP, “Singapore’s leaders, never short of self regard, thought they had something to teach the Chinese about running a society (*The Economist*, 1/3/98).” This is certainly an overstatement, but it does indicate that, four years into the joint venture, emotions were running high. To the Chinese, China is the “middle kingdom,” and it is of course the largest country in the world and used to living and working in a highly evolved society. For them, the representatives of a very small country introducing better ways of doing things must at times have been a source of some irritation. The comments of Zhao Dashing suggesting that China’s Singapore friends must be more patient tactfully states the frustration many Chinese on the project may have felt with their foreign colleagues.

The decision to restructure

On June 28, 1999, the Singapore government announced it was handing over controlling interest in CS-SIP to China and scaling back its involvement to a 35% share (Chan, 1999). Despite the positive face put on the decision, it was a major scaling down. Coming after just five years, the decision signaled the end of the CS-SIP as a real attempt at institutional transference on a large scale and narrowed its goal to becoming a profitable industrial park.

Four reasons for Singapore's decision stand out. First, CS-SIP's development was well behind schedule. Five years into its planned 20-year development period, it had attracted US\$754 million in actual investments and another US\$2.7 billion in commitments, well under 25% of the target of US\$20 billion (Holloway, 1998). It had attracted a resident population of only 5,000 out of the 20-year target of 600,000. Companies operating in the park were employing 14,000 people against a target of 360,000. These numbers by themselves, given the difficulties of the start-up phase of any new enterprise, seem a quite credible performance. However, to leadership used to fast results, it may have seemed insufficient.

Second, Singapore was accruing what was becoming an unsustainable financial loss. Reliable figures are difficult to obtain, because Singapore does not make this information public. One unofficial estimate suggested that by the year 1997 the cumulative losses would amount to US\$ 90 million (Teng, Snyder). The *Far Eastern Economic Review* reported, "Development costs...have climbed to almost \$400 million, and profitability remains a distant hope" (Dolven, 1999). Other knowledgeable people speculated that the amount was in the billions. Whatever the correct figure, it became more than Singapore was prepared to bear.

Third, there was disagreement about goals. As discussed previously, the officials of Suzhou wanted tangible physical development and investment. The Singaporeans placed priority on less tangible accomplishments: non-corrupt management, a residential town with high quality of life, and supporting institutions which their

experience suggested was the path to sustained development. This disagreement appeared to be growing, not diminishing, as time passed.

Fourth, working relationships between the Chinese and the Singaporeans had deteriorated to a point where there appeared to be no way of restoring them. Lim Neo Chian, the last Singaporean CEO, said in January 2001, “Singapore restructured because working relations got so bad we felt nothing more could be accomplished. The Chinese had no stakes.”¹⁵ In that environment, there appeared no chance of accomplishing the institutional transfer. Mr. Lim added that ironically, as soon as the deadline for the handover was announced, the Chinese began to take a keen interest in both management and software transfer. To that point, in Lim’s view, the Chinese had seen CS-SIP as Singapore’s responsibility. As of the 1999 announcement, they realized that in two years it would be theirs to manage, so they energetically immersed themselves in learning all they could from their colleagues from Singapore.

Assumptions about support and independent agents

Every successful institutional transfer depends on the support of key people and organizations in the recipient country. Determining whether that support will be forthcoming is a crucial element in the transfer decision.

As in Suzhou, proponents of institutional transfer often assume that needed support will be forthcoming when in fact it is not assured. The consequences can be very serious if this assumption is mistaken. In calculating support, proponents of transfer frequently mistake support that they expect to get but that is not within their control for that which is guaranteed and that they can control. If success rests on assumptions that people and organizations that are independent players will act in ways that further the goals of transfer, a large risk is being taken. For example, in Suzhou the leaders of CS-SIP could be assured of financial support from Singapore at the level committed—they could assert influence over investors through financial and management incentives that were relatively within their control. However, critical to success was the full support of the Municipal

government of Suzhou that CS-SIP leaders assumed they could depend on because they had the support of the national government, but which they could not control. In the longer term, they also assumed that a modern high-rise city with physical and social amenities would attract 600,000 residents away from their current homes, but even that assumption in truth depended on thousands of individual decisions beyond their control. Both assumptions proved wrong, and, when they did, there was little that the CS-SIP leadership could do to redeem the situation.

Those considering institutional transfer (as well as many other types of investment) must think very carefully about the support needed for success. Then they must consider carefully whether that support is dependent on factors and interests beyond their own. If support critical to success is beyond control, then plans must be seriously reconsidered.

Universality and the paradox of context

Singaporean leaders, encouraged by the words of Deng, believed their successful model of development to have much broader applicability in Asia and perhaps the world. They made a \$13 billion bet and—in Lee Kuan Yew’s words, staked their reputation—on the belief that this was the case. They bet on the broadly universal applicability of their model over the importance of adapting it to the specific context and they were mistaken. The Suzhou case makes a powerful argument for the importance of context—not just common language, ethnicity, and shared geographic region, but for the hard reality of how things work at the operating level. In the process, they took little account of the specifics of the Chinese context, how it differed from Singapore, and the ways in which Singapore’s success was a product of its own unique context.

In Suzhou, the Singaporeans played the key role in designing CS-SIP. Paradoxically, it was their immersion in their own context that was the limiting factor. They knew Singapore had been responsible for its success. It was their focus on creating as much of Singapore as they could in Suzhou that was limiting. When institutions are transferred and officials of the originating country assume important leadership

roles—Singaporeans working in China, a donor organization, or a foreign project manager—intimate knowledge of the context in the originating country may limit inquiry and comprehension of the recipient country’s context. The assumptions held by leaders may be grounded in their own context and experience, and that may limit their vision, comprehension, and, inquiry into a new reality.

For example, the Singaporean concept of building a relatively self-contained industrial residential community as a model and demonstration project was quite at variance with that of a number of senior Chinese officials. A senior official of China’s State Planning Commission articulated the views of a number of Chinese officials and academics who had been asked their opinions. He noted that Singapore was trying “to build a walled city isolated from the rest of China.” In his view the effort was misconceived and showed a lack of understanding of China and its economy. Influencing Chinese development, in his view, required “removing the walls and building extensive links between CS-SIP and other parts of the Chinese economy. To have an influence in China requires integrating what goes on in CS-SIP with the Chinese economy outside the Park and not try to separate from the rest of China.”¹⁶ A deep understanding of the context in the recipient country is clearly critical to the successful transfer of institutions.

Supply-and demand-driven transfers and stakes

Whose initiative is it to transfer innovative institutions to a new country? The answer to that question can be very important. If the initiative for the transfer is driven by the innovating country as in the case of Singapore, or by an aid donor who sees the innovation as a solution to a recipient country’s problem, the recipient country may not have a sufficient stake in the success of the transfer to make it work. Important stakes in the success of the transfer on the part of the recipient country are critical to success. Residents of the recipient country have an in-depth knowledge of the local context that is essential for adapting it to the recipient country. The institution should be run by the people of the recipient country and should be integrated with and supported by the recipient country. Even in the

best of circumstances, this is not an easy task. Unless the recipient country has high stakes in success the transfer is unlikely to succeed.

The aftermath

Lee Kuan Yew's analysis of what went wrong is informative, and suggests that Singaporeans remain ambivalent about what went wrong. In a press conference in Shanghai on October 1 1999, Lee Kuan Yew said, "We should have reached the solution of handing over to them and making them responsible, say, two years earlier...Had this solution been reached earlier, the Chinese side today would be running the show and we would just be helping them, and I think that is less of a difficulty because they are responsible for the outcome" (Kwang, 1999, p.35). That solution would have meant in 1997 what it did in 1999—a sharp reduction in investment and a virtual abandonment of the institutional transfer program. He also acknowledged the problems of differing priorities at different levels of the Chinese government. In his view, "Beijing wanted Singapore's help transferring its software or know-how in developing a township, replete with factories, commercial complexes, housing and social amenities, that could be replicated throughout China. On the other hand Suzhou was interested in the hardware. Suzhou does not want to go around to build 100 industrial parks in China. They just want more factories, more jobs, more money, more promotions in Suzhou... There was no identity of goals at that level."¹⁷

Lee Kuan Yew recognized that "There must be an identity of interest, not only at the top between Beijing and Singapore but also between the working parties on the ground." But the solution he proposed was still reflection of the Singaporean context. "The ideal solution would be to go to Beijing itself where the centre is in charge, or to go to a place like Tianjin [a major industrial city close to Beijing] with the status of a province."¹⁸ For Singapore, was it a learning experience or just a "chastening" one?

For China, the results must have seemed more satisfactory. In early January 2001, Wang Jin Hua, the new Chinese CEO of CSSD, announced that Suzhou expected to report profits of US\$7.5 million.

Presumably, that meant for the year 2000, although that was not stated.¹⁹

Notes

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¹ The China-Singapore Suzhou Industrial Park quoted Senior Prime Minister Lee Kuan Yew in their brochure.

² In writing this paper, I drew substantially on a teaching case written by Teng Su Ching for the Public Policy Programme's Case Unit at the National University of Singapore, and on my visit to Suzhou and SIP in July 1998.

³ I obtained the information on Singapore's investments in joint ventures from the Jurong Town Corporation's Annual Report, 1995/96.

⁴ The Far Eastern Economic Review quoted Frank Liu, Director of Transpac Capital (the Taiwanese venture capital firm) on their August 6, 1998 issue (page 14).

⁵ The description of the Suzhou New District was printed in their brochure, which was provided for me by municipal officials.

⁶ The Mayor of Suzhou and the municipal staff made the statement to me and to the officials of the Chinese National School of Administration during our visit to Suzhou in 1998.

⁷ Secretary Yang made the statement during an interview with the Television Corporation of Singapore.

⁸ Ibid.

⁹ The information was obtained from the Suzhou Industrial Park's brochure.

¹⁰ The quote was provided during an interview with Teng Su Ching.

¹¹ I got the details from the Program's website, <cssd.com.sg>.

¹² Program's website: <cssd.com.sg>.

¹³ I interviewed Lim Neo Chian in Singapore, January 19, 2001.

¹⁴ This was the situation during my visit to Suzhou in 1998, but I was told that other visitors experienced the same problem.

¹⁵ Lim Neo Chian made the statement during a conversation I had with him in January 19, 2001.

¹⁶ During the interview in September 1998, the official requested not to be quoted directly. Discussions with other officials of the SPC and academics in two Beijing educational institutions shared similar opinions.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ I obtained the information from a Chinese newspaper's press report, which was translated by CS-SIP, and was given to me by Lim Neo Chian.

References

- Anonymous. (January 3, 1998). "The Trouble with Singapore's Clone." The Economist, p. 39.
- Bardoch, Eugene. (2000). A Practical Guide to Policy Analysis. Chatham, N.J.: Chatham House Publishers.
- Chan, Dennis. (June 28, 1999). "Suzhou Handover in 2001." The Straits Times (Singapore), p. 1.
- Dolven, Ben. (August 26, 1999). "Humble Retreat." Far Eastern Economic Review, pp. 40-41.
- Grindle, Merilee S., and John W. Thomas. (1991). Public Choices and Policy Change: The Political Economy of Reform in Developing Countries. Baltimore: Johns Hopkins University Press.
- Holloway, Nigel. (June 4, 1998). "The Emperor Closes In." Forbes.
- Keohane Robert O., and Joseph S. Nye, Jr. (1999). "Power and Interdependence in the Information Age." In Elaine Ciulla Kamark and Joseph S. Nye (eds.), Democracy.Com: Governance in a Networked World. Hollis, N.H.: Hollis Publishing Co., pp. 197-214.
- Kwang, Mary. (October 1, 1999). "S'pore Should Have Solved Suzhou Woes Earlier." The Strait Times (Singapore), p.35.
- Landes, David S. (1998). The Wealth and Poverty of Nations: why some are so rich and some so poor. New York: W. W. Norton.
- Lee Kuan Yew. (2000). From Third World to First: The Memoirs of Lee Kuan Yew. Singapore: The Time Media PTE. LTd.
- Neustadt, Richard and Ernest May. (1986). Thinking in Time: The Uses of History for Decision Makers. New York: The Free Press.
- Peyrefitte, Alain. (1992). The Immobile Empire. New York: Alfred A. Knopf.
- Rose, Richard. (1993). Lesson Drawing in Public Policy. Chatham, N.J: Chatham House Publishers.

Rose, Richard. (1991). "What is Lesson Drawing?" Journal of Public Policy, 11 (1), pp. 3-30.

Schauer, Fredrick. (April, 2000). "The Politics and Incentives of Legal Transplantation." Working Paper No. 44. Center for International Development, Harvard University.

The Straits Times. (June 28, 1999).

Teng Su Ching. "The Mountains are High and the Emperor is Far Away: Developing the Suzhou Industrial Park in China." The Case Unit, Public Policy Programme, National University of Singapore.

Teng Su Ching and Thomas Snyder. "Equal Mutual Benefit." Unpublished teaching case for The Case Unit, Public Policy Programme, National University of Singapore.

Westney, D. Eleanor. (1987). Imitation and Innovation: The Transfer of Western Organizational Patterns to Meiji Japan. Cambridge: Harvard University Press.