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EXPLAINING THE ENDURING COMPREHENSIVE DEVELOPMENTAL STATE IN SINGAPORE: *A CLASS RELATIONS PERSPECTIVE*

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Abstract

This article offers an explanation as to why the Singapore developmental state remains dominant and ‘comprehensive,’ after 40 years of consistent economic growth. Unlike the other East Asian developmental states, it has not retreated but instead seems to be strengthening its power in society. To explain this unusual phenomenon, this paper adopts a class relations perspective to argue that the key difference is that there has been a continued absence of the domestic capitalist class, as the state constantly collaborates with transnational capital on major economic projects, while the working class has continuously been ‘incorporated.’ To illustrate this argument, this paper not only surveys 40 years of developmentalism in Singapore, but also analyzes Singapore’s most recent developmental strategy, the biomedical sciences initiative, as all these strategies extended the rule of the comprehensive developmental state.

Keywords:

Class relations; Developmental states; Singapore; biotechnology policy

Explaining the Enduring Comprehensive Developmental State in Singapore

Introduction

From a class relations perspective, an ideal typical ‘developmentalist’ society has a particular class structure where a developmental state is the most dominant political and economic agent in society. In contrast, in an archetypal capitalist society, the main economic agent is the *bourgeosie* or capitalist class, while the (capitalist) state uses its political power to regulate the economy[1]. In both types of societies, labour or the working class is usually in a subordinate position. As the most dominant agent in a developmentalist society, the developmental state is able to use political and economic incentives as well as penalties to ‘enlist’ the cooperation of the capitalist class and the working class on large scaled national economic projects (Johnson 1982; Amsden 1989; Wade 1990; and Evans 1995). In this sense, the post independence Singapore government has been correctly described as one such developmental state (Castells, 1988; Huff, 1994 and 1995; Perry, Kong and Yeoh, 1997; Pereira, 2000; and Low, 2001).

Long term studies of developmentalist societies have shown that state domination over the other two classes ought not to be sustainable. Some (neo-liberal) political economy perspectives posit that economic globalization will eventually lead to a convergence of diverse capitalist-state forms into a single ‘Anglo-American’ or ‘normal’ model, where ‘politics will retreat from markets’ (as discussed in Weiss 2000: 22). A class relations perspective predicts the same outcome but offers a different explanation: class transformation. While the developmental state might have overwhelming economic and political power at a particular point in history, if the developmentalist policies are successful and if there is economic growth, the domestic capitalist class and the working class will both become relatively more powerful than the state (Castells 1992; Evans 1997). The Singapore developmental state, however, shows no sign of devolution, even after 40 years of continuous economic growth. Indeed, at the beginning of the year 2000, it has apparently strengthened its economic position within Singapore society, with its launch of a new set of heavily interventionist industrial policies aimed at developing the biotechnology sector in Singapore.

This article seeks to explain how the Singapore developmental state has remained, and seems most likely to remain in the near future, ‘comprehensive’ as the most powerful political and economic agent within society. It posits that the key to understanding Singapore’s class relations is the state’s strategy to engage multinational corporations or transnational capital, and later government-linked corporations, effectively stifling the possibility of fostering a private domestic capitalist class. At the same time, the state continuously incorporates the working class, resulting in its continued subordination. The result, I argue, is that there is no agent that can challenge the political and economic supremacy of the Singapore developmental state. This paper begins by reviewing how class relations are structured in a developmentalist society. This is followed by a survey of developmentalism in Singapore between 1965 and 2000. The Singapore government’s biotechnology policy, known as the Biomedical Sciences Initiative which was introduced after 2000, is then analysed, showing that class structures have not and probably will not change in Singapore any time soon.

Developmentalism and Class Structures

Unlike many other studies of the developmental state, this paper is not concerned about how it brings about industrialization or economic growth. Instead, the focus is on the class relations in a situation of developmentalism. Developmentalism can be defined as a situation when there is a ‘comprehensive’ developmental state in society that is significantly more powerful, politically and economically, than both the domestic capitalist class and the working class. A developmental state is a particular type of state apparatus that prioritises economic growth ‘over all else.’ (see Johnson 1982; Woo-Cumings 1999) A ‘comprehensive’ developmental state is one which is especially dominant both in the political and economic sphere over capital and labour (Kim 1997). Many studies have already shown that comprehensive developmental states come to this position of disproportionate power through the use of force and from within an environment of instability, economic backwardness or geopolitical danger (Johnson 1982). They are often advised by a technocratic or bureaucratic elite, formulating economic policies that will lead to economic growth and national survival (Castells 1992). It is then down to the developmental state's transformative capacity, its ability to effectively intervene in the economy, to implement these policies (Weiss 2000). The greater the transformative capacity of the developmental state, the more it is described as being 'comprehensive'; on the other hand, limited and failed developmental states are those that have weak or no transformative capacity (see Kim 1997; Woo-Cumings 1999). Ultimately, the issue here is how developmental states are able to get other social agents (such as labour, businesses or other interest groups) to cooperate in the national project. If other social agents are able to resist, block or capture the state, then the state does not have effective transformative capacity (Evans 1995).

The case of the so-called (East) Asian developmentalism usually refers to the comprehensive developmental states of Japan (1950-1970), South Korea (1960-1980) and Taiwan (1970-1990). In Japan, the developmental state began its ascent after World War Two. With the support of the US government, the Japanese comprehensive developmental state managed to grow the economy very quickly, mainly through enlisting the cooperation of the *zaibatsus*[2] in the industrialization drive (Johnson, 1982). In South Korea, the comprehensive developmental state emerged after the civil war with the North and a local military coup. It then managed to co-opt the large *chaebols*[3] to participate in the national economic projects, as well as discipline labour groups. The industrialization drive was eventually successful, as South Korea soon grew to become an OECD-level country (Amsden 1989). A similar scenario was played out in Taiwan, as the Kuomintang led government was able to direct the many family-owned small and medium enterprises to participate in the industrialization effort (Wade 1990). All of these comprehensive developmental states were 'strong,' as they needed capacity to intervene to radically transform the economy. This strength was political, as seen in the case of the developmental states of South Korea and Taiwan, which were authoritarian regimes backed by the military (Amsden, 1989 and Wade, 1990). These developmental states were also economically 'strong,' as they required the necessary capital and finance to invest in the economy and to provide targeted financial subsidies to domestic industrial enterprises, and to embark upon large-scaled infrastructure development. For example, all three comprehensive developmental states (Japan, South Korea, and Taiwan) were financially supported by the US government, as a means of containing the spread of communism in Asia, in addition to having their own income raising schemes (Pempel, 1999).

However, class relations perspectives argue that the comprehensive developmental state has a 'life-course'. While it might be the most dominant social agent at one point in history vis-à-vis other social agents such as the domestic capitalist class or the working class, its effectiveness will necessarily plant the seeds of its own downfall.

> 'The process of development they [the developmental state] succeeded in implementing, not only transformed the economy but completely changed the society. A new more assertive capitalist class, ready to take on the world, emerged

> in the 1980s, increasingly confident that they no longer needed a state of technocrats, racketeers and political police.' (Castells, 1992: 66)

In other words, industrial transformation, economic growth and social development will ultimately lead to the decline of the developmental states. South Korea is an exemplary case of this process. Even before the Asian Financial Crisis of 1997—which has been described as the death knell of the Korean developmental state—the comprehensive developmental state had already devolved into a 'limited' developmental state during the 1980s as it no longer wielded the same degree of power within Korean society (Kim, 1997). This was because the *chaebols*, which had initially needed state subsidies to grow, no longer required the state's financial support because they had become large (independent) global entities on their own by the 1980s. In Taiwan, the US-backed Kuomingtang is no longer is an archetypal developmental state in Taiwan, in part because the government itself has changed significantly, but also because enterprises are much more independent (see McBeath, 1998). Thus, '…the success of the developmental states in East Asia ultimately leads to the demise of their apparatuses and to the fading of their messianic dreams.' (Castells, 1992: 66) In other words, the developmental state is necessarily 'inherently degenerative' (Evans, 1997). Of course, external factors could further add to the transformation of class relations within society; for example, the Asian Financial Crisis (1997 onwards) in South Korea severely affected the already waning position of the developmental state (Kim, 1999; Haggard and Macintyre, 2000).

To recapitulate, from a class relations perspective, a developmentalist society ought not to be sustainable in the long run; it is peculiar to a specific set of socio-historic structures for a particular time (Wong, 2004: 353). If effective and successful, the developmental state will retreat, and society ought to shift towards the archetypal capitalist society where capital dominates the economic sphere while the state focuses on regulation and politics. The case of Singapore therefore is unusual. While the dominance of the state at the period immediately after independence is not surprising, its continued dominance after 40 years and three major national economic policies, each of them heavily interventionist, certainly is. Furthermore, every one of these policies has generally been successful in bringing about economic growth. In addition, there has been rapid social development in the country, achieving high levels of health, education, and life expectancy. Yet, the Singapore developmental state shows no signs of retreating. If it has been adapting at all, it appears that it has strengthened itself vis-à-vis other social agents within Singapore society. This paper will explain the continued comprehensiveness of the Singapore developmental state, and attempt to provide some explanations for this unusual case.

Developmentalism in Singapore

The Singapore developmental state has been studied many times, and analysed from many different angles[4]. Still, it is necessary to revisit some of the main issues, as they are directly relevant to the argument of this paper. The Singapore developmental state emerged after Singapore's exclusion from the Federation of Malaysia in 1965. With political independence, the People's Action Party swept into power and took total control of the government[5]. At the time, Singapore faced economic difficulties, not only because the island had no natural resources, but also as a result of being excluded from Malaysia, since its northern neighbour was Singapore's resource-rich hinterland. Also, Singapore faced domestic social problems, including potentially high rates of unemployment due to a rapidly rising birth rate and the impending withdrawal of the British military bases, which had provided the bulk of Singapore's employment outside of the banking/commerce sector. Under these 'dire' conditions, the Singapore developmental state prioritized economic survival over all else. Using its political dominance, the PAP took control of various arms of the state, directing them towards development.

There were several factors that contributed to the comprehensiveness of the Singapore developmental state's dominance within society. Unlike the other Asian developmental states, there was never a strong class of domestic capitalists in Singapore outside of a few powerful families, particularly in the banking and trading sectors (Rodan 1989; Hamilton-Hart 2000). Indeed, the Singapore developmental state managed to 'co-opt' or 'incorporate' these families into aligning with the long-term developmental programme; several of the banks which were owned by these tycoons were asked to play important roles in financing development (Huff 1994). Further, the large-scale national economic programme, which was export-processing industrialization, did not threaten the position of these families in Singapore. On the issue of its relation to labour, after independence, the state used its political dominance to tame and discipline the once powerful labour unions (Deyo 1981; Rodan 1989; Leggett 1993). The most important act was the forced incorporation of all labour unions in Singapore under the National Trade Union Congress, which is directly controlled by the state. In fact, the Secretary General of the NTUC, is a PAP member and Minister in Parliament. All the terms and conditions of union membership as well as working conditions were therefore under the control of the state after 1965. By 1967, all forms of strikes were outlawed. Confrontational labour groups could be immediately excluded from the NTUC, which would mean that its worker-members could no longer seek employment in Singapore. This ultimately made the state the main consolidator of employment on the island. Put in a class relations perspective, the state had total dominance over the working class. In addition, with employment being scarce after 1965, and with a rapidly growing population, Singapore faced a situation where there was a fairly large 'surplus army of reserve labour'. This made job insecurity very real; hence, labour groups were willing to submit to the directives of the state, all in the name of self-survival (see Pang 1990).

Despite this, the key to understanding the Singapore developmental state's comprehensiveness was probably its collaboration with multinational corporations or transnational capital (Mirza 1986; Pereira 2000). The logic behind this option was a combination of desperation and lack of alternatives on the part of the Singapore government. The East Asian developmentalist strategy of engaging domestic capital, such as the *zaibatsus* or the *chaebols*, was not possible in Singapore, as there were almost no domestic industrial capitalists at the time. The option of forming state-owned enterprises, at the time, was deemed as being too costly and slow-to-market. Also, as mentioned earlier, the country was facing a potential unemployment and over-population problem; hence, jobs had to be created immediately. Thus, export-processing industrialization, fuelled by transnational capital, was seen as the most pragmatic means for immediately generating employment and stimulating economic activity on the island (Schein 1996). From within the class relations perspective, it could be argued that the Singapore government chose to collaborate with with transnational capital rather than domestic capitalists because the former had the resources and expertise to industrialize Singapore quickly.

To encourage transnational capital to establish productive operations in Singapore, the Singapore developmental state's strategy included preparing industrial infrastructure, designing pro-business tax policies, and, most relevant to this paper, the offering of a docile working class to transnational capital (Mirza 1986; and Pereira 2000). However, the Singapore government invested heavily in 'improving' human capital, through spending on public housing, healthcare and education. Many commentators at the time felt that these social interventions were driven not by the state's humanitarian or welfarist concerns; instead, the overriding logic was that the state wanted to 'produce' a trained, healthy, contented and disciplined workforce that would be 'attractive' to transnational capital (Deyo 1989). At the same time, since the workforce was 'dependent' on the state for public housing, healthcare and education, they, as a class, did not dispute the rule of the state.

Hence, from the class relations perspective, the substitution of the domestic capitalist class by transnational capital meant that one potential counterweight against state supremacy was absent. Transnational capital is known as being totally apathetic to domestic politics, as it is only interested in capital accumulation. In other words, as long as multinational firms were making money, they really would not participate in local politics at all. Thus, in Singapore's case, the collaboration between the state and transnational capital was a mutually beneficial situation for both parties.

Although it might appear that the working class would be vulnerable and exposed to potential severe exploitation, this did not really take place in Singapore. Between 1965 and 1980, Singapore's economy averaged an annual growth of nearly 10 percent (Lim, 1988). Although it was clear that the multinational corporations benefited most from locating production in Singapore, local workers also gained from growth. While most people in Singapore went to work under harsh industrial conditions under an authoritarian state, the overall cost of living—since housing, healthcare and education was very affordable—was still manageable for most (see Perry, Kong and Yeoh, 1997). The state also took steps to ensure that gains from growth were fairly equitably distributed, mainly through additional investments in public services, and controlled wage increases. The overall improvement in the quality of life for most people increased the state's legitimacy, particularly in the sphere of economic decision-making.

In the next two decades—between 1980 and 2000—instead of scaling back, the Singapore developmental state continued its interventionist economic strategies. In 1980, it began the industrial upgrading programme, where it encouraged the multinational corporations to shift away from low value-added manufacturing towards more high technology processes. Although not immediately successful, Singapore did move up the value-added chain in the 1990s with the collaboration of multinational corporations (see McKendrick, Doner and Haggard, 2000). In the 1980s, the Singapore developmental state also began building up the so-called 'government-linked corporations' (GLCs). These were for-profit corporations that were majority owned either by the Singapore government itself, or via a state-controlled entity, such as Temasek Holdings, which was the state's investment arm. The Singapore developmental state initially fostered GLCs in 'strategic' sectors, such as the telecommunications, airline and shipbuilding sectors. However, it later expanded the number of GLCs by entering into aerospace engineering, electronics and mechanical manufacturing, and other industrial sectors (Low, 2001). As a key feature, the chairman of each GLC was often a person very closely related to the Singapore government; indeed, several chairmen or senior executives were PAP members who were also Members of Parliament. This generally allowed the Singapore developmental state to keep close control over these GLCs. During this period, the PAP began its first phase of political renewal, with Goh Chok Tong succeeding Lee Kuan Yew as Prime Minister. There was ostensibly no sea change in the class relations of society. The Singapore developmental state remained strong and powerful especially when compared to other agents in society. With the majority of the working class being employed by transnational capital or a government-linked corporation, very few individuals were willing to give up these 'premium' jobs in favour of being self-employed and autonomous entrepreneurs (i.e. start-up capitalists). As such, throughout this entire period, the domestic capitalist class never grew.

At the beginning of the 1990s, the Singapore developmental state's level of economic intervention went even deeper, as it began to invest in the Southeast Asian regional economy, in a new economic policy known as the 'regionalization' strategy (Dent 2003). The most obvious symbol of this was the 'regional industrial parks' programme. In understanding that costs in the region was much lower than in Singapore, the Singapore developmental state did not attempt to halt the hollowing out of lower value-added industrial production; instead, it assisted transnational corporations and Singaporean GLCs to relocate to specially built Singaporean-run industrial estates in selected cities across the Asia Pacific region (Perry and Yeoh, 2000; Pereira, 2004). The regionalization strategy has not been entirely successful, mainly because of factors beyond the Singapore developmental state's control (such as the onset of the Asian Financial Crisis after 1997). Still, Singapore's economic growth was not seriously affected. In addition, this opened up a new channel of employment and income for Singaporeans, as they began to work overseas, mostly for transnational corporations or Singaporean GLCs. Further, since the weaknesses of the regionalization strategy were generally attributed to external factors, the Singapore developmental state has not faced a domestic backlash, and continues to enjoy high levels of legitimacy.

Throughout these two decades, the Singapore developmental state remained in total control of the economy. From a class relations perspective, the only possible threat to the developmental state, which is the domestic capitalist class, remained absent. With regards to the working class, the state has been able to activate and reactivate the siege mentality that is required to support the rationale that a strong government within the economy is necessary for economic survival. Already enjoying very high levels of legitimacy, the Singapore developmental state's dominant position within society was never seriously threatened in the economic, political or social spheres. The most powerful economic agents within Singapore remained the multinational corporations, which were politically indifferent, and the GLCs, which were closely tied to the state.

Developmentalism Reloaded

At the beginning of the 21^{st} century, nearly 35 years after national independence and heavy state intervention in the industrial process, rather than reduce its economic role, the Singapore developmental state intensified its degree of interventionism. It introduced a new national industrial policy, known as the Biomedical Sciences Initiative (Tsui-Auch, 2004; Pereira 2006). The biotechnology sector has been identified as being one of the fastest growing and most profitable in recent times, mainly due to rapid advances in research, science and technology (see Chase-Dunn, Lara-Millan, and Niedmeyer, 2002). Not surprisingly, many governments have attempted to catch the biotechnology wave, not just for economic reasons but also for social reasons. Despite some concern over the ethical aspects of the biotechnology sector, it is seen by many governments as being a highly desirable employment-creation engine, as the human resource requirements for this sector are extremely dependant on tertiary skills and knowledge (Pownall, 2000).

The Singapore Biomedical Sciences Initiative is different from many other national biotechnology strategies. According to Da Silva, Baydoun and Bardan, most governments—especially those in the developing world—have been promoting the biotechnology sector as a response to local needs (2002: 64). These needs usually emanate from domestic issues, such as the problems in the local agricultural sector, or are designed to supplement the local economy. In the latter case, state support usually entails the fostering of domestic biotechnology firms. This is not to suggest that other developing countries reject foreign direct investment in the biotechnology sector. Indeed, many governments seek to establish joint ventures between transnational capital and domestic biotechnology firms. The aim is a 'win-win' relationship, where the foreign biotechnology companies gain access to domestic markets, while the domestic biotechnology company benefits from technology transfer and capital injections from the foreign partner.

The Singapore biotechnology strategy, however, is different from the policies of other developing countries in that there once again is no domestic biotechnology agent involved. Instead, Singapore's Biomedical Sciences Initiative encourages wholly foreign-owned biotechnology operations to set up within the country through a series of fiscal incentives, including tax breaks and even direct state subsidies. The foreign investor firms could be involved in any aspect of the biomedical sciences. This might include pharmaceutical production, as well as related activities such as biomedical clinical research and development, and biomedical devices production, research and design (http://www.biomed-singapore.com).

The Singapore developmental state has also invested huge resources in the training of personnel ready to work in the biotechnology sector. For example, between 2001 and 2004, 276 postgraduate scholars have been awarded overseas and local government scholarships to pursue doctoral programmes in various aspects of biomedical sciences (A*Star, 2005: 8). According to the director of A*Star (Agency for Science, Technoloy and Research), which is a statutory board tasked with promoting—among other activities—the biomedical initiative, each scholarship recipient is expected to cost the government about S$1m (US$0.6m) (*FDI Magazine*, 5 August 2003). More generally, the Singapore developmental state has publicly announced that it would spend at least S$1.2b in public biomedical research to support the broader initiative (Lim and Gregory 2004: 353) However, while much of the investments made in education and training are for long term benefits, the Singapore developmental state has amended its labour and immigration laws to encourage 'foreign talent', especially in the biotechnology sector, to come to work or research. Indeed, almost 30 percent of A*Star's biomedical scholarships went to non-Singaporeans (A*Star, press release, 21 July 2004).

At the same time, the Singapore developmental state has invested heavily in two 'mega infrastructure projects,' which are the Tuas Biomedical Park and Biopolis. The Tuas Biomedical Park, developed and managed by the Jurong Town Corporation (a Singapore statutory board), is a 183 ha site at the westernmost tip of Singapore dedicated to support the growth of the biomedical industry[6]. Costing around S$550m to develop, it is designed for 'bulk active pharmaceutical and biopharmaceutical manufacturers, with special provisions for unique power, water and sewer requirements.' (www.jtc.gov.sg/Products/ industry+clusters/tuas+biomedical+park.asp) Biopolis, developed by Ascendas—a for-profit Singapore government-linked corporation—is designed to be a

> '…world-class biomedical sciences research and development (R&D) hub in Asia. This campus is dedicated to providing space for biomedical R&D activities and it is an environment that fosters a collaborative culture among the private and public research community. Biopolis Phase 1 is a 185,000 sqm (2.0 million sq ft) biomedical complex of 7 buildings slated for completion from June 2003 to March 2004. Several key government agencies, publicly-funded research institutes and R&D labs of

> pharmaceutical and biotech companies will be located here.' (http://www.one-north.com/pages/lifeXchange/bio_intro.asp)

Biopolis Phase 1 cost around S$500m to develop (Singapore Economic Development Board, press release, 1 December 2003). It is hoped that eventually, Biopolis will be the location where about 1500 scientists are involved in biomedical research and development.

Although there is provision for the support and development of domestic biotechnopreneurial companies by the state[7], it is clear that the main targets, at least in the initial phase of the biomedical initiative, are the 'big pharma,' which are the very large transnational biotechnology or pharmaceutical corporations[8]. One key strategy was the formulation of a very strict 'intellectual property' (IP) regime, as well as a very explicitly clear 'bioethnics code'. Both of these were drawn up with foreign investors in mind. The IP regime is considered to be important because large transnational biotechnology corporations do not want to face a situation where their products might be 'pirated,' or face competition from 'generic drugs.' For the bioethics issues, the Singapore developmental state appointed a top-level committee[9] to draft a comprehensive set of guidelines and to make recommendations for changes to the law (where necessary) on various aspects such as stem cell, human tissue, and genetic research (http://www.bioethics-singapore.org/). To the Singapore developmental state, having a clear and enforceable set of laws on biomedical research was essential to improve the country's competitiveness, both as a pharmaceutical production hub as well as a research and development centre. According to some scientists interviewed by the *Wall Street Journal Europe*, scientists (and biotechnology companies) have chosen to come to work in Singapore, not because there is a weak legislation and poor bioethics standards, but instead because the regime is strict and bioethics are clearly stated, so that scientists (and companies) know exactly where they can or cannot go with their research (*Wall Street Journal Europe*, 26 January 2005).

The initial outcome of the biotechnology drive is that nearly all the 'big names' in the biotechnology sector have set up massive manufacturing as well as research and development plants in Singapore. For the year 2004, it was reported that the sector grew 33 percent to S$15.8b; value-added grew 48 percent to S$10.1b, and employment in the sector grew 6.7 percent to 9,225 (Singapore Economic Development Board, press release, 31 January 2005). Within the sector, pharmaceutical production contributed S$13.9b, which accounted for 88 percent of the sector (ibid.). In the same report, the Singapore Economic Development Board said that in 2004, the biomedical sector attracted S$850m in manufacturing asset investments, and S$110m in total business spending; in addition, it forecasted that more than 1,900 new jobs would be created when the projects were fully implemented (ibid.). Singapore’s Deputy Prime Minister, Tony Tan, announced that the target for Singapore’s biomedical sciences sector was S$25b in manufacturing output and an employment of 15,000 by 2015 (ibid.). Although it is true that one ‘bumper crop’ year for Singapore’s biomedical initiatives does not immediately suggest that the developmental state’s strategies and interventions have succeeded, they have at least laid the foundation, not just for potential economic growth but also for shaping the economy and society for the future.

The Singapore government’s Biomedical Sciences Initiative is ‘classic’ state developmentalism. The developmental state has identified an economic niche in the global economy and has intervened to transform domestic arrangements (economic, political and social) to pursue this niche. The Singapore developmental state has the capacity and capability to take advantage of the global biotechnology sector, as it is not a ‘cheap’ or easy sector to develop, particularly with the necessary investments needed in infrastructure and training. As a related issue, the Singapore developmental state is probably aware that the island enjoys a short-term advantage over potential competitors, where it can offer investors a conducive production environment without domestic biotechnology competitors. Thus, in the short term, there is little doubt that Singapore will become a biomedical manufacturing hub for the big pharma. If this translates into economic growth for Singapore, and if Singaporeans get to share in this growth, then it is highly likely that the Singapore developmental state’s credibility will remain high.

Yet, the focus of this paper is not to predict whether Singapore developmental state’s interventions in the biotechnology sector would bring about growth; instead, it seeks to explain why the Singapore developmental state never devolved (as expected) and could actually launch the biomedical initiative. After nearly 40 years of consistent growth and development, the Singapore developmental state still retains dominance in the political and economic sphere. There are several inter-related explanations for this situation, but the most important reason is that the main agent which could challenge the supremacy of the state, the domestic capitalist class, continues to be absent. The state has been able to retain control over the working class throughout this period. This is because it still enjoys relatively high levels of public support, due mainly to the legitimacy it has gained from ‘delivering growth’ in the previous industrial policies. Thus, it could be argued that the people would ‘trust’ the state’s biotechnology policy, even though most people will not be participating in the policy.

During the new millennium, the PAP staged yet another act of self-renewal, with Goh Chok Tong handing control to Lee Hsien Loong, the son of Lee Kuan Yew. As with the first occasion, there was hardly any change in the class relations in Singapore. The Singapore developmental state remains strong and powerful. Although there have been a few opposition members of parliament (as such denying the PAP the ability to create an elected one-party government), no one single opposition party even comes close to deposing the PAP (Mauzy and Milne 2000). There are many reasons for the weakness of opposition parties in Singapore; however, one prevalent view is that Singaporeans vote primarily on economic rather than political or social issues (see Ho 2005). Given the state's high level of credibility on economic matters, the electoral outcome therefore is not surprising.

Conclusion

The literature on the developmental states suggests that the archetypal developmental state's dominance over the other classes is unlikely to remain 'comprehensive' over the long term. From a theoretical perspective, the developmental state initially emerges because it seizes the initiative from within a chaotic or problematic situation, especially when other key social agents are less organized or powerful. The developmental state then consolidates its position by utilizing its power and delivering growth in society. In this manner, it not only builds up its legitimacy and credibility, but also domestic private enterprises. However, once the economy is developed, the developmental state's dominance is usually eroded, as domestic capitalists would have grown and developed into powerful social agents, particularly in the economic sphere.

Against this understanding, this paper argues that the Singapore developmental state has remained dominant because it has not allowed the growth of the domestic capitalist class. Instead, the state has continued to 'collaborate' with transnational capital and Singaporean government-linked corporations in the large-scale national economic projects. More importantly, the developmental state has been mostly able to continuously deliver growth, ensuring that its level of legitimacy in the eyes of the working class remains high.

In this sense, as of 2007, the Singapore developmental state has not faced the economic, political and social challenges that the South Korean and Taiwanese developmental states have. Due to careful management and self-renewal, the Singapore developmental state has remained dominant, while other domestic social agents have remained comparatively weak. This does not imply that the Singapore developmental state will be dominant forever. It will devolve if and when other social agents become more economically, politically and socially powerful. However, up to the period of the biotechnology policy, this has not taken place.

The case of the enduring Singapore developmental state offers a new insight into the sociology of developmental states, suggesting that developmental states would rather not devolve, if given 'a choice.' Viewed from another angle, the devolution of the archetypal developmental states of Japan, South Korea and Taiwan was probably not 'voluntary;' instead, they were either pressured by the rest of society to decrease their presence in the economy, or they were simply marginalized by the rise of other social agents. The Singapore case shows that 'state developmentalism' is not necessarily short-term. Although it is a tautology to say that the Singapore developmental state remains dominant because it has been dominant in society, this is exactly how and why there will be a comprehensive developmental state in Singapore for the foreseeable future. However, if and when the local conditions change, then other changes—which might include the devolution of the developmental state—might indeed follow.

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[1] This view is drawn from Block's categorization of 'state types:' capitalist, welfarist, developmentalist, and socialist. (Block 1994: 693) The welfarist society is one where the state and labour collaborate against capital, while the socialist society is one where the state replaces capital altogether.

[2] *Zaibatsus* are large multi-industry holding companies or conglomerates, commonly found in Japan.

[3] *Chaebols* are very similar to *zaibatsus,* in that they are also multi-industry holding companies or conglolerates, found in South Korea.

[4] However, of the many, only two have actually examined the developmental process from a class relations perspective, Deyo (1981) and Rodan (1989).

[5] There was almost no opposition against the PAP because (a) the pro-socialist parties were imprisoned under the Internal Security Act, (b) several individuals and parties boycotted the elections, and (c) those that ran against the PAP were generally of "inferior" quality (Turnbull 1989).

[6] The JTC website notes that there is a 188 ha reserved site known as the Tuas View Extension, which will form Singapore's second biomedical park, as and when the demand comes 'on stream.' (http:// www.jtc.gov.sg/Products/ industry+clusters/tuas+biomedical+park.asp)

[7] For example, the Singapore government has announced that domestic biomedical firms can apply to a fund of around S$50m (*Singapore Straits Times* 11 January 2005).

[8] This phrase is used by many within the biotechnology sector. See for instance the headline in *Business Week*, 'Little Island, Big Pharma,' 17 February 2003.

[9] The Bioethics Advisory Council is a broad organization that encompasses several subcommittees. Members of each subcommittee include legal experts, biotechnology industry personnel, scientific and academic community members, as well as religious leaders.