

Which Way Will the Dragon Turn? Three Scenarios for Design in China Over the Next Half-Century

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This paper was first given as a talk to the Future of Industrial Design in China conference in Beijing, China in May 1995. Given the long-term prognosis it tried to take on developments in China its formulations may be less archaic than its date implies.

What is the global context for design today?

And how does it bear on design in China?

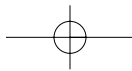
The answer is both simple and complex. It is simple in that China currently is being transformed by the global context for design today—that is by the modernizing forces of late capitalism. But as a process it is complex—much more so than the processes of modernization that occurred in the West in the nineteenth century, or even in Russia and Japan earlier this century. It also is different from the “second wave” of demand-led modernization, which transformed the world after 1945, though it shares some of its attributes. This third—and final?—wave of modernization dates from the late 1970s. It has, as its economic engine, three developments of enormous significance which come together in a fourth over-riding condition.

The first is technological, and implicit today in the rise of industries and services based on, or utilizing, the colossal increases in the availability of information processing and communications made possible by computerization. Yet despite its impact, electronic communication is not as significant for production as it is for the ways in which communications technologies facilitate the efficiency of existing global networks of production. Cellular phones, e-mail, and the like—and Hong Kong already is at the global cutting-edge of cell-phone use—make possible extremely efficient transfers of knowledge virtually without time-delay. It is this efficiency and real-time effectiveness of communications that facilitates the enormous global distribution of elements of the total production process. China, most dramatically, is becoming the beneficiary of production which may take place in five or six centers around the globe: with market research in one place, design in a second, production in a third, and distribution and retailing in a fourth.

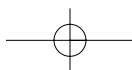
The second development is particularly important for China. Let’s call it the dis-embedding of industrial production from geographically determined centers. The proposition which now rules the location of industry worldwide can easily be stated: *liberated by a combination of increased availability and ease of flow of goods, information and wealth from geography and from a need to locate production*

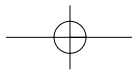
within the core areas of consumption, production now locates itself globally almost entirely with respect to cost. We now are seeing the wholesale movement of production out of the older industrial nations (Britain, Germany, and the United States) into low-cost centers and above all China, with the Pearl River delta as the epicenter. All this is made possible by the efficiency of global shipping and transportation networks, the ease of the flow of commercial information and the fluidity and efficiency of capital markets. For China, for the last fifteen years Hong Kong has provided the gateway through which these three indispensable elements can be accessed. What China gives to global industry in return are not consumers—the current Western fantasy of 1.2 Chinese billion consumers will go unrealized for many years—but low costs, which for global manufacturing simply means cheap labor. But what is astonishing about the period we are entering is not a move of manufacturing to low-cost centers (something we can trace back to the first wave of genuinely international production around 1900-1910), but its scale. *World* production (especially in certain areas of consumer goods) is moving to *specialist* low-cost centers, as evidenced by Hong Kong which, for example, manufactures a significant proportion of plastic toys and watches for the world. Over the next decade, there seems nothing to stop this movement from intensifying. What still is perhaps difficult to comprehend for many in both China and the West is the scale of transformation involved. Statistics don't tell the full story, but in traveling from Hong Kong to Guangzhou, one suddenly sees what is occurring. (Much as the shock for travelers seeing industry in Manchester or Birmingham in say, 1844, brought home, for Engels and others, the radical implications of the first industrial revolution). Thus, it is not as a center of consumption that China will be important during the next twenty-five years but as the new world center of production. Indeed, from the perspective of say, 2020, it may come to seem as if the industrialization that occurred in Hong Kong between 1950 and 1980, in which so many of the principles of highly adaptable, low-cost but highly intelligent production that now characterizes production in the Pearl River delta were worked out, was nothing more than the prelude to the truly epochal creation of coastal China as the twenty-first century's "Workshop of the World." But whatever happens, it already is clear that the developments in China are of a scale that indicates that we are at the beginning of a permanent transformation in the global location of manufacturing. By 2020, in world terms, manufacturing will be essentially an Asian and, moreover, a Chinese enterprise.

A third and important qualifying condition needs to be mentioned—one that is a variant on the issues I have just noted, but which is of special relevance to a conference on design. Already, economists in Hong Kong are speaking of a local transition from "Made in Hong Kong," to "Made by Hong Kong"—meaning that



Hong Kong capital is relocating itself to producing within the Pearl River delta, but the capital and the “front-end” office locations, everything from senior management through marketing and finance—and design—still is located in Hong Kong. Transpose this globally, and what we see already is implicit in the points made, namely that the division of labor, the deepest principle perhaps of modern production, with Adam Smith as its central theorist, now operates in a geographic sense, separating not only worker from designer within the factory, but locating them on different continents. There are two very serious issues here, that of control, and that of value. For industrial designers, what perhaps is more serious is an underlying condition that, in this economy, manufacturing is of no account. This may seem like a bizarre statement. Nonetheless, it essentially is true. The first (British)—and even the second (German-U.S.)—industrial revolutions were based on production. By the end of World War I, the problems of mass-production essentially were solved, as Henry Ford proved so clearly. The massive mobilization and total organization of production that was developed in World War II took production systems to the point where, in 1945, the economic problem of the future was not how to produce, but how to manage demand. The global economy we have been living in essentially is one dominated by the answers given to this problem. From the perspective of the United States and, to a lesser extent, Western Europe, this is well understood. Russia, tragically for the Soviet economy, never understood it; the failure to grasp the simple point that, after 1945, all economies, socialist as well as capitalist, proceed as if the problem of production is overcome, perhaps was the most pressing reason why the Soviet economy ultimately failed. China, for different reasons, above all its structural under-development and the almost complete destruction of production facilities, could not easily learn this lesson. Today, economic forces are compelling adherence to it. In the modern economy, while the problems of production must be solved, the crucial structural problem is demand-management, one of creating demand for the products. Demand and market share must be won via marketing, advertising, and design, and by managing the total product cycle, not just the manufacturing moment. It would be foolish to discount the role that economies of production have in this process, but today that role is essentially negative—it functions largely to reduce costs. Manufacturing cannot, in itself, add value. In that sense, its role diminishes relative to other components of the product-cycle. Today, the cost of producing goods is becoming almost minimal compared to the cost of their development. CDs are a perfect example of how production is the least significant and least profitable aspect of the process. In software, the case is even more apparent. Production is nothing, and development is everything. It’s no wonder then that we can speak of a long-term economic trend in which manufactur-

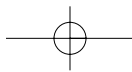


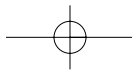


ing becomes a smaller and smaller component of the total world economy, just as the production component of manufacturing is becoming less and less significant as a proportion of the total cost of goods.

What I am saying here might appear to contradict what I said a moment ago about the epochal significance of the huge increases in manufacturing that we can predict will occur in China in the coming decades. But there is no contradiction. The economic fact is that now that the problems of production essentially are solved, there are almost no excess profits to be made from producing per se. This is not to say that individual companies will not find short-term ways of making a good deal of money. They will. The Hong Kong economy is proof of that, as are the new millionaires of the Pearl River delta. But this underlying structure means that production in China will be characterized by ruthless competition over the next few decades. The purchasing companies (i.e., the companies that commission or buy production to ship and market overseas, including the Hong Kong, Taiwanese, Japanese, and Western companies now investing in production facilities in the delta and in coastal China) will work to drive down profit margins to the point where profit in manufacturing alone will be difficult to achieve. If China is not to be reduced simply to being a low-cost factory for the Western economies (and I use this term literally, as well as a play on the original connotation of the term regarding the Pearl River factories of the China trading companies of the late eighteenth and nineteenth centuries) China will have to develop her own capability to manage and create demand. Ultimately, this will be a key role for design in China.

This last point leads directly into the fourth over-riding condition that today determines global production, and therefore what is happening in China. The form of modernization in China now, in 1995, is being experienced with a force similar to what Britain experienced in the early decades of the nineteenth century, it is *total*. It is hard to underestimate the force of this word, or its difference from earlier waves of modernization. To make sense of it, we need an analogy. Historians of the twentieth century, looking at the two world wars, referred to "total war." The term expresses the sense that the wars were waged with unprecedented totality. The wars consumed everything. On the other side, "total war" also meant the idea of total mobilization for war, the complete organization of production and consumption for war ends (something that Britain and then the U.S. became expert at much sooner than Nazi Germany). As in so many other areas, the world wars can be said to have anticipated postwar developments. Today, China is learning rapidly in a context of total modernization. "Total" here means all encompassing. Not only is it a *capitalist* modernization which currently is engulfing and transforming the last, and greatest, non-capitalist enclave left on earth, it also is a totalizing modernity in that

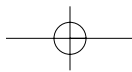


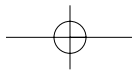


what is sweeping through China today is a process which transforms and *colonizes*—and the term, though offensive, is accurate. Culture, society, and the forces of production, consumption, and reproduction: today these are nothing more, in China as elsewhere, than subjects of the interests of capital. The process is “totalizing” because nothing escapes the net of this modernization process. If China, using its huge population as bait, has opened itself up to the world, the world in turn has entered China determined to remake China in its image. The situation is a familiar one between countries and economies in the core of the world production and those, like China today, still on the periphery (however much China might aspire to, and eventually will develop, core status within the next quarter century or earlier.)

The shape of the struggle that will occur here already is apparent, and design will be in its center. On the one hand is the fact that, essentially and not only incidentally, the modernization process sweeping China is capitalist to its core (i.e., there is nothing outside the market.) On the other there is the idea to preserve something within this process that is distinctly Chinese and even, perhaps, though I am less sanguine about this, something distinctly Marxist. That is, something which belongs, for good or for ill, to the system of state organization that has given China in the last half-century a unique culture, which is not entirely or wholly based on the market and which, for all its limitations and crises, also speaks of cultural and human values and aspirations beyond mere market forces. This struggle is manifestly unequal. To be sure, there will be a cultural veneer applied, at least politically, to what develops. Nationalism alone requires such figleaves. China is no more mature than any other state in being unable to dispense with such figures. Political forces, too, will ensure that the state survives. What is of more interest for designers is the question of the human subject. Capitalism is superb at allying subjective desire with material consumption delivered through the market. The totalizing nature of the wave of capitalist modernization that we are now living through has much to do with the shift of the core capitalist economies to consumption as the engine of “perpetual” economic growth. The realization post-1945 (though anticipated in the U.S. in the 1930s) that managing and sustaining “mass demand” for consumer goods was the only basis on which mature capitalist accumulation could be sustained has morphed today into a frenzied acceleration of credit-based material consumption, based on the decline in the real price of desirable commodities (a fall made possible, in part at least in the last decade, by the opening of China to low-wage, low-cost production).

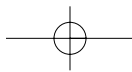
From a historical perspective, there is a very serious question as to how long this kind of economy can be sustained. Since the late-1960s, the Western economies have been shaken by a series of recessions, from the 1974+ oil-price hike to the downturns of the

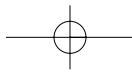




early 1980s and early 1990s. It seems today as if we are in the middle of a business-investment led and technologically-inspired boom. But underlying this boom is consumption—fueled by a massive expansion of the availability of individual credit and by the relentless workings of capitalist culture which today permits nothing but consumption to be the *raison d'être* of individual life. However, the longer-term viability of this mode of consumption, premised on the reduction in the real cost of goods for the consumer, is not necessarily guaranteed. While there is no doubt that the greater availability of consumer goods has had a real, and fundamentally positive, effect on lives, especially in easing domestic labor, there is a price to be paid. Mass consumption increasingly means the consumption not just of goods but also of values. What is consumed, or ingested, with the purchase of consumer goods is not just the material ease that things can bring (I recall the ease the clothes washer and cooking range brought for my grandmother.) but also the entire system of values of the market. Increasingly, the goods that are ciphers of this new economy decline in quality as well as in price. The social question to be faced, if China can face the potential of market-driven wealth dealing with social questions, is how can improvements in the material standard of living be organized without recourse to the worst implications of capitalist consumerism? To put it another way, can the giddy euphoria of mass-consumption provide a sustainable basis of an enduring culture?

These questions are crucial because they get to the heart of the tension between the values and needs of the market, and those of the subject. The designer is in a peculiar position in terms of this tension. He or she works, essentially as a servant of both the market and the consumer. Products only succeed if a resonance is established between the features, capabilities, and characteristics of the product and the user. Products that violate this law will fail over time. Part of the designers' role, therefore, is to be a double agent. He or she exists in a constant state of tension—working for the market but, in doing so, also as an advocate for users. A product must find a place within the market economy. This tension runs throughout the market economy, but perhaps is most apparent in design. That is not surprising because, in this mode of capitalism, design is the peculiar nexus between the subject (made over as the consumer) and the products whose consumption sustains the global economy. The “total” modernity that I spoke of earlier has design as one its key moments. Design is the interface—the word is exactly appropriate—between the product and the user, and therefore between capital and the user. And it does not operate in a vacuum. Within the total cycle of production and in relation to the technological systems that underpin the technical, logistical, and financial, not to mention political, components of capitalism, it may still appear a small moment. This is its tradition role, as seen in economic theory,



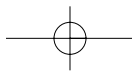


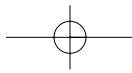
by technologists and in much business practice. Yet the shibboleth of design's economic marginality, which has devout adherents in Hong Kong I can tell you, is belied by the underlying long-term economic injunction that insists that pure price competition will eventually be self-defeating. There is a significant shift when the economic perspective of production changes from the attempt to win marginal profit from cost-control (as in the Pearl River delta today) to the crucial question of how value is to be added and how the profits available from design improvements can be realized. The centrality of design as the agent of purely technological innovation, which gives form that allows that technology to have a subjectively resonant and useful form, then becomes apparent.

Where does this overview leave us, for design, in China today?

I've tried to place what I understand is happening in China, particularly in the Pearl River delta, in the context of the trajectory of global capitalism. China now is an actor on the world stage. That stage is different today. It is in the process of realignment, especially economically, because of China's changing place in it. But the determinants of how actors come onto that stage are capitalist; all others are reduced to peripheral status, if they exist at all. In saying they are capitalist means they also are Western. Crudely speaking, China currently is an "outsource" for the West. This realization, as I've already suggested, cuts two ways, and has two implications for design.

In the first instance, it would suggest, that the prognosis for design in China, particularly industrial design, is not good, or at least not in the short term. In industrialization dominated by export-oriented production, essentially determined from the outside, there is very little space for the original and innovative reconfiguration or redefinition of products. Product definitions (for example the concept of what a product is, the understanding of the category that it belongs to, and the pattern of how it is configured) are, at the moment, given to and not determined by, China. Nothing exemplifies this more than the fact that a number of the major Hong Kong fashion retail companies do not have their design base in the territory, but in New York. Design is linked to markets and to product conception driven through on-site market analysis. This has strong implications for design. The fact that production in China still is essentially determined from without is to have to come to terms with the fact that, at the moment, mature product innovation and development cannot exist, or at least not on any scale. Product design in the Pearl River delta, for example, is largely a matter of low-value adaptation of existing product types for market-niche opportunities. In this context, product design follows, it does not invent. The design model is not innovation but the copy, a strategy pioneered long ago by Hong Kong's nascent manufacturers and, before them, by the eighteenth century traders of the Pearl River.



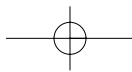


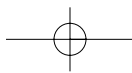
There follows the cynical tenet, that in Hong Kong, “R&D” means not research and development but “replication and duplication.” The negative implications for design epitomized by this model are obvious—the copy economy always will tend to trivialize, cheapen and operationalize the role of the designer.

But is this situation all bad? Certainly it indicates the objective, structural, difficulty of establishing a mature design profession in China today, if by mature profession we think of something on the model of American or western European practice. But is this really what is required? Is there perhaps within the emerging situation, especially in the longer term, the seedbed of a different model of design altogether?

The Western model of the industrial design profession arose from specific historical circumstances, for example, it arose in relation to, and as a part of, an economy based on demand management, with industrial design charged with the responsibility of ensuring product desirability and with building into products a modicum (but only a modicum) of social responsibility. If something of this model still remains in some European, Japanese, and American instances, the change in economic conditions manifested over the last decade or so has made it an increasingly historical, and even a discredited, model. Its key problem is its assumption of autonomy. “Classic” industrial design, that is to say in the forms the profession took after 1945, was ambiguous about its role in business. On the one hand, product design cannot be separated from industry. On the other, the designer as an individual and the design profession itself saw themselves, to some extent rightly so, as advocates within the product development process of noncommercial values. This could take the form of a defense of principle (the ideology of functionalism, or of “pure design values”), of aesthetics, or of the user. The problem here was not the defense or the advocacy (within the development process it is hard to see who else might stand up for the user or for aesthetics), but that the relative autonomy that the profession worked within meant that designers neither became fully involved in the business of product development (economics, strategic management and product planning rarely being part of their training) nor became fully autonomous. When compared with architecture, for example, and except at certain moments (most obviously, Italy from the 1960s through 1980s), industrial design has shown an absence of critical judgment and exploration. Rejecting theory and criticism, eschewing the challenge to articulate the depth of what it advocated and dealt with, and fired up by an equal refusal to come to terms with the profession’s roles in the contemporary capitalist commodity economy, industrial design took refuge in a weak objectivism that simply meant a closing of the mind to the critical issues involved both in design’s economic functioning and its complex role with things and persons.

It is this position of “relative autonomy” of the design

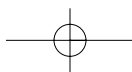


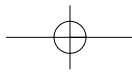


profession vis-à-vis either business or subjects that is breaking down today. In practice, product design in the developed and developing economies now tends to take one of two distinct forms. On the one hand is what we can call the Hong Kong model. Here, design is given low priority and status. The possibility of the designers' contribution to the early stages of the product development process is scarcely understood. Effort goes instead on short-term market response and on the pragmatic organization of production processes for manufacture at the lowest possible cost. In this process, at best design is either a form of packaging, a cheap means of adding identity or additional-value (the "add-a-feature" strategy of Hong Kong manufacturers) to a product, or it is an unimportant stage in the process of making a tooling die. At worst, for instance in the Hong Kong jewelry industry, there is simply no sense of what design can offer. This is the low-end model of design-in-business, one which is not a model sustainable in a mature economy. It is the model dominant in China today, i.e., design as a peripheral moment in the production of goods whose essential configuration is determined elsewhere.

The other is what I'll call the design-managed model. By that I mean the situation, evident in a number of core-nation leading companies, where the product development process is rethought and replanned, so that the process of designing and the product itself (and the axioms which rule its determination) are, at best, comprehensively redefined, reconfigured, and often wholly rethought. The products made under this system are, needless to say, not competing only on grounds of price, but rather in terms of product quality and innovation. Through focusing on non-price issues, particularly human factors, and on cultural and psychological factors just as much as ergonomic ones, these companies seek to offer new levels of resonance between product and user. BMW is a beautiful example in car design. It is a process that creates world-class products—one scarcely found in China today. It is almost completely absent also in Hong Kong. But Japan, and to some degree South Korea, have sophisticated corporate versions of this process (one thinks of Samsung for example).

I stress these two models because they offer radically different possibilities as to what design is allowed to contribute, and because it seems, at least at first sight, that industrial designers in China are still denying the existence of both of these models. Judging from what is exhibited in the hall next door for example, we see what is almost a nostalgia for a European design world which already is passing away (to be replaced not only by the processes I spoke of above, but by a whole host of other types of design relationships and design developments ranging from small-batch, designer-maker shops to software design). It strikes me, as I think it would strike most outside observers, that the attempt to create a design profession on the basis of a now historic, largely





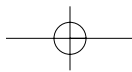
mythical and essentially problematic model of industrial design is doomed to failure. By the time such a profession establishes itself outside of, as well as inside of, the universities it would be anachronistic in global terms. Indeed far from looking forward such a model looks backward. It certainly cannot come to grips with either the new commercial or the existing and emerging social demands. Such a comment sounds hard. It is made because it is clear that this is not the only possibility for a design profession in China (although it must be said that the possible alternatives are less visible and less immediately identifiable).

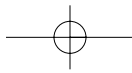
Let's look in more detail at these demands, and how understanding them might help in forging a sense of a globally viable strategy for design in China. To end on a somewhat happier note I will focus on what I'll call three possible "optimistic" scenarios for design in China in the coming decades.

What Design in China Might Be: Three Scenarios for Design in China in the Next Fifty Years.

Scenario 1: Design becomes strategic, a key ingredient in China's transformation from being a low-cost manufacturing unit to being the global center of new product innovation.

In speaking of design in relation to current tendencies within the global economy, I have said that one tendency—epitomized in what I've called "the Hong Kong model"—is to trivialize and operationalize the role of the designer. It follows that one way of refiguring the possibilities for design is to redefine the designer's role so that it shifts from an essentially operational and essentially secondary role (where the designer always is a servant of the client) to a tactical or strategic role in which the designer is recognized as a key player in the process of conceiving, realizing, and innovating new products. At best, the designer is someone who articulates new visions of life through developing, innovating and modeling new products—products which indicate or enable new ways of living. I'll speak in a minute about the social and ecological implications of this, but I remain first with the economic. I've indicated above that, even if we assume another ten to fifteen years of this almost unparalleled transfer of global manufacturing capability to China, it may not be sufficient to ensure the country's future as an industrial power. The economic subtext of my first scenario is the urgent need for China to stabilize, that is to make permanent its industrial renaissance. In a world in which production flows to the site of the most poorly paid labor force (which is what industrial capital-flow investment is all about) there is a constant danger of industrial production "disappearing" from China as fast as it recently has arrived. If you need convincing, go to Shenzhen where there already can be seen sites of abandoned industrial enterprises: from

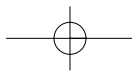


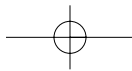


industrialization to de-industrialization in little more than a decade! In any case, if China is not going to keep its working population on the minimum possible wage, with all the political tensions that are at risk, especially as the social fabric of society is ripped away in the process of “modernization,” the quality of industrial production, in terms of value added, must be increased quite significantly. In other words, China must, in U.S. terms, “get its act together” and begin to produce world-class products. This alone suggests the necessity for strategic design. One thing is clear—in a world with a surfeit of products and product designs, imitations of what-exists will not provide the basis for an indigenous high-value export industry. What worked for Japan in the context of the 1950s will not necessarily work for China in the changed context of the next century.

But on what basis might such products be made? Three answers immediately suggest themselves. The first was given in the *China Daily* yesterday. That is, the solution of science-technology and the development of new products as an outgrowth of scientific research—products which would of course require design as the agent for the translation of the technological possibility into humanly usable and desirable products. The second, is the solution of origination: the production of objects rethought as to their identities and axiomatic structure. The third solution, which is a variant of the second, is origination in product concepts and operation gained by drawing on one’s own resources, i.e., developing new product languages out of the resources offered within the traditions of Chinese products and Chinese understandings of the psychology of the relations between persons and things. None of these strategies are mutually exclusive. All may be combined in various forms. Each is a solution of research and analysis as much as of form-making. Put another way, what they have in common is that they presuppose a confident and radical reassessment of “what is.” Most crucially of all, each draws on a palpable resource internally and integrally available in China, and each, for better or for worse, accepts the risk of redefining existing product identities.

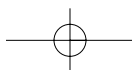
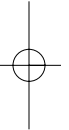
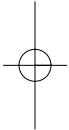
Perhaps it is difficult from a Chinese perspective to realize just what little risk the latter involves. Product identities as formulated in the advanced economies are, quite frankly, increasingly exhausted. The magazines hide a brutal truth under their cosmetic photography. Western industrial design, itself massively limited by its own limitations as well as by its dependence on corporate structures often sclerotic in attitude to product development, has for thirty years recycled essentially the same solutions to product problems. The banality of what is offered to the global consumer ought to be an embarrassment to every designer and capitalist. But the situation, ghastly as it often is (are contemporary products really the best we can do after more than two centuries of industrialization?) contains a real, economic, possibility. Globally, “design rents” potentially are now to be had by reworking product identity such that

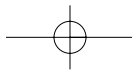




one essentially reinvents the product. What you have in China today are an extraordinary series of resources—scientific, intellectual, cultural, and psychological—which could be used to fuel such an attempt. (These resources of course would include the increasing confidence of the Chinese people themselves). Such work is not easy: but it may permit what, at the moment, cannot occur, namely the invention and development of an authentically modern Chinese culture (something of which if it is left to capitalist market forces will be trivialized out of existence).

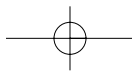
What are the possibilities of such a scenario being realized, and what would it look like? In the short term, and by that I mean the next decade, it is difficult to see sufficient space for this scenario to develop, except perhaps in small ways within universities as a research strategy. If the present rate of inflow of manufacturing investment continues, it is likely that all it will be is the focus of all business (and government) attention. Simply managing this transition—and managing it to produce profit—is an enormous task. Changing tack is made because the companies that either directly invest in new manufacturing capability or which underwrite local investment are not interested in seeing local product innovation. The economic, for this read “marketing,” centers of the world remain the U.S., Western Europe, and Japan. Closeness to these markets will keep product conceptualization firmly in the core countries. But two developments could change this situation. The first is the increasing pressure on profits, which is likely to be inexorable. As capacity increases, so does the ability of the buyer to negotiate ever lower prices. As this pressure mounts, the psychological and economic disincentive to risk product origination may fall away. Let us speculate that this may begin to happen between 2005–2015, perhaps sooner if there is an economic slump. The second and perhaps slightly longer-term possibility is that cultural changes in the West, and increasing sophistication among business in China, especially in marketing and user research will, enable the beginning of a cultural reconceptualization of a number of major product types. I was amazed after arriving in Hong Kong to find almost half a dozen branches of the Swedish home furnishing firm IKEA. If IKEA can sell remarkably successfully in Hong Kong, what are the chances, twenty to thirty years from now, of a Chinese company selling modern furnishings in Stockholm? Impossible? Why?—given the astonishing history of Chinese furniture (remarkably suited to modern adaptation) and given what we might predict as the exhaustion of the Western model.

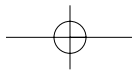




Scenario 2: Design in China takes on a crucial role in helping to alleviate and then restructure the ecological crises that will strike within the next twenty-five to fifty years. Design, as the design of “sustainable cultural future’s” becomes a key element in restructuring Chinese society after the production-led excesses of the period 1980–2020.

This scenario is so long term that it may seem to most of you in this hall as wholly irrelevant to the issues of today. It is not. And in their heart of hearts, I doubt if anyone here really thinks it is. There is no doubt that China will be the first major nation to have to deal with system-threatening ecological collapse. If economic development continues to be managed as irresponsibly as at the moment, then the resource implications and the problems of dealing with second, third, and fourth-order consequences of development will set in train both ecological disasters on a scale not yet imagined in the world, and consequent social, economic, and then political crises. Ecological design is, in this case, an essential, not an optional scenario for China in the next thirty years. The logic of this scenario is based on the manner in which global tendencies towards unsustainable crises (particularly global warming with all its consequences for the changes in weather patterns, but also the impending crisis of usable water supplies—and Beijing is hugely vulnerable here) will be intensified by the pace, scale, and irresponsibility of development. The abandonment of planning, plus a culture of short-termism with respect to the managing of both natural and artificial resources, almost certainly will combine with worsening global conditions to precipitate both small-and large-scale disasters. (Projects predicated on an almost nostalgic respect for technological—projects on the scale of the Stalinist fantasies of the 1950s and ‘60s can now, unfortunately, be realized as earlier ones could not: I refer here, above all, to the Three Gorges project.) Where “sustainable design” comes in as a strategy is as the process that begins to anticipate these issues and to plan for them. This is not “product design” in any of the usual senses of the term. We are speaking of something much more extensive; of a mixture of design, economics, and social science (interacting with environmental management) to produce the conditions for sustainable economic development in a context of ecological and perhaps consequent political, social, and economic crises. While this is not product design in the usual sense, it is not *not* product design in that the ability to give form to products—in this case sustainable form—becomes key. What that leaves is to be investigated. But it is hard to think of a more important long-term project for China than to begin research in these fields, research which uses design, with its ability to give evident form to things that did not possess form, as a central moment of its work. So, in this scenario, design becomes a central research activity, exploring and anticipating future possibilities (and in the process drawing on the millennia of careful Chinese thought about the character of man-nature relations).

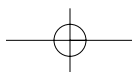


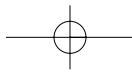


How likely is this scenario to occur? Not at all likely, I am tempted to say, until it is too late. Yet it is almost impossible to imagine that China will not encounter very severe “ecological” crises in the coming decades, and I mean ecological here not just in terms of nature, but regarding the fit of development and environment in the widest sense. The economic implications of these problems could be vast, as could the social and political ramifications. So let us predict that major problems will manifest themselves globally, as well as in China, by, say 2015, and perhaps much earlier. These will begin to require a new kind of scientific, technological, and planning effort in which design is centrally involved. It follows that a student who graduates today as an industrial designer will be facing these problems at, say, age forty-five...the peak of his or her career. How well trained will he or she be to face these problems? The answer, here just as in the West, is not at all. One of the terrible consequences of late capitalism is that it persuades us—to a degree impels us—to live in a perpetual present, excising both historical and futurological understanding. The present today means “the economic modernization of China”—a good and laudable goal given the material impoverishment of the vast majority of China’s citizens for most of this century. The question for design—its professional question, or better its ethical question—is how should design anticipate its future role and how therefore should it deal with its own implication and involvement in the processes that will lead to these crises? This is a very serious question. The long-term credibility of the design profession in China will depend on how it is answered.

Scenario 3: Design becomes everywhere: design as “silent design” and design as institutional design. China becomes a truly advanced sustainable industrial nation at the core of a new world economy: 2025–2050.

For anything like “sustainable” design to be put in place, a final scenario is necessary. Though logically it comes before the ecological, historically it may well come after, though the former also will be built on the embryo of this mode of “designing.” This strategy is that of “silent design,” to use a term from design management. “Silent design” refers to the manner in which design activities occur within a company or institution not only in the design office, but in many other locations. Silent design draws attention to design as shaping activity—an activity which may be located in products, but which also may equally, and today with as much validity, be applied to institutions and to their behavior. How is this a design strategy? It is so in the sense that we are talking of designing as the process of shaping—things certainly, but also institutions, programs, systems.... This process is design with a small “d,” design as a verb, an activity. It occurs everywhere. What distinguishes Design, with a capital “D”, is a much more self-conscious process. Indeed, at best, that is what Design is, it’s the process of becoming self-conscious about making, shaping and forming. All things, be



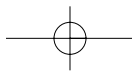


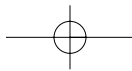
they products, institutions, or systems, are configured, that is they are formed. Design in this sense, our sense, is the process whereby the form of things is put on the table as it were, where configuration is examined, self-critically and often reinvented. This is design's great virtue. This is what it offers business and what it promises society. It is also, by itself, very often the source of design's irresponsibility. What is going to be interesting in China, and in the West also of course, is how, in the long run, this sense of design will merge with, and will be tempered by, the idea of systemic, institutional, and behavioral design.

What then is interesting, in the shorter term, is how this "expanded" understanding of design moves back into industrial design in the more limited sense. Here we come back to the situation in the Pearl River delta, and the idea of developing a transformation of the kind of product manufactured in southern China. Already, in a sense, variants of this scenario are at work in the processes of designing production systems in the delta. The Hong Kong economy was long characterized by astonishingly inventive configurations and adaptations of production technologies and methods. The process today is intensified. But that very process points to this wider sense of designing where one is no longer designing one component of the production-consumption cycle, but its entirety. This is strategic design at an even higher level than that referred to above. Here we are looking at totalities, at seeing the entire production (and consumption) process as a "design" moment where clearly it is not the explicit formal aesthetics of this process that are at issue, but a more subtle process of shaping a totality to a context, or of shaping a product to the complexities of its use and production in the very widest sense of those terms. Oddly, these areas traditionally have not been where the designer lived, and this is not surprising if he or she emerged essentially from a quasi-craft tradition and education.

To say this is not at all to denigrate that education—its significance continues. But what is essential to grasp is the longer-term emergence of system or institutional design where the entirety of the process is up for grabs. It is safe to say that, in the conscious sense, almost none of this is occurring today in China as "design." But of course, in other forms, in other guises, it is happening all the time. What is politics but a "design" in this wider sense?

The third design possibility for China is that this will become better understood; that in seeing design as essentially a strategic activity, we see it also as a planning activity: design as a way of building and exploring scenarios for the future—within the firm, within the commune or the township, and within the province. We are talking about the shaping of institutions in the way that we shape products. Products work best we said, when their features, capabilities, and capacities in some way resonate with the features, capabilities, and capacities of persons. The same applies to institu-





tions and systems. As China builds itself into a global core nation, this element of system will become of more account. The extraordinary opportunity for design in China in this last scenario will be to design China! The statement is not quite as absurd as it sounds.

Concluding Remarks

I cannot develop the full scope of this last scenario design here, nor in the time I have left can I tie it in any better to the question of ecological design and the possibilities I advanced for developing strategic product design. But there is a common thread. The three scenarios I have offered are *active*. They involve the designer in moving, rather than passively waiting for the industrial client. They redefine him, or her, as a socially involved thinker-doer concerned not with the manufacture of another trivial bauble, but with setting in motion designing as a process through which a way of life can be given shape and enabled to come into being (because the physical, social, and psychological conditions of that life are realized directly and indirectly through the forms of the things we live with, engage with, and use to enable our lives to be). The one moment of modernist design that is worth preserving is the ambition to fold a moment of the utopian into the everyday. That was one of socialism's ambitions, which it might be well to remember in the rush to embrace the market. For if it is not remembered in human terms, we shall find it remembered only in terms of the market and its values. Even if the market is necessary, it still is not everything.

We make our lives through how we make. Design is about this equation.

