

THF Working Paper

Working Papers Series No.9/2015

CHINA'S HOLLOW CENTRE AND THE IMPACT OF INVISIBLE SOCIETAL FORCES ON ITS INTENDED PROSPEROUS EVOLUTION

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Abstract

The argument¹ to be made in this paper may be summarized as follows. Societies evolve in their own distinct ways and produce their own 'business systems'. These different ways derive largely from the societal heritage, because it shapes the institutions and norms. Such a heritage may stretch back far into pre-history. Societies may also evolve through change if they are inclined to do so. Some do not. As complex objects they need to be seen as products of constant interplay between three main elements: political power; economic action; and cultural structures of meaning. As economies progress towards greater wealth, their internal complexity increases exponentially. This requires adequate sophistication in its handling and such is only available when substantial devolution of power has taken place, and when encouragement has been given for the spontaneous re-inventing of forms of stable order by societal actors dealing directly with the complexity. This is seen in this account as an active, responsive, responsible, and autonomous 'middle' within society. In the advanced economy case it allows a society to go beyond the capacity of central government to respond effectively to the complexity.

Introduction

To achieve economic coordination and control capable of matching world standards of competitive efficiency, a society needs – in addition to stable order - two strong capacities: innovativeness and cooperativeness. These rest on configurations of societal features that foster and support the capacities. The configurations are likely to be special to each society in the detail, but – when effective - will exhibit certain universal features. Most societies cannot handle the full complexity and intensity of a modern economy because they do not have enough of the two capacities. Some are likely to learn and succeed. China does not currently have enough of the two capacities and may or may not learn and succeed. The reasons for this lack are generally not discussed or dealt with in policy-making, as they exist in the world of meanings and ideas, and they affect processes rather than tangibles. This does not mean that they can be ignored.

These challenges may be summarized in three questions: Can large-scale organization be achieved indigenously at world standards of efficiency by a fusion of hierarchy and initiative? Can social capital be built to a point where strangers can be trusted? Can conformity and order be achieved without resort to fear, so can a more

¹ An earlier version of this argument was presented at the Inaugural Research Frontiers Conference of Management and Organization Review, Hong Kong, 7 Dec 2014, with the much appreciated support of INSEAD, and as a HEAD Foundation Working Paper also with much appreciated support. The author wishes to thank Arie Lewin, Michael Witt, and Christian Welzel for discussions and inputs on the topic. He acknowledges also a large number of anonymous Chinese business people who have been helpful with their thoughts.

benevolent form of domination evolve? Most analysis of China takes a partial view, and would benefit from the widest perspective consistent with understanding.

The range of analysis about China is currently very wide, and covers positions of optimism, advice as to what is needed next, and pessimism about long-term prospects. Much commentary is coloured by the bringing in of criteria assumed to

universal applicability, despite it being known that business systems will contain much that is distinct to a particular society.

The government position remains experimental but moving towards a set of strong regional hubs with much devolved power, energized by competition for key resources controlled at the centre, and with uncertainty restrained by the Party members holding all key positions. In these hubs, forms of alliance between public and private and outsiders are proliferating. The private sector remains the main dynamo and source of productivity. It could be argued that this formula achieves the simultaneous loose-tight properties of control necessary in handling great complexity and scale. But it could also be argued that other societies have gone beyond that design into forms of order that extend self-organization much further, and necessarily so.

The central question remains, as in most single-party states, can the government loosen control sufficiently to release the potential energy of an autonomous bourgeoisie, or 'middle'? Or can it foster the emergence of a functional equivalent? Both questions are set against the ultimate challenge of retaining societal order under the onslaught of a massive increase in the complexity of transactions if, among other difficulties, the barrier of doing business with strangers can be surmounted. This test of capacity for progress is coming to be seen more widely as the Middle Income Trap, and most countries approaching it fail to get through. China will be approaching that trap about ten years from now. How might it get through?

It is rare to find analysis that looks at matters at the societal scale of analysis while at the same time taking account of the deeper subtle influences that work at the level of organizations. I have in mind here forces that have direct but obscure impact on the passing of the crucial test of productivity per capita. Such commentary has to be multi-disciplinary, historic, and systemic. This paper takes the risks involved in such analytic adventurism, not because it permits sweeping statements, but because the subject deserves the respect of matching complexity on the ground with complexity in the account. This brief version of such an account is designed to ask harder than average questions of those who specialize in a single main discipline or perspective². It aims to bring matters to the surface that are usually hidden and little researched. It rests on a wide literature, not directly cited but listed selectively at the end as recommended reading. It also rests on forty years of close interaction with China and its organizations.

² Readers seeking a less brief treatment are referred to Redding G and M.A. Witt *The Future of Chinese Capitalism*, Oxford University Press, 2007; and Witt M.A. and G.Redding (eds) *The Oxford Handbook of Asian Business Systems*, Oxford University Press, 2014.

The paper will consider first the general problem of societal progress, then speculate about very long-term evolutionary findings, historical patterns of human change, and the core seemingly universal requisites for handling intensely interactive modern complexity. China's development trajectory will be analyzed against these wider features, and questions posed that would allow for the testing of perhaps unacknowledged assumptions, before a consideration of apparent options and trends.

The General Problem of Societal Progress

Any analysis of a society's form of progress must take account of at least three main categories of influence: the *political* realm is where the structure and nature of authority is settled; the *economic* realm is where the structures and natures of organizations are settled, where the society's chosen form or order is shaped by institutions, and where the society's resources are put to use; the *cultural* realm is where the mind-sets of people become engaged in legitimating the connections between the *political* and the *economic*. These three aspects of context are in constant reciprocal interaction and the total tends to evolve as the surrounding world imposes forces for change.

Historically the transitions of the Agricultural, Industrial and currently the Information Revolution, have induced increasing densities and usages of capital, human capital and social capital. A society's capacity to handle such transitions is an outcome of its accumulated capacity for transformation. Herein lies a tension between the relatively 'destructive' forces brought by innovation, and the stabilizing forces brought by high levels of cooperativeness. Societies as it were walk a tightrope holding these forces in dynamic balance, as each force needs the other if transformation is to succeed. It often takes political genius to keep these forces in balance, while moving forward on an upward-sloping high wire.

In these transitions some societies move faster and further than others in achieving wealth. This relates to – especially in the transitions of the Industrial and Information Revolutions – an exponential rise in the complexity of how a society's economy works. Some societies evolve structures and institutions to handle that while remaining stable. Others are still struggling with the smooth linking of the political, economic and cultural that is entailed. The score kept for this game is *productivity*: a measure of the efficiency with which the available resources are put to use. This in turn rests heavily on two processes: the rational and responsive sourcing and allocating of finance in pursuit of its most efficient use; and the motivations, commitments, creativity, confidence, and knowledge, of the individuals doing the work in the organizations. High intensity of such contributions is only possible when the use of power in the society is seen as legitimate in its relations with the use of resources; in other words the political, economic and cultural realms are in equilibrium. The essential challenge for many societies is that central control works only up to a point. After that the next level of complexity can only be handled by the diffusion of initiative into an educated population able to handle the new complexity while the total remains stable. Herein lies the essential Chinese puzzle.

An indicator that this is a very difficult game to play lies in the measured trajectories of countries making the attempt to handle the proliferating complexity of a modern economy. Most fail, or at least plateau out at a level that leaves them aspirants rather than major players (in terms of performance quality, not size). At its simplest, the phenomenon is referred to as the Middle Income Trap. The evidence is clear that countries tend to approach it from a 'developing' condition and move up to about US\$ 15000 per capita GDP, and then level off. Few get past that invisible barrier. The advanced economies went through the barrier decades ago and have moved up historically to levels of around 40,000 plus. China is currently at about the 11,000 mark and will reach the 15000 level in about a decade.³ China's challenge, and the central question in this paper, is whether its current system is adequate for handling the exponential increase in decision complexity induced by entering a modern - as opposed to a pre-modern – environment of economic coordination, control, and individually motivating legitimacy.

The basic rules for societal progress

Industrial revolutions at any time in history tend to unfold in ways that reflect two sources of influence. The first is a set of proclivities to behave in certain ways that are anchored in a particular society's inherited traditions for order, relationships, and action. So in the first industrial revolution, that of Britain in the eighteenth and nineteenth centuries, society was structured around ideals of individual freedom that had accreted over centuries and had become deeply embedded. In mainland Europe the influence of the 'Protestant Ethic' in the northern countries, as fully understood, remains potent. In the Japanese equivalent during the late nineteenth century, the business organization became a transposition and re-interpretation of the traditional *ie*, or work-based unit of identity, and the subsequent amplifying of that same social psychology produced the 'Japanese management' phenomenon that the global world of business learnt so much from, especially in such features as lean production, now the world standard.

Such societal forms of influence help to explain the variety of systems of capitalism, and of national socio-economic structures more generally. It is visible in the case of China in features such as the continuing significance of familism, reliance on interpersonal trust, and of dominant patrimonial government.

The second influence on a society's evolved formula for progress comes from outside, in the form of examples to emulate, techniques to acquire, and ideas to consider. Japan in the late nineteenth century modernized in its own way but with extensive absorption of lessons deliberately sought elsewhere. The early evolution of western Europe's economies was strongly supported by the use of Arab mathematics and numbering used in accounting. Singapore deliberately courted

³ Numbers used in such global comparisons are made problematic by an absence of standardization (related to regular new attempts to standardize!), among the global bodies issuing them. The figures adopted here are those used commonly in the literature on the middle-income trap. See e.g. Eichengreen, Park and Shin 2011 in the references, and also China State Council report, China 2030).

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multinationals as contributors to its industrialization in the late twentieth century. China is going along with the business systems standardized by the World Trade Organization. In fostering a fruitful connection with Hong Kong it left itself open to outside methods and ideas, even while knowing that the opening of the window would bring in the flies.

Modernization is a response to the radically increasing complexity that is attached to any thriving economy working to reach the higher levels of GDP per capita. That complexity has several strands to it. There is firstly the potential rise in the number of exchange transactions across the economy and across its borders. In a very high level economy anyone can do business with anyone else (within the usual constraints of compliance with the rules), so that the volume and range of possible transactions becomes very large indeed. But this only works when the society has constructed reliable and efficient institutions to underpin the risks of doing business with people who are otherwise strangers. Such institutions include widely available reliable information, efficient protective commercial law, intermediaries such as trusted bankers, clear rights, professions to guarantee specialist conduct, etc. All of these institutions serve to empower individual actors and to lessen their dependence on personalism as a prime guarantee of the conduct of others. In the modern case interpersonal trust is normally enhanced by the addition of this 'system trust' as societies advance. Interpersonal trust (as with *guanxi* in China) may well get the country to the 15000 barrier, but it is not likely to be enough for it to achieve the 40,000 plus found elsewhere. Reliance on it (and by extension the weakness of supporting institutions) is one of China's most significant long-term handicaps. It is termed 'social capital' and is part of a cluster of invisible requirements that provide a society with the transformative capacity it needs. It is of course feasible for China to choose its own development formula based on the retention of personalism as its primary form of social capital in the economy. This would have predictable costs, as will be argued later.

Other aspects of the impending advance of complexity relate to the outcomes of education: the tolerance of pluralism, the encouragement of responsible autonomy and specialization, the flourishing of debate, and the encouraging of creativity and risk-taking. All are aspects of the very strong empowerment wave that has been growing globally in recent decades and that is moved by the globalization and information revolutions, plus the economic and psychic benefits associated with democracy.

If one seeks advice on the keys to successful societal transformation it is useful to derive them from the accounts of success so far. How was it done in western Europe, in North America, in Japan, Korea, Taiwan? Studies of these complex and varied examples tend to confirm the presence of two major features that – when available – allow the society to handle the transition to the complex world of a modern economy. Taking it as read that, as noted earlier, an equilibrium has been achieved between the political, economic and cultural realms in a society, what then provides the dynamism to make the wealth and foster its distribution?

As far as action is concerned a highly significant institution in successful cases has been a large, influential, and autonomous middle class, or *bourgeoisie*. Such a

body is normally made up of business owners and managers, professionals, and public servants, all participants in capitalism. It is this body that has historically in successful cases taken the majority of the initiatives that deliver well-functioning order. This is normally achieved with government encouragement, but it ensures that the new complexities are addressed by those dealing directly with them, such talent being both fertile and numerous and societally responsible if their status is to be legitimate. The extensive work of Deidre McCloskey on this feature demonstrates its power. The warning of Marie-Claire Bergere that China is trying to produce a system of capitalism without capitalists (by coopting them into the Party) serves to raise a serious point for later discussion.

In addition to having the key actors and their having freedom to act, is the question of what *processes* are associated with societal success. The answer lies in two key features, acting as catalysts: *innovativeness* and *cooperativeness*. Joel Mokyr's detailed study of the first industrial revolution identified these clearly and I will shortly propose that they are related to deep-seated instincts supporting species survival. These catalysts need to be manifest at a high level of intensity, and they need to fit reciprocally with the surrounding system of which they would be outcomes. Their presence makes all the difference. But the way they work may well be influenced by very long evolutionary societal histories, and before treating them in more detail, it is necessary to make a brief excursion into new and still adventurous research about that evolution, because - if true - its main contention has significant implications for how any society will evolve. Is China already constrained?

The evolutionary shaping of societal structures

We know from decades of research that there are two major cultural clusters into which societies tend to fit. One of them stresses hierarchy, compliance, and strong psychological dependence on membership of a specific collectivity like a family or a tribe. Power here is given much attention and comes to be finely divided. Acceptance produces stability. The other cluster stresses individual autonomy and equality as principles. This form tends to bring with it more looseness of structure but also a higher sense of personal responsibility to the wider community. Authority here is resisted except when needed and merited. These two clusters were labeled by Geert Hofstede in 1980 as either High Power Distance/Collectivism, or Low Power Distance/Individualism.

More recent work by the World Values Surveys under Ronald Inglehart and a large team of global scholars has shown new aspects of the same two clusters, this time under a wider definition of the societal ideals being measured (see Fig 1). Here the main summary dimensions identified are (a) values along a range from 'survival' to 'self-expression' and (b) values along a range from 'traditional' to 'secular-rational'. These large-scale and continuous World Values Surveys have also revealed shifts in recent decades away from the survival/traditional pattern towards the self-expression/ secular-rational as societies adjust their cultures in an overall global drift described by Christian Welzel as 'freedom rising' via empowerment.

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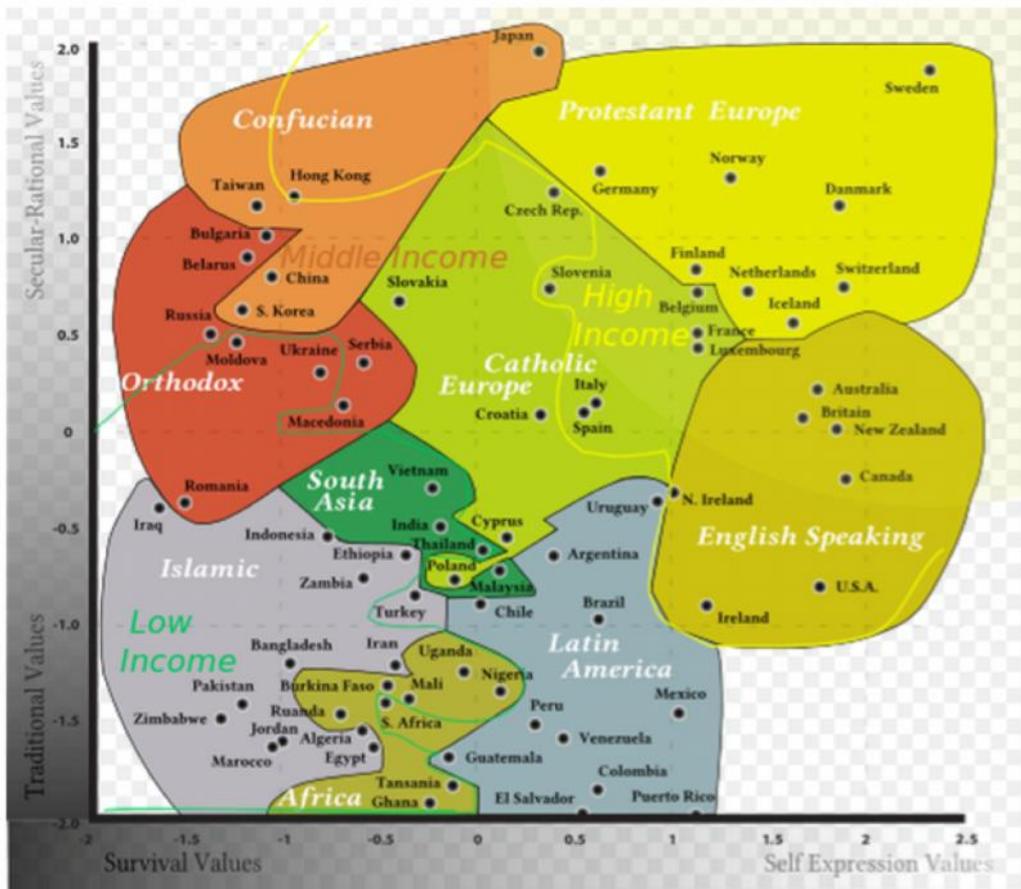


Fig.1. Summary of findings from the World Values Surveys overlapped with development implications and religious or other identifying heritages.

Figure 1 also illustrates cultural clustering of such values. They appear to fit with long-term heritage, including religion. (Note that in a separate account Welzel and Inglehart show convincing evidence that race per se is not a feature of this patterning). The clusters also fit with per capita wealth, showing relative poverty associated with survival/traditional values and relative wealth associated with secular/rational/ self-expression ideals. Such data are prima facie evidence of deep forces at work in societies, and must be accounted for in assessing the likelihood of any society moving from the middle-income category to the high-income.

To be examined later is the question of whether a new form of societal formula could emerge to add further variety to the current occupants of the high-income category. The answer of course is yes it could, for we cannot predict what will be learnt. Whether learning takes place depends on obstacles that lie within societies such as vested interests, or sacred orthodoxies, or deeply-embedded criteria for political legitimacy. Such facts of realpolitik lie at the core of the China question. But before that is reviewed it will be necessary to add (a) some further propositions about how these patterns may have evolved and (b) a summary of universal requirements for successful trajectories.

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The state of knowledge on the question of evolutionary patterns in societal formation is still in flux. Earlier specialist disciplines such as palaeo-anthropology have been recently reinforced by the availability of DNA readings applied to fossils. Knowledge derived from studies of primate behavior has also been folded in to the picturing of how forms of social order have evolved. But this whole field remains work-in-progress, and what now follows is currently well-based conjecture rather than received wisdom. It is therefore offered under those conditions, and because its implications *could* be heavy with significance. Ignoring that possibility might be more risky than including it while asking the reader to watch out for its future clarification. Space considerations mean that it can only be briefly introduced, but references are included at the end of the paper to tempt the curious.

One point that is widely accepted is that forms of human society evolved over tens of thousands of years in ways that reflected their ecological context. Put simply the way a set of people earned their livelihoods – essentially by finding food, water, shelter, and protection – determined how their societies came to be structured and organized.

The first human societies were bands of hunter-gatherers, but at some point around 10,000 to 15000 years ago there began to appear forms of settlement, based on the keeping of animals and the growing of crops. How these new larger social units came to be stabilized has since been imprinted on the societies that evolved from them. Such imprinting takes place when early institutions 'lock in' related forms of order, and the society's culture then legitimates the total evolving form and it keeps replicating and reinforcing itself. This is traceable now over extraordinarily long periods of time.

One school of thought suggests that order evolved in two main forms, and this is most fully supported in the 'cool-water hypothesis' proposed and documented by Christian Welzel. In this theory, societies evolved differently as their surrounding natural ecology shaped their options. The argument is essentially simple. When societies stabilized in conditions where water was permanently available, and where land was not limited, people could choose to settle without worrying over the sharing of core essentials. They might well choose to collaborate for defence, but otherwise they could get on with their livelihoods without the constant close scrutiny of others. Their evolved individualism would also support principles of equality, and their ideals stress trust in the probity of others in the community, against whom they were not competing. Reciprocal altruism here took the form of following ideals of communal duty. Such patterns of response are associated with societies in temperate regions with steady predictable rainfall, water sources free of disease, and available land. The distribution of this type, labeled in parallel literature as *hedonic*, overlaps with the top right quadrant of the World Values graph (fig 1), and so encompasses northwest Europe, Japan, and the English-speaking countries (including many of their predictably influenced ex-colonies).

The alternative societal formula, labeled *agonic*, evolved in different ecologies. Here water resources were relatively scarce or unpredictable or required shared effort to obtain, as with irrigation or in rice cultivation; climates were warmer but more disease-inducing; land was more scarce and required control over access; resources

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were abundant but clustered together; everyone could know what everyone else was doing; reciprocal altruism was exercised through clear rules of exchange.

In the agonistic case, group survival came to be based on the acceptance of domination by a central authority figure, the 'big man' of anthropology. Subjection to that order became instinctive and hierarchy became normal along with its attendant responses: the moral understandings in ideals such as paternalism; and the institutions of patrimonialism. The early work of Carl Wittfogel on China's political economy made clear that China's centralized governments are traceable to the need for the state to take control of access to water in the interests of population survival. The government was responding to the fact that the areas of greatest potential food production were also the areas of greatest potential loss of life from floods. Using corvée labour this produced a gigantic physical infrastructure of water control and transport canals. From the building of the 800 mile Imperial Canal at the end of the 6th century CE onwards, China would construct approximately 200,000 miles of waterways over its areas of fertile land. It became a 'hydraulic civilization'. Once set, the system became path dependent, and has not altered in its essentials since. The government is essential for the macro control of resources and is given the power in accordance with the dependence of the population on its administration. And water remains a national challenge that only government can handle because of the huge nature of the projects needed.

The simple possibility is raised that China remains in essence an agonistic society, and that northern Europe, North America, and Japan are at heart hedonic. Having said which, it is appropriate to examine the China/Japan contrast for what it may reveal about societal progress, and about the contrasting trajectories of near neighbours with subtly but significantly different ancient heritages, and with very different current levels of performance.

A final point about the human heritage comes from research on innate human drives evolved from the progressing of the homo sapiens species. Survival in the early stages of human evolution depended on two primary drives wired into the limbic system: to defend, and to acquire. These were later added to as societies became more socially complex, and two additional drives joined the earlier two acquired from primate ancestry. The new drives were: to bond and to learn. Such drives are hard-wired into our species, as responses to increasing social complexity. It is perhaps not surprising to find them visible as transformative capacities in the present day handling of complexity: what I refer to as cooperativeness (to bond) and innovativeness (to learn).

Comparing China and Japan

Japan's GNI per capita stands at seven times that of China. Its reformed industrial giants remain formidable forces in the global economy and display constant efficiency in technology and organization. The politico-economic structures of the two economies remain very different. Can China ever emulate Japan in performance? If China is diffident about taking lessons from the west, might it take lessons from Japan, a country where cultural affinities are at first glance close?

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A deep study of the contrast is available in Shmuel Eisenstadt's analysis of Japanese civilization, and in this he elaborates on the origins of perhaps the most significant contrast in social psychology between the two societies. In Japan the primary unit of identity is the person's own community, or what the Japanese sociologist Chie Nakane calls a person's 'frame': a unit of society often defined around employment, and going well beyond the nuclear family. Identity within this social unit takes on magnetic significance, just as in China does membership of a family. From that starting point the organizing of economic action uses different structures and has different psychologies of both identity and motivation.

This feature in Japan's social nature is traceable to several aspects of early separation between the two civilizations. Despite a great deal of common cultural heritage, most notably Buddhism and Confucianism, Japan was never taken over by China politically or ideologically. Japan tended to absorb outside influences of many kinds over centuries by a process of re-formulating them to fit with deep Japanese understandings resting in Shinto. In simple terms the Shinto world-view celebrates the sociability of human beings and the significance of community in nature. Even though holding only symbolic influence, and being based in ritual rather than the exercise of direct power, it still today meets the spiritual needs, albeit informally, of about 80 percent of the population. It also exists as an extension of the peoples' identity with Japan itself and supports the continued legitimacy of the Emperor. It is perhaps for this reason, and reflecting on Chinese society diffracted into family units, that Sun Yat Sen, in designing the first of China's twentieth century revolutions would observe that China is like a tray of loose sand, while Japan is like a piece of solid granite.

Going further into understanding the contrasts Eisenstadt pointed to differences in conceptions of statehood and community. Thinking absorbed from China that supported the early form of Confucian- inspired hierarchy at the outset of the Tokugawa shogunate after 1600 was re-interpreted subsequently, not just by Tokugawa himself but by a series of influential political philosophers such as Ogyu Sorai. Put at its simplest the central role of *li* (the rules of order) was redefined. This principle, so crucial in Chinese political philosophy, allowed for the imposition of conformity by stressing the fusion of the transcendental and the mundane. Life in reality should be conducted according to guidelines established in a version of heaven, the principles consequently being metaphysical. This philosophy was challenged by Japanese thinkers and the imposed heavenly conformity replaced by a more grounded ideal. This latter was based on saving other people in their real surroundings. The transcendent principle was no longer superior or prior. Ideals about order became more objective, more particular, seen more in context, and more realistic. Resting on Japanese ideals about the sociability of human beings, and the significance of community in nature, a re-affirmed Japanese societal philosophy emerged.

Significant outcomes of this flowed together as influences to decentralize power in Japanese society and to permit it to evolve towards meeting the challenges of new complexity in the late nineteenth century. Examples of such changes are : the emergence of an autonomous bourgeoisie; the decentralization of most government

administration into the 360 *han* or regions; the emergence of different autonomous societal realms, such as that of art and poetry, and so the encouragement of pluralism; the softening of hierarchy with consensus seeking; the professionalization of administration; and the widespread growth of education. Above the entire scene perhaps the most significant China-Japan difference came from the separation of powers at the top. The emperor who symbolized Japan was not charged with running the country. That duty fell to others who themselves were constrained by the imperial presence. China by contrast seemingly cannot function without a single dominant emperor or equivalent.

These two societies work with quite different human and social material in crafting their economies, if material is understood in terms of its qualities in fostering innovation and cooperation, and in playing a part in the achieved form of order. This rests on the degree of empowerment of the average individual. A final observation on this theme is that the human heritage will have given people in each society the same innate drives to innovate and to cooperate. Their expression is however shaped by the societal context of institutions and ideals.

The Role of Cooperativeness

In Eric Beinhocker's study of the origins of wealth, he points out the impact of increasing socio-economic complexity on the conduct of business, and reaches the disarmingly straightforward conclusion that the battle between firms is essentially fought by competing to cooperate. His meaning is that a firm might well work out a strategy for market penetration, but that putting it into practice needs to be done more efficiently than in other firms and that this rests on a range of social technologies and relationships. These include coordination with sources of finance to satisfy expectations; with customers to satisfy demands; with subcontractors for specialist needs; with government for aspects of compliance; with employees to engage their maximum levels of work efficiency, creativity, and commitment. It is in this arena of forms of cooperation that the most distinct efficiencies are reached and success and failure are established. It is here that the firm's response is worked out to the fact that competitive environments determine what 'fitness function' will best guarantee survival and growth. Business strategy is all about finding a formula that others will find difficult to replicate, therefore using forms of cooperativeness distinct to the firm, then replicating the successful form before others join the game.

Cooperativeness in a society works in two ways and these are determined by its dominant form of trust. One way is to use networks of personal reciprocal obligation, and these can extend sideways across an economy and also up and down in an organization. In China one of the strongest institutions is that of *guanxi*, a form of bonding with strong supportive norms about reciprocity. Vertically a similar reciprocity is expressed in paternalism. In either case the glue is personalistic. The result is very strong bonding but very limited *extension* of cooperativeness. The general context is one in which you trust those with whom you are bonded but you are not in a position to trust strangers. This inhibition derives from two related conditions: other people are generally competing for scarce resources: and there is a vacuum in terms of duty to the community beyond family. Between the family and the

state is an empty space, and it is an aspect of what I will argue is the hollow centre. The World Values Survey reports that 89 percent of Chinese people do not trust strangers.

The institutions that fill that vacuum in high-intensity societies are what Lynn Zucker sees, in her studies of trust, as forms of insurance; they underwrite the risks of transacting with unknown people. Such institutions include reliable and protective law, open reliable information, professions that standardize and control the conduct of their members, fair regulations, etc. But listing such institutions only gives half the story. The real contribution of such forms of system trust lies in their 'ownership' – and often their origin - lying with the members of society who interact most closely with the domains they cover. The interest of such responsible citizens must lie in persuading the average person that the institution provides order for the public good rather than private gain.

China's challenge of cooperativeness

It is a core dilemma for a totalitarian state to permit the transfer of influence into the body of society, except under controlled conditions. The function of the Party is to permit this and it has worked to produce a great deal of decentralized economic decision-making power in the regional hubs and the major cities. But just as control by the Party provides comfort at the centre that order is not threatened, it also ensures that an autonomous body does not evolve to accumulate countervailing power. In effect the government is filling the hollow centre with its own administrative system. That is, in a limited sense, a rational choice. But the question is open as to whether it matches the need for handling escalating complexity. Governments are not usually equipped to understand detailed matters on the ground. Nor do entrepreneurs usually need advice from state planners on their business strategies. And increasingly autonomous citizens are not motivated by proliferating administration.

The question is whether it fosters cooperativeness at the level likely to be competitive by world standards. The answer is probably not. The evidence for this is presented in Christian Welzel's 'contagion thesis' in relation to the effects of emancipation as tracked globally. Once freedom is tasted, it tends to be more and more desired. Once acquired it fosters greater taking of opportunity. Once opportunities are being taken an economy can grow faster. This is a 'utility ladder'. The ladder stands on empowerment.

If there is a choice between having an autonomous *bourgeoisie* or a government-controlled form of strategy-making and assets allocation, then the evidence for the former from China itself is overwhelming. The private sector, as recently analysed in detail by Nicholas Lardy, has become 'the major source of economic growth, the sole source of job creation, and the major contributor to China's still growing role as a global trader'. Most markets are now competitive. Private firms produce about two-thirds of output.⁴ It is clear that a form of *bourgeoisie* exists, and that its members have produced so far an economic miracle,

⁴ Lardy 2014, pp 2-3.

but in terms of influence on society's structures and institutions it remains a weak form. Its weakness is attributable to several features: control by the Party, including compliance under conditions of anxiety or fear; the weakening of traditional civilizational ideals; duty to family constraining communal spirit; the 'unnaturalness' of civil society in Chinese tradition other than via philanthropy; the weakness of system trust; central control of information; and restriction of pluralist debate. In comparison with high intensity-per-capita societies the middle is hollow. Real power hovers above.

Outcomes of this set of limitations amount to weaknesses in the enlarging of cooperativeness across the economy. Civil society surveys score China at the same level of Russia, and well below advanced economies. Mistrust inhibits cooperation in the social sphere beyond guanxi. Several questions emerge. Although the present system has been immensely successful to date, how much of that success rests on taking up the slack available in e.g, large amounts of low cost labour, instinctive family-based entrepreneurship, and acquired technology? Although the system remains successful at the present level of complexity, will it be able to handle the great increase in complexity due to arrive at the other side of the Middle Income Trap? Can the total system sustain the political stress of devolving influence beyond its direct control, and if so how?

The role of innovativeness

Innovativeness is one of the twin instincts (with sociability or cooperativeness) that are hard-wired into the human frame to enable a society to cope with the adaptation needed to survive. Although expressed through individual agency, it has two higher exponents. Organizations need to adapt to change. And so does society itself. Change itself is seemingly inevitable and only partially predictable, and this latter feature adds extra significance to a society's capacity to handle it.

The world now sees certain industrial districts as main focuses of innovativeness, primary among which is Silicon Valley, but with equivalents at different scales around the globe. There is much to be learnt from their structures about how innovation may be encouraged. In addition is the more diffuse but still significant matter of adventurousness exhibited by business leaders such as entrepreneurs seeking new combinations of things they use to take market opportunities.

From studies of innovativeness it is possible to distil certain requirements for success in both process and outcomes. The economic unit regardless of ownership must be capable of being scaled up to take advantage of opportunity; creative individuals in it need to be cooperative with it and yet psychologically autonomous; the latter need to have fair incentive for being creative; information needs to flow freely to sponsor both learning and collaboration; surrounding systems of regulation should be seen as fair and protective; and assessments of risk should be rational and evidence-based. The practical application of these principles is likely to vary in form between societies, even though the principles are adhered to.

China's challenge of innovativeness

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In recent decades China's industrial reputation has rested mainly on its mastery of the role of being the world's workshop. Industry of this nature is largely low to middle tech in nature, and design usually derives from foreign sources via product specification and imported machine tools. The 'workshop's undoubted success is based on an entirely rational response to opportunity and it has achieved great innovativeness *in the coordinating process* by bringing together entrepreneurial energy, low-cost skilable labour, access to world markets via collaborative agencies, and technology acquired via alliances of one kind or another. The official encouragement of foreign direct investment on the condition of technology transfer brought in much technique to fill a gap. But the reliance on the private sector, and its extension at scale into 'local corporates', did not ensure the building of technical or scientific innovative capacity of an indigenous kind into Chinese organizations. In a 2007 report commissioned by the UK Government, James Wilsdon and James Keeley stated that 99 percent of Chinese firms had never registered a patent; that half of the patent applications in China were from foreign companies; and that China's share of patents registered with the World Intellectual Property Organization was 1.4 percent.

The World Bank index for Innovation, Skills and Information (KI) scored China 5.5 (out of 10) compared to South Korea at 8.5, Hong Kong at 8.6, Taiwan at 9.5, and Singapore at 9.6. Constraints identified by firms in China included low skills, weak entrepreneurship, and weak information. Other studies have pointed to weak intellectual property protection, high mobility of skilled workers, and poor linking of education with industrial needs.

A rarely discussed feature of China's industrial scene is the interface with outside firms when, in alliances, they introduce innovation. Cultures clash, and this often prevents the innovation. A detailed case of this phenomenon is reported by Angelika Zimmerman and Marc Bollbach who studied the long-term attempt by a German automotive components manufacturer to introduce 'lean' production into its China plants. They studied two plants, each with about a thousand employees and concluded that certain cognitive dispositions and behaviours had inhibited the firm's attempt to introduce lean production. The barriers were outcomes of the institutional and cultural context, and included poor problem-solving skills, constrained mindsets, inhibitions over suggestions due to 'face', concern for harmony blocking the search for root causes, a strong sense of hierarchy blocking upwards communication. They concluded that the failure to transplant this production system, with its substantial assumptions about employee empowerment, indicates a serious challenge faced by China in matching world standards in high tech and high productivity manufacturing. Similar reservations about the negative impacts of strong hierarchy on organizational adaptiveness are widespread in the research literature.

A different but equally significant aspect of innovation is how science is brought into fruitful connection with the economy. Here again the research points to a problem in China of hierarchical control by government. In other countries with high levels of innovation there is a rich and fruitful interchange between scientific research and its commercial application. This is guided by a great web of intermediate organizations, committees, funding consortia, and liaison bodies. As described by J

Arnoldi and J.Y. Zhang the fusion of research and its application is handicapped. Knowledge generation and knowledge application are de-coupled in a 'dual reality'. Techno-bureaucrats have undue influence via funding control. External scientific judgment is filtered. Nationally-mandated programs are given priority, so that alternative fields of enquiry are discouraged.

Three questions now arise: Can the dependence so far on technical 'borrowing' be displaced by indigenous technical innovativeness? Will this be enough to get China into a new world of much more intense competition? Can it use alliances with outside firms as a means of making the transition? These will be carried forward with other questions and discussed in a concluding summary.

The problem of initiative within hierarchy

As John Child observed recently in a review of new research on the topic 'Hierarchy and its negative consequences is arguably the most pressing social issue of our times'⁵. Of all the issues faced by China in its journey towards the modern, nothing approaches this challenge in magnitude or difficulty, as it lies at the core of China's definition of its civilization. This is a patrimonial state. It has a strong top and a hollow middle, the latter full of people but disproportionately lacking in influence.

This long-standing heritage has shaped the world of Chinese organizations in ways that have constrained so far the socio-economic options. Its organizations fall into two camps:

- (a) large-scale and (in most cases) inefficient; lacking in commercial initiative at global standards of competitiveness.
- (b) Small to medium in scale and full of initiative but unable to reach large scale at global standards of competitiveness and durability.

Organizations that combine high levels of initiative *and* large scale efficiency, although some certainly exist, are rare in Chinese culture. Even those in the encouraging environments around the South China Sea do not stay intact at the key transition point of owner succession, losing on average 60 percent of their value at that stage as J P Fan has demonstrated⁶.

The combining of initiative and hierarchy is a *sine qua non* of all the advanced economies. If China cannot find a way of doing that, its growth will level off. The key to this lies in making the hierarchy benevolent, in other words to create organizations that employ people in conditions of motivation and empowerment so as to elicit from them their commitment and creativity for the organization's benefit. As Robert Heilbroner pointed out in his history of capitalism, this invention of a more benevolent form of domination is the secret of the system's success. This applies to any of its main forms Anglo-Saxon, European, Japanese, and now South Korean. Achieving this, as noted by Max Weber, was a matter of learning that the dominant control of economic assets would not produce value under free market conditions unless both

⁵ Child (2014) 1727.

⁶ Fan 2012

employees and customers became parts of the coalition of influences. The market then takes over some of the role of the state in dealing with the growing complexity of action.

Given these flows of influence affecting innovativeness the replacement of borrowed technology by indigenously invented technology is unlikely to occur, except in rare cases. Scientific originality is likely to be also handicapped by Party control of scientific policy. But that does not close the door. Given the forces of globalization, and the role of WTO in making China's business environment more conducive to collaboration, it is probable that technology transfer will continue for a long time to come. The probability exists that the urge towards alliances out of rising necessity will be so strong as to counteract the wishes of the state to develop an independent Chinese business system as its primary response to global competition.

Three questions

This paper proposed three questions designed to open up a critical review of whether China is likely to put together the transformative capacity needed in the modern context it aims to enter. This context is one of exponentially proliferating complexity. Economic history suggests that this momentum is usually handled by more reliance on the logics of competitive market discipline, albeit conditioned by the overlay of moral imperatives brought in by the combination of cultural norms and government regulation. The process works better when the codification and diffusion of information keeps pace with the intricacy of decision making, as the work of Max Boisot clearly demonstrates. The inability of socio-economic systems to handle such complexity can be disastrous as the last global banking crisis showed. The history of totalitarian states does not provide comfort that political centres can handle this challenge at world standards of competitive efficiency.

China knows this, and has taken steps to meet the challenge. Two steps in particular may be identified: the releasing of small and medium private sector energy in the Deng Xiao Ping reforms; and the devolution of decision power into the regional hubs. Two controversial issues now remain and they are (1) how long the centre can stay in control of the regional hubs through the Party and over what agendas? And (2) how long can the civic energy of a potentially strong middle class remain suppressed, or some equivalent to it be made to work? These questions throw light on the core challenge, namely that unless innovativeness and cooperativeness become the agendas of a large group of empowered citizens with property rights, and with freedom to think beyond dogma, then the required quality and quantity of adaptiveness will be lacking. The energy of this middle class can only contribute fully if processes of spontaneous self-ordering are accepted as legitimate. In all such arguments it is necessary to be clear that the straight transplanting of institutions from outside is not here assumed or advocated. The real challenge is for Chinese inventiveness to find its distinct functional equivalents, as did Japan. I turn now to the questions.

Can large-scale organization be achieved indigenously at world standards of efficiency by a fusion of hierarchy and initiative?

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The weakness of large-scale organization in China is strongly connected to the relative failure of the state sector to perform competitively. This judgment is strengthened by the fact that the state firms have run for decades with monopoly advantages of access to finance and markets. Nicholas Lardy reports that between 1996 and 2012, return on assets in the state sector has fluctuated between 1% and 4.9%. In the private sector it has fluctuated between 11% and 13.2%. The state firms' result is flattered by extraordinary returns on assets in several giant firms: six-year averages to 2012 of 25% in CNOOC; 19% in China Mobile; and 14% in the tobacco monopoly. Other studies have applied rigorous costings to financial behavior and suggest that given the favourable borrowing arrangements of the state enterprises, many of them, when seen under conditions of true comparison, have been operating at negative rates of return. Similar distortions do not affect the private sector performance data.

Studies of China's large state firms have consistently reported flaws in quality of organizing and three problems are regularly reported: organizing into vertical silos that prevent middle and upper-middle management from taking a full organizational perspective and of achieving efficient coordination; this 'divide and rule' response expresses a top-down decision style that imposes control but stifles upwards communication; an organizational climate of conformity, and personal anxiety over risk-taking. In consequence of these features the inhibiting of initiative is predictable, and so innovativeness likely to be weak.

In the private sector a number of very strong firms have emerged to large scale to take the market opportunities and to arbitrage foreign technology for opening the China market. Such firms, even though large, have tended to be dependent on a very small dominant coalition, often a single founding visionary. This kind of dependence works well in guaranteeing clarity of vision, and in providing requisite surrounding support in a politicized and personalistic context. So too does it allow a firm to take a long-term view and it permits risk-taking of a nature that would otherwise meet opposition in conditions of widespread ownership or contentious internal company debate. A great strength of these companies is their cohesion around a personal vision. But their great weakness is in the perpetuation of that cohesion when the leadership diffracts. Only very few seem to have made the transition to professional management and even fewer to control under investor interest-groups.

The point for our present agenda is the high dependence for initiative on single individuals, and the long-term fragility of that. Nor is it just that such a person carries the main burden of strategic thinking, but that the relationships that secure the firm's stability of cooperation and support are also largely personalistic and difficult to pass on. The point is equally relevant in the small and medium enterprise sector where the same conditions apply.

China's large-scale organizational efficiency in the longer term rests on finding solutions to the fusing of hierarchy and widespread initiative, whether in state or private sector enterprise. As already argued the real test lies in the future. The Economist sees the emergence of 'Factory Asia' with China at the centre of a regional web of integrated firms in manufacturing for world markets, including China's

own⁷. But that arena is open to all firms to enter, and success in that competition will depend more and more on the organizational capacity to harness initiative, rather than simply on low cost labour.

Can social capital be built to a point where strangers can be trusted?

If China retains its inherited culture of what Lau Siu Kai called 'materialistic familism', then it will stay true to ancient habits and cultural norms. Many observers of the wider societal picture see China as a perpetuated patrimonial autocracy. The strong and deeply penetrating culture has for some replaced the standard political responses and leaves China as more of a civilization than a normal state as John K Fairbank once remarked. That makes it much harder to change fundamentally. If so, structures of trust are likely to remain constrained because to build a powerful form of system trust is to redesign not just institutions, but also the culture of paternalism and dependence. This is because spontaneous forms of order such as autonomous professions, a free press, pluralism and debate over beliefs, and autonomy in education, all bring with them the side-effect of undermining traditional order. Without system trust transactions will continue to rest on *guanxi*. Strangers will continue to be dealt with cautiously. The competition for scarce resources will remain intense. Whatever civil society emerges will remain politicized.

One must sympathize with those responsible for order in a state containing a fifth of the world's people. And one must respect the willingness shown in recent years to experiment pragmatically with socio-economic structures. One should also applaud the trend of policy toward market discipline and decentralized authority. But at the same time one must see the nature of the task ahead as requiring quite remarkable adventurousness and imagination.

The barriers to success in this adventure remain largely invisible. As with the cosmos, they lie like dark energy in what seems an empty middle, exerting influence but remaining intangible and unmeasurable, and thus beyond the reach of most analysis. The contention here is that the endemic mistrust outside *guanxi* will handicap China's capacity to keep pace with what will be coming, by limiting the coordination of economic action at the necessary scale of intensity of creativity.

Can conformity and order be achieved without resort to fear, so can a more benevolent form of domination evolve?

Having argued that an invisible barrier exists affecting the knitting together of society horizontally, I now turn to another invisible barrier that affects its being knitted together vertically. The barrier is the use of strong control, punishment, conformity, and discipline. These cause people to respond on a continuum from anxiety to fear. The style is legitimated in government reminders that 'eating bitterness' is a sign of good citizenship and a source of respect, as Michael Griffiths and Jesper Zeuthen have recently described.

The argument here is not that such forces are inherently illegitimate. Any society makes up its own definition of legitimacy, and in China autocracy is part of a Confucian tradition that includes moral responsibility downwards in a hierarchy, and

⁷ The Economist March 14 2015 page 15.

compliance upwards. Instead the argument being made is that this is a pre-modern form of domination, and that as such it stifles the release of the societal energy and creativity needed to deal with modern levels of complexity in the (a) intricacy, (b) technicality, (c) integration-needs, and (d) competitive response sophistication, practised in economies at 40,000 US\$ per capita. The game is played at a different level. This level can be achieved by China, but not while retaining the present-day response.

Conclusion

This paper has suggested that there are hidden forces in China's social psychology that remain significant shapers of events in the economy. They reflect deep-seated human responses to societal survival in conditions of radical change. They are invisible and rarely included in policy making. They serve to condition the quality and quantity available of two of the most crucial capacities needed by any society when it attempts the transition across the middle-income trap from the pre-modern condition of strong patrimonialism to the modern condition of an empowered citizenry holding the principle role in economic progress.

For China the prospects are affected by the great weight of its traditions, and the very strong path dependence of its political heritage. But these constraints are counterbalanced by several positive features. The government is clearly aware of the challenge. It is experimenting with controlled decentralization with great success so far. Entrepreneurship exists in great quantity. The Chinese people exhibit great tolerance and deep reserves of talent. And the world is changing to make possible new structures of a kind not previously envisaged, and especially in the domain of even greater global cooperation between firms. It is perhaps in this arena that new forms of modern capitalism will evolve on Chinese soil.

Note

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