

DEVELOPMENT, CULTURE, AND INSTITUTIONS[†]

Cultural and Institutional Bifurcation: China and Europe Compared

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How to sustain cooperation is a key challenge for any society. Different social organizations have evolved in the course of history to cope with this challenge by relying on different combinations of external (formal and informal) enforcement institutions and intrinsic motivation. Some societies rely more on informal enforcement and moral obligations within their constituting groups. Others rely more on formal enforcement and general moral obligations towards society at large. How do culture and institutions interact in generating different evolutionary trajectories of societal organizations? Do contemporary attitudes, institutions, and behavior reflect distinct pre-modern trajectories?

This paper addresses these questions by examining the bifurcation in the societal organizations of pre-modern China and Europe. It focuses on their distinct epitomizing social structures, the clan and the city, that sustain cooperation through different mixes of enforcement and intrinsic motivation. The Chinese clan is a kinship-based hierarchical organization in which strong moral ties and reputation among clan members are particularly important in sustaining cooperation. In Medieval Europe, by contrast, the main example of a cooperative organization is the city. Here cooperation is across kinship lines and external enforcement plays a bigger role. But morality and reputation,

although weaker, also matter and extend beyond one's kin.

The analysis exposes the impact of different initial moral systems and kinship organizations on China's and Europe's distinct cultural and institutional trajectories during the last millennium. These initial conditions influenced subsequent evolution through complementarities between moral systems and institutions. The implied social relations, moral obligations, and enforcement capacity further influenced the interactions with other external organizations (such as other cities or clans, or higher state authority), which further reinforced the distinct trajectories.

This paper's historical and comparative institutional analysis is based on the model in Avner Greif and Guido Tabellini (2010). It combines the analysis of generalized and limited morality (Tabellini 2008) with the analysis of the evolution of institutional complexes composed of complementary institutional and cultural elements (Greif 2006, ch. 7). A comparable analysis of the impact of initial beliefs and social structures is provided by Greif (1994, 2006, ch 9).

Section I presents a conceptual framework to explain why these two civilizations took different paths. Section II presents supporting historical evidence consistent with this explanation. Section III presents evidence on the persistent impact of these distinct societal organizations.

I. How to Support Cooperation: Clan versus City

This section presents a conceptual framework to examine the evolution of distinct ways to sustain cooperation. It focuses on interactions among individuals and, consistent with the historical evidence, on clans and cities as means to achieve cooperation. To facilitate the discussion,

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we ignore other actors such as the state and religious authorities to which we return in the historical discussion.

The clan (lineage) is a kinship-based community its members identify with and are loyal to. Cooperation within the clan is sustained mainly by moral obligations and reputational incentives that discourage cheating and free riding. Enforcement through formal institutions plays a small role. By contrast, the city is composed of members of many lineages, and formal enforcement is more important in sustaining cooperation. Morality also plays a role; however, moral obligations within the city have a wider scope but a weaker intensity. They have wider scope in that they apply to everyone and not just towards friends or relatives, and they have weaker intensity in motivating less cooperation compared to moral obligations within clans. Hence, at least some external enforcement is needed to sustain cooperation. In terms of economic efficiency, these two social arrangements have clear tradeoffs. The clan economizes on enforcement costs, whereas the city can exploit economies of scale because it sustains cooperation among a larger and more heterogeneous set of individuals.

How could such different arrangements have evolved? There are two parts to the answer. One part views the evolution of the clan and the city as the result of optimal decisions by individuals with a given morality (i.e., preferences). Suppose individuals can choose where to interact with others, either within their clan or within the city. Interacting can either refer to bilateral exchange or to public good provision. Individuals with a strong clan identity are more attracted to the clan because they draw a stronger psychological reward from intra-clan cooperation. The attractiveness of the clan versus city, however, also depends on their sizes because of economies or diseconomies of scale. A smaller organization is less attractive because economies of scale are not fully exploited. But an excessively large organization suffers from congestion externalities or diseconomies of scale in the enforcement of cooperation.

The preference composition within the organization also matters. A clan is more efficient, and hence more attractive, as the fraction of its members with a strong sense of clan identity increases. Similarly, the city is more efficient and attractive if more of its citizens value

cooperation with non-kin and if they respect the formal institutions that regulate their social interactions.

Although multiple equilibria are possible, clans are more likely to emerge in a society dominated by clan loyalty, because they are more efficient and thus more attractive. Clan loyalty would not support cooperation among the heterogeneous community in the city. By contrast, a city is more likely to emerge as the main social organization in a society where moral obligations have wider scope than just clan affiliation. In other words, the diffusion of specific values in the society explains the emergence of one organizational form over another.

The second part of the answer concerns cultural transmission. A society in which cooperation occurs within the clan is likely to foster clan loyalty, in both scope and intensity. By contrast, cooperation within a large and heterogeneous population and formal institutions foster generalized morality and respect for the procedures and formal institutions that regulate social interactions in the city. In other words, values evolve to reflect the prevailing social arrangements. The emergence of one moral system or another is explained by the distinct initial distribution of individuals across organizations.

Combining these two parts yields the possibility of cultural and institutional bifurcations. Clearly, whether a bifurcation emerges or persists can also depend on other variables, such as the type of public good to be provided (how rapidly its economies of scale decrease), or the extent of gains from trading with a larger community. Yet, two otherwise identical societies that differ only in the initial distributions of values and social heterogeneity can evolve along different self-reinforcing trajectories of both cultural traits and organizational forms.

II. History

The collapse of the Chinese Han dynasty and the Roman Empire (after 220 CE) were turning points in the cultural and institutional evolution of China and Europe respectively. The political and religious processes that followed led to distinct initial conditions when these societies eventually recovered. The evidence indicates subsequent bifurcation consistent with our conceptual framework.

A. Initial Conditions

Large kinship groups were common in most early societies. Yet, on the eve of the urban expansion in China and Europe circa 1000 CE, large kinship organizations were common in the former but not the latter. This distinction can be taken as an initial condition because it reflects political and religious process exogenous to the dynamics we examine.

In China, the Han dynasty came to power while advocating Confucianism as an alternative to the Legalism of the previous Qin dynasty. Confucianism considers moral obligations among kin as the basis for social order, while Legalism emphasizes legal obligations. After the collapse of the Han dynasty and the division of China to rival states, Buddhism gained popularity. It undermined large kinship organizations by emphasizing the individual, monastic life and the religious community. Not surprisingly, Buddhism was particularly promoted by the many non-ethnic Chinese rulers of the various states that emerged in China.

The ethnically Chinese Tang dynasty (618–907) that reunified China initially also promoted Buddhism. Eventually, however, it turned against it and, among other measures, destroyed thousands of Buddhist monasteries and temples in 845. Confucian scholars had also responded by formulating the so called Neo-Confucianism that was more appealing to the masses, while Buddhism was similarly reformulated to be more consistent with Confucian principles regarding kinship. Kinship structures thus survived and “the clan as a Chinese institution in the pre-modern period... prevailed some 800 years, beginning with the Sung dynasty [960–1279]” (John C. Fei and Ts’ui-Jung Liu 1982, 393). Detailed information on the share of the population with lineage affiliation is not available, but it was highest in the south and lowest in the north.

In Europe, the Germanic invasion of the Roman Empire initially reinforced tribalism. In the early (post-Roman) German legal codes an individual had rights only by affiliation with a large kinship group. As is well known, tribal tendencies were gradually undone by the Church which, in addition to generalized morality, advanced a marriage dogma that undermined large kinship organizations (cf. Greif 2006a). The Church discouraged practices

that sustain kinship groups, such as adoption, polygamy, concubinage, marriages among distant kin, and marriages without the woman’s consent. By the ninth century the nuclear family predominated. Legal codes, for example, no longer linked rights and kinship. Large kinship groups remained only on Europe’s social and geographical margins (e.g., Scotland).

Summarizing, in China circa 1000, large kinship organizations prevailed and obligations to kin were stressed, while in Europe such organizations were rare, and generalized morality was stressed. These differences were due to political and religious processes.

B. Subsequent Evolution

Subsequent cultural and institutional evolution reflects these different initial conditions, in accordance with the ideas of the previous section. The length of this paper restricts elaborating on this evidence, and we thus focus on the period of urbanization and growth that occurred in both China and Europe between the eleventh and the mid-fourteenth centuries.

Clans remained “the predominant form of kinship organizations in late imperial China” (Ebrey, P. Buckley and James L. Watson 1986). Clans provided their members with education, religious services, relief from poverty, and other local public goods. Cooperation was sustained by intrinsic motivation and reputation supplemented by formal, intra-clan mechanisms for dispute resolution. The objective was not to enforce an abstract moral law but to arbitrate a compromise.

If clans did economize on enforcement cost, the state should have created complementary institutions to pursue its objectives. Indeed, clans were responsible for tax collection, the conduct of their members, and the training of candidates for the civil service exams. Because it benefited from the clan, the state reinforced intra-clan cohesion by rules, such as linking land-purchase rights to local clans’ members, and by promoting Neo-Confucianism in which “the family was given a metaphysical foundation, and filial piety was promoted” (T. Ruskola 2000, 1622).

Intra-clan enforcement reduced the need for formal enforcement institutions. Moreover, a legal system would have undermined the clans, an outcome opposed by the elders who

controlled the clans and by the state that used them. Indeed, clan rules regularly discouraged litigation and favored arbitration provided by the clan (Hui-Chen Wang Liu 1959). Similarly, the Chinese state encouraged intra-clan dispute resolution and did not articulate a commercial code until the late nineteenth century. There was no separate legal branch in the Chinese administration, and administrators were penalized for a wrong verdict. Civil adjudication was aimed at finding a compromise, with the notable exception of enforcing legal rights over taxable land.

Clan loyalty and the absence of formal, impartial enforcement limited inter-clan cooperation. Indeed, although “friendship is one of the five ethical relationships [in Confucianism] and should not be disregarded, yet [clan rules often state that] one must be very careful about it” (Liu 1959, 148). About 95 percent of clan rules call for care in selecting friends, while only 8 percent call for “helping a friend in trouble” (ibid). Institutions governing trade reflect the resulting limited inter-clan interactions. The “dominant form” of organizing long-distance trade was clan and regional merchant groups (Debin Ma 2004, 267) that relied on moral obligations and reputation among specific individuals related by kinship or place of residence.

There were, obviously, cities in China. Yet, intra-clan loyalty and interactions limited urbanization, city size, and self-governance. Considering large cities, China’s urbanization rate remained between three and four percent from the eleventh to the nineteenth century, while the initially lower urbanization rate in Europe rose to about ten percent. Including small cities, urbanization rates were comparable, but China’s small cities were venues for cooperation among members of local clans rather than their melting pot. While the European cities gained self-governance, this did not happen in China until the modern period.

The lack of self-governed cities in China was not simply due to the power of the state, but also due to pervasive kinship structure that facilitated state control over cities. Immigrants to cities remained affiliated with their rural kinship groups. As late as the seventeenth century, “the majority of a city’s population consisted of so-called sojourners, people who had come from elsewhere and were considered (and thought of themselves as) only temporary residents... suspicions were always rife that sojourners could

not be trusted” (John Friedmann 2007, 274). Guild-like organizations (*huiguan*) extended the reach of the rural clans into the city, and in order to be a member it was necessary to belong to a particular place of origin (Christine Moll-Murata 2008).

In Europe, in contrast, generalized morality and the absence of kin groups by the tenth century led to a distinct trajectory of societal organization (Greif 2005, 2006a). Europe, at the time, was under attack, and both the Church and states were weak. Individuals created cities with the support of the Church and secular rulers. Residents organized themselves across kinship lines based on their interests, and economies of scale motivated immigrants who integrated with the existing population. Cities were therefore motivated to foster the Christian dogma of moral obligations toward non-kin. Cooperation among relatively large populations enabled most cities in Western Europe to gain self-governance by 1350.

Formal, legal enforcement supported intra-city, inter-lineage cooperation. The evidence reflects transitions from “handshakes” to contracts, and from electing voluntary judges relying on customary law to professional judges’ relying on a formal legal code. There was a large investment in legal infrastructure, and the number of legal professionals such as judges, attorneys, scribes, and notaries increased. Organizations (such as guilds) that provided club-goods also fostered cooperation among non-kin by the threat of exclusion. Enforcement costs were nevertheless high, and both the crime rate and “policemen” per capita were higher in large pre-modern European cities than in contemporary ones. The role of moral commitment to fulfilling contractual obligations, however, is suggested by widespread use of contracts that could not be legally enforced, such as contracts to create self-governed cities and to defraud another by no more than a given amount.

Intra-city cooperation enabled cities to provide local public goods. European rulers found it cost effective to harness cities’ administrative capacity in reasserting their power (Greif 2005). Cities collected taxes, provided navies, fought in wars, and administered justice on behalf of the state. Self-governed cities thereby restricted the power of monarchs to an extent beyond clans’ capacity. Intra-city formal enforcement supported intercity impersonal exchange through

the Community Responsibility System, under which all members of a city were liable for a default by any one of them on an intercity contractual obligation (Greif 2006). Impersonal exchange, in turn, reinforced generalized morality.

III. China and Europe—Contemporary Distinctions

In subsequent centuries significant institutional and cultural changes took place in both Europe and China. In particular, the rise of the West engendered a major backlash (including the Communist Revolution) against Chinese traditions. Yet, although institutions were changed, cultural traits persisted, and economic arrangements continue to reflect different traditions.

Even today, kinship groups remain a more important conduit for economic exchange in China. Chinese family firms are common, and in China “you trust your family absolutely, your friends and acquaintances to the degree that mutual dependence has been established. ... With everybody else you make no assumptions about their good will” (Gordon S. Redding 1993, 66). Business relations are personal and based on networking, *guanxi*, which means social connections and is a synonym for special favors and obligations. Networking, in turn, reinforces limited morality. “To make such networks operate reliably, Chinese society has come to attach central importance to the notion of trust. What is Chinese about this trust, however, is that it is ... limited to the partners in the bond. It works on the basis of personal obligations, the maintenance of reputation and face, and not on any assumption that a society’s shared faith makes all who share it equally righteous regardless of whether you know them or not” (Redding 1993, 67).

The World Value Survey (WVS, 2005–8) reveals that only 11.3 percent of Chinese trust a person whom they met for the first time compared to between 26.1 percent to 49.3 percent in the West (i.e., France, Great Britain, United States and Germany). Friendship is “very important” to less than 30 percent of Chinese but, on average, to almost 60 percent in the West. In the United States, the level of trust toward strangers exceeds 60 percent; in China it is less than 40 percent (Roland Inglehart, et al 1998). Similarly, outside of China proper, Chinese businessmen

perceive Westerners as more reliable in contractual obligations. For example, a 1994–5 survey of Chinese businessmen in Thailand and Hong Kong finds that “Westerners are considered [by the Chinese] to be attractive partners for ... their respect for the law and keeping of promises. Trustworthiness is a frequently mentioned trading attribute of non-Asians” (T.R. Pyatt and S.G. Redding 2000, 59). Indeed, the Hong Kong Chinese businessmen consider the Thai Chinese no more trustworthy and more opportunistic than Westerners.

The preliminary research discussed in this paper highlights that pre-modern China and Europe were evolving along distinct trajectories. One implication is the need to study their potentially distinct capacities in bringing about the modern economy and adjusting to it. More generally, the paper highlights that indigenous institutions and culture interrelate to constitute a coherent whole. The implied complementarities contribute to institutional persistence and can hinder inter-society institutional transfer.

REFERENCES

- Ebrey, Patricia Buckley, and James L. Watson.** 1986. *Kinship Organization in Late Imperial China 1000–1940*. Berkeley, CA: University of California Press.
- Fei, John C. H., and Ts’ui-Jung Liu.** 1982. “The Growth and Decline of Chinese Family Clans.” *Journal of Interdisciplinary History*, 12(3): 375–408.
- Friedmann, John.** 2007. “Reflections on Place and Place-Making in the Cities of China.” *International Journal of Urban and Regional Research*, 31(2): 257–79.
- Greif, Avner.** 1994. “Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies.” *Journal of Political Economy*, 102(5): 912–50.
- Greif, Avner.** 2005. “Commitment, Coercion, and Markets: The Nature and Dynamics of Institutions Supporting Exchange.” In *Handbook of New Institutional Economics*, ed. C. Menard and M. M. Shirley, 727–86. New York: Springer.
- Greif, Avner.** 2006a. “Family Structure, Institutions, and Growth: The Origins and Implications of Western Corporations.” *American Economic Review*, 96(2): 308–12.

- EQ1 Greif, Avner.** 2006b. *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge: Cambridge University Press.
- AQ2 Greif, Avner, and Guido Tabellini.** 2010. Work in progress.
- Inglehart, Ronald, Miguel Basañez, and Alejandro Moreno.** 1998. *Human Values and Beliefs. A Cross-Cultural Sourcebook*. Ann Arbor, MI: University of Michigan Press.
- Liu, Hui-Chen Wang.** 1959. *The Traditional Chinese Clan Rules*. New York: J. J. Augustin, Inc.
- Ma, Debin.** 2004. "Growth, Institutions and Knowledge: A Review and Reflection on the Historiography of 18th–20th Century China." *Australian Economic History Review*, 44(3): 259–77.
- Moll-Murata, Christine.** 2008. "Chinese Guilds from the Seventeenth to the Twentieth Centuries: An Overview." *International Review of Social History*, 53: 213–47.
- Pyatt, T. R., and S. Gordon Redding.** 2000. "Trust and Forbearance in Ethnic Chinese Business Relationships in Hong Kong and Thailand." *Journal of Asian Business*, 16(1): 41–63.
- Redding, S. Gordon.** 1993. *The Spirit of Chinese Capitalism*. 2nd ed. Berlin: Gruyter.
- Ruskola, Teemu.** 2000. "Conceptualizing Corporations and Kinship: Comparative Law and Development Theory in a Chinese Perspective." *Stanford Law Review*, 52: 1599–1729.
- Tabellini, Guido.** 2008. "The Scope of Cooperation: Values and Incentives." *Quarterly Journal of Economics*, 123(3): 905–50.

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SYMBOL	MEANING	EXAMPLE
	delete	take it out
	close up	per cent
	delete and close up	rem ove
	insert something here	something ^{is} missing
#	space	too #close
eq #	space evenly	space these consistently
stet	let stand	ignore marks and leave as was
tr or	transpose	this backwards is
	used to separate 2 or more marks in margin	^ / ^
][center]this should center[
[set farther to the left	[move left
]	set farther to the right	move right]
=	align horizontally	align with surrounding text
	align vertically	align with surrounding text
	move to next line	
	begin new paragraph	
sp	spell out	set PA as Pennsylvania
cap or ≡	set in capitals	ALL CAPS
sm cap or s.c.	set in small capitals	SMALL CAPITALS
lc	set in lowercase	lower case
ital	set in italic (underline the text)	<i>italic</i>
rom	set in roman	roman or regular
bf or	set in bold (squiggly underline of text)	BOLD
-	hyphen-used to join words and to separate syllables	
en or $\frac{1}{n}$	en dash—a connection between two things	2006–2007
em or $\frac{1}{m}$	em (long) dash—indicates a sudden break in thought	
\vee	superscript or superior	E=MC ²
\wedge	subscript or inferior	H ₂ O
$\hat{\cdot}$	centered	for a centered dot in p $\hat{\cdot}$ q
$\hat{,}$	comma	red, white, and blue
$\hat{'}\downarrow$	apostrophe	my sister's friend's investments
\odot	period	the end.
;	semicolon	he said; she said
:	colon	what follows proves: clarifies
$\text{“} \vee \vee \text{”}$ or $\text{“} \vee \vee \text{”}$	quotations marks	“the economist”
(/)	parentheses	(like this)
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