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 relying on different combinations of external (formal and informal) enforcement institutions and intrinsic motivation. Some (collectivist) societies rely more on informal enforcement and moral obligations within their constituting groups. Other (individualistic) societies rely more on formal enforcement and general moral obligations among individuals across groups.

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 pre-modern China’s and Europe’s societal organizations. It focuses on their distinct epitomizing social structures, the clan and the city, that sustain cooperation through a different mix of external enforcement and intrinsic motivation. The Chinese clan is a kinship-based hierarchical organization, where cooperation is sustained also by strong moral ties and reputation among clan’s members. In Medieval Europe, by contrast, the main example of a cooperative organization

* Stanford University and Bocconi University. Prepared for the session on “Development, Culture, and Institutions” organized by Karla Hoff for the ASSA meeting, Atlanta 2010. This research was supported by CIFAR and by an ERC Grant.
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 formal and informal 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 Greif and Tabellini (2010) and builds on the analysis of generalized vs limited morality in Tabellini (2008). A comparable analysis of the impact of initial beliefs and social structures is provided by Greif (1994, 2006) while Greif (2006, ch. 7) discusses the impact of the inter-relations among beliefs, morality, and organizations on societal evolution.

The outline of the paper is as follows: Section 1 discusses a conceptual framework that can explain why these two parts of the world undertook these different paths. Section 2 presents supporting historical evidence consistent with this explanation. Section 3 presents evidence on the persistent impact of these distinct societal organizations.

1. How to Support Cooperation: Clan vs 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 ways to achieve cooperation. To facilitate the discussion, we ignore other actors such as the state and religious authorities, to which we return in the historical discussion.

The clan is a kinship-based community whose members identify with and are loyal to. Cooperation within the clan is sustained by a combination of moral obligations and reputational incentives. Enforcement through formal institutions plays a small role. By contrast, the city is composed of members of many lineages and cooperation also relies on formal enforcement. It would be misleading, however, to describe the city as lacking any morality. In the city too, cheating and free riding are partially discouraged by intrinsic motivation. Moral obligations within the city differ from the clan’s in two ways: they 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 – this is the notion of generalized as opposed to limited morality (cf. Tabellini 2008). They have weaker intensity, in the sense of providing weaker intrinsic motivation to cooperate with others compared to that among clan members. 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 amongst 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 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 vs 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 dis-economies of scale in the enforcement of cooperation.

The preference composition within the organization is also relevant. A clan is more efficient and hence more attractive the larger is the fraction of its members with a strong sense of clan identity. For the same reason, 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 social interactions within the city.

One can see where this part of the story leads. Although multiple equilibria are possible, clans are more likely to emerge in a society dominated by values of clan loyalty, because such organizations are more efficient and hence more attractive. Clan loyalty would not support cooperation within a city, because of the heterogeneity of clan affiliations in this community. 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 emergence of one organizational form over another is explained by the diffusion of specific values in society.

The second part of the answer concerns cultural transmission. A society where cooperation occurs within the clan is likely to foster clan loyalty, both in scope and intensity. By contrast, if cooperation takes place within a large and heterogeneous population and it is enforced by formal city institutions, this will diffuse generalized morality and respect for the procedures and formal institutions that regulate social interactions in this wider community. In other words,
values evolve to reflect the prevailing social arrangements. The emergence of one moral system over 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.

We now discuss the historical evidence in light of this conceptual framework.

2. 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 subsequently recouped. The evidence indicates subsequent bifurcation consistent with our conceptual framework.

2a. Initial Conditions: Large kinship groups were common in most early societies. Yet, on the eve of the urban expansion in Europe and China circa 1000 CE, large kinship organizations predominated the former but not the latter. This distinction can be taken as an initial condition because it reflects political and religious processes 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. Similar to Christianity it emphasized 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 4,600 Buddhist monasteries and 40,000 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. Subsequently, clans (lineages) became “the predominant form of kinship organizations in late imperial China" (Ebrey and Watson, 1986, pp. 1, 6). Detailed information on the share of the population with lineage affiliation is not available but lineages were common in the south of China, were less common at the center and least common in the north of China.

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. Over time, however, tribal tendencies were deliberately undone by the Church. The marriage dogma that the Church advanced effectively dissolved the large kinship organizations (cf Greif 2006a). Consistent with its emphasis on the individual and generalized morality, the Church discouraged practices that sustain kinship groups, such as adoption, polygamy, concubinage, marriages among kin often up to the seventh degree, and marriages without the woman’s consent. By the 9th 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, circa 1000, in China 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.

2b. Subsequent Evolution: Subsequent cultural and institutional evolution reflects these
different initial conditions, in accordance with the ideas of the previous section. Here we focus on
the period of urbanization and economic growth that occurred in both China and Europe between
the 11th and the mid 14th centuries.

“The clan as a Chinese institution in the pre-modern period is generally believed to have
prevailed some 800 year, beginning with the Sung dynasty [960-1279]” (Fei and Liu 1982: 393).
Clans provided their member with poverty relief, education, religious services 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 economized on enforcement cost, the state should have created complementary
institutions to pursue its objectives. Indeed, clans were responsible for tax collection, for the
conduct of their members, and for training of candidates for the civil service exams. Intra-clan
cohesion was reinforced by rules that linked rights to buy land to clan’s membership, and by the
promotion of Neo Confucianism in which “the family was given a metaphysical foundation, and
filial piety was promoted to cult status” (Ruskola 2000: 1622).
Intra-clan enforcement reduced the need for formal institutions. Moreover, a formal legal system would have undermined the clans, an outcome opposed by the elders who controlled the clans and the state that used it. Indeed, clan rules regularly discouraged litigation and favored arbitration provided by the clan (Liu 1959). Similarly, the Chinese state encouraged clans to resolve intra-clan disputes internally and did not articulate a commercial code until the late 19th century. There was no separate legal branch in the Chinese administration, administrators with no legal training acted as judges, and they were penalized for a wrong verdict. Adjudication in civil disputes was aimed at finding a compromise.

Clan loyalty and the absence of formal, impartial enforcement limited inter-clan cooperation. Indeed, clans’ rules often state that although “friendship is one of the five ethical relationships [in Confucianism] and should not be disregarded, yet one must be very careful about it” (Liu, 1959, 148). About 95% of clan rules call for care in selecting friends while only 8% call for “helping a friend in trouble” (Ibid). Institutions governing trade reflect the resulting inter-clan segregation. The “dominant form” of organizing long-distance trade to the modern period was clan and regional merchant groups (Ma 2004, 267) and such exchange 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. China’s urbanization rate remained between three to four percent from the 11th to the 19th century while Europe’s urbanization rate, probably lower circa 1000 CE, rose to reach about ten percent by 1800 (Maddison 2001). Except for the very large administrative cities, China’s cities were smaller than Europe’s and their internal
organization was limited. 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 17th 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, ... Native-place guild compounds ensured a haven from a city that was ambivalent about their presence” (Friedmann, 2007, 274). Guilds-like organizations (*huiguan*) extended the reach of the rural clans into the city and to be a member “it was necessary to belong to a particular place of origin” (Moll-Murata 2008, 220).

In Europe, instead, generalized morality and the absence of kin groups by the 10th century led to 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. Cooperation among such relatively large population enabled cities to gain self-governance. By 1350, most cities in Western Europe gained self-governance.

Formal, legal enforcement supported intra-city, inter-lineage cooperation. The evidence reflects transitions from ‘hand-shakes’ to contracts and from electing voluntary judges relying on customary law to professional judges relying on a formal legal code. There was a disproportionate increase in the analysis of law and legal professionals such as judges, attorneys, scribes, and
notaries. 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 crime rate and ‘policemen’ per-capita were higher in pre-modern European cities than today. The role of moral commitment to fulfilling contractual obligations, however, is suggested by wide-spread use of contracts that could not be legally enforced. Examples include contracts to create self-governed cities and to defraud another by no more than a given amount. Cities were therefore motivated to foster the Christian dogma of moral obligations toward non-kin.

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 tax, 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 inter-city impersonal exchange through the Community Responsibility System under which all members of a city were held liable for default by any of them in inter-city contractual agreement (Greif 2006). Impersonal exchange, in turn, reinforced generalized morality.

3. 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 lead to major backlash, including the Communist Revolution, against China’s traditional institutions and culture. Yet, cultural traits and economic arrangements in China vs Europe continue to reflect their different traditions.
Even today, kinship groups remain a more important conduit for economic exchange in China than in the West. Chinese businesses tend to be family-based. “For example, among the 100 largest Taiwanese companies which control 20% of the Taiwan's GNP, all but two are owned either by a single person, or by close partners, or by a family. Of the two exceptions, one is foreign-owned; the other is owned by its unions” (Montagu-Pollock 1991). In Hong Kong 70% of the 20 largest firms is family held while a 2003 random sample of 311 private enterprises in Zhejiang province found that 62% of the businesses were family-firms (Chen and Lu 2009). In the US, the founding family ownership is present in 35% of firms in the Standard and Poor’s 500 and represents about 18% of equity (Bertrand and Schoar 2006).

In China “you trust your family absolutely, your friends and acquaintances to the degree that mutual dependence has been established and face invested in them. With everybody else you make no assumptions about their good will.” (Redding 1993, 66). Business relations are still personal and based on networking, guanxi, which literally 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 important 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% of Chinese trust a person whom they met for the first time compared to between 26.1% to 49.3% in the West (i.e., France, GB, USA and Germany). Friendship is ‘very important’ to less than 30% of Chinese but,
on average, to almost 60% in the West. In the US, the level of trust toward strangers exceeds 60%, in China it is less than 40 (Inglehart, Basanez, and Moreno 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” (Pyatt and Redding 2000: 59). Indeed, the Hong-Kong Chinese businessmen consider the Thai-Chinese no more trustworthy and more opportunistic than Westerners.
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