

From: P. Bernholz & R. V. K. (eds)
Political Competition, Innovation and
Growth in the History of Asian Civilizations
6. India Edward Elgar, Cheltenham, 2004

Deepak Lal

A major materialist hypothesis that political and military competition among states and decentralization promotes institutions which lead to economic freedom, innovation and development is belied by the case of India. I had used this counter-example to argue in my recent book *Unintended Consequences* (1998) that purely materialist explanations were insufficient to explain the differing economic outcomes in Eurasia over the last millennium.

In this chapter I first set out the similarities between India and 'Europe' in terms of being areas of Eurasia with cultural unity but political disunity. I then outline the reasons, based on my earlier book *The Hindu Equilibrium* (1988), why these similar initial conditions did not lead to the same institutional developments in India as in 'Europe'. In the final section I argue that, to understand the divergence in institutional developments, one has to bring in the role of what I have labelled 'cosmological beliefs', and show that even in this respect there were initially greater similarities between the cosmological beliefs of these two Eurasian civilizations, and that they only diverged because of two great Papal revolutions in the sixth to eleventh centuries initiated by the two Popes Gregory (the Great and the VII).

In this context it is worth noting that, the reason I have written 'Europe' is because as Michael Mann (1986) has rightly noted: 'Why is Europe to be regarded as a continent in the first place? This is not an ecological but social fact. It has not been a continent hitherto . . . Its continental identity was primarily Christian. It was known as Christendom rather than Europe' (p. 407). And when making civilizational comparisons the relevant civilization to be compared with Hindu India's is not even Christendom as a whole but Western Christendom.

I

Following in the footsteps of Kant (1784), Gibbon (1787) and Weber (1923), Eric Jones (1981) has based the rise of Western Christendom relative to the other great Eurasian civilizations on the political and institutional competition among the states which comprised a European 'state system'. This competition, apart

from making each of the states more contestable and hence limiting the natural predatoriness of the state (see Lal: 1988, 1998 for a model of the predator state) as emphasized for instance by North (1981), also allowed novelty and unorthodoxy to flourish and for new ideas and techniques to be rapidly diffused.

Why Western Christendom alone was able to create this 'equilibrium' state system was according to Jones due to the geography of the region. It had 'core areas' defined as pockets of alluvium on which intensive agriculture based on the plough could be carried out, but which were separated by natural barriers such as mountains, the sea, marshes and dense forests, so that it was difficult after the Romans to combine them into an empire. There was a natural division therefore into states whose basic geographical characteristics allowed them a stable existence.

But, as Jones himself noted of India: 'The matrix of nuclear areas and natural barriers smacks of Europe, especially as the same political divisions recur throughout history. As in Europe, it was costly to try to rule the subcontinent as a single empire. But why, given the makings of a similar set of competing polities, did no state's system emerge? The vessels were there but the brew of history was not poured into them' (p. 194). After a survey of various other explanations for the strength of India's social structure 'and the fluidity of its political and international systems' (Modelski 1964: 559), Jones writes: 'the conclusion seems to be that the structure of Indian society militated against political stability, and the lack of political stability militated against development' (p. 196).

But this only raises the further question: why did the Indian social structure arise and why did it not change if it was dysfunctional? Note also that, on the importance of this social structure is admitted in leading to different political and economic outcomes, despite ecological conditions being similar to 'Europe', the materialist hypothesis that it was the 'European' state system based on the region's ecology which led to economic freedom, innovation and development also collapses. For what has to be explained is why in similar ecological circumstances the differences in social structure arose, which in turn may have led to the 'state system', but certainly did lead to the lineaments of a free economy. That is of course the theme of my *Unintended Consequences*, and part of my explanation is given in section III below. But before that we need an explanation for the Indian social system – why it arose and how it impinged on the polity and thence the economy.

Finally, the lack of an 'equilibrium' state-system in India also meant that unlike 'Europe', political competition and decentralization were not preconditions for innovation and development. For one of the few things Indian historians agree on is that the periods of political stability under dynastic imperial rule – sometimes, though fairly rarely, extending over the whole of the subcontinent

– were also the most prosperous and glorious periods of Indian history, and the periods when innovation and growth took place. When these centralized empires broke down there was a regression, but not as serious as had been previously thought, as is documented in a detailed study by Bayly (1983) of the eighteenth century, when the Moghul empire disintegrated and the British empire was in its infancy. The basic reason for the prosperity of empires was that they provided the subcontinental law and order that allowed long-distance trade to develop, and their demise was usually accompanied by the decline of trade and commerce. As these periods of imperial stability were few and far between (encompassing parts of only eight centuries of the 23 since 300 BC) Indian standards of living probably cycled around a mean established around the second century BC. What we need to explain is the long cultural stability and economic stagnation in India despite its ecological and initially ‘cosmological’ similarities with Europe, and for this the origins of its unique social structure are crucial.

II

The three pillars of the Indian social system were: the relatively autarchic village communities, the caste system and the joint family. While modernization has undermined the first, the other two pillars stand firmly to our day. In my *Hindu Equilibrium* I provided an explanation for the origins of the caste system and the disjunction between state and society that it engendered, which in part explains the paradox about India that Jones and others have noted. Chapters 2 and 3 of the book may be consulted for the evidence on which the following assertions I shall be making are based.

Caste

I argued that the caste system arose once the nomadic Indo-European tribes, collectively labelled Aryans, who had entered the subcontinent through the northwest passes, spread along the Himalayan foothills towards Eastern India (modern-day Bihar) where they discovered the mineral deposits required to produce the implements they needed to clear the forests which covered the vast Indo-Gangetic plain, and to cultivate this vast alluvial plain with iron ploughs. Being nomadic pastoralists this new highly labour-intensive agricultural form was probably taught to them by the original inhabitants of parts of the plain who they initially enslaved and called Dasas. However they were faced by a number of problems.

Once the vast plain had been cleared it became the battle ground for various feuding monarchies. Though it formed a natural ‘core area’ in Eric Jones’s

sense, for an Indian state, given its size and the available military and transport technology, its domination by a single state has been episodic. Though its control and the dream of creating a subcontinental empire has been the lodestone of every Indian chieftain, these centripetal tendencies have been counterbalanced by the centrifugal forces flowing from geography.

This endemic political instability posed a problem in securing a stable labour supply for the relatively labour-intensive plough agriculture the Aryans came to practice. For it meant that various alternative methods of tying labour down when it was scarce relative to land (a common problem faced by Eurasian agrarian civilizations – see Domar 1970) were not available.

The most obvious is slavery. But in the absence of a centralized administrative system to register and enforce slave ‘contracts’ – which was precluded by the endemic political instability – a necessary condition for slavery to persist is the ease with which slaves can be distinguished from free men by some attribute such as pigmentation or language, the former being more inescapable than the latter. Slavery, apart from some domestic slaves, was unknown in India, though it seems that the original inhabitants, the Dasas – who were distinct from the Aryans in appearance and spoke a different language – were originally enslaved and then emancipated, largely because they had the agricultural skills, which the nomadic pastoralist Aryans did not, to work the plain. As agricultural techniques are notoriously imprecise and would also depend upon the willingness of the Dasas to demonstrate them, an incentive compatible solution was to emancipate them and give them autonomy in decision-making and control over agricultural operations, and incorporate them into the caste system at the lowest rung as Shudras, below the other three ‘twice-born’ Aryan castes (*varnas* – namely, *Brahmins* (priests), *Kshatriyas* (warriors) and *Vaishyas* (merchants)).

Other forms of tying labour down to land, like poll taxation, indenture or limitations on migration were also not feasible in the absence of a powerful centralized state and its attendant bureaucracy which was precluded by the endemic political instability.

The caste system provided a more subtle and enduring answer to the Aryans’ problem of maintaining their rural labour supply. It established a decentralized system of control which did not require any overall (and larger) political community to exist for its survival and it ensured that any attempt to start new settlements outside its framework would be difficult if not impossible. The division of labour by caste and its enforcement by local social ostracism were central to the schema.

The endogamous specialization of the complementary services required as inputs in the functioning of a viable settlement meant that any oppressed group planning to leave a particular village to set up on its own would find – if it were confined to a single caste group – that it did not have the necessary

complementary skills (specific to other castes) to start a new settlement. They would need to recruit members of other complementary castes to join them in fleeing the Aryan settlement. This would have been unlikely. For some of these other complementary castes would already have a high ritual and economic status, with little incentive to move to the more uncertain environment of a new settlement.

Neither could the oppressed lower castes (or individuals) acquire the requisite complementary skills themselves and thereby overcome the difficulty of putting together the required coalition to form a new settlement from within a single oppressed caste. This was unlikely to happen because of the social ostracism embedded in the caste system. It would not be profitable for other groups to impart the knowledge of these complementary skills, in as much as the ostracism involved in breaking the caste code, either as a consumer or producer (at each level of the caste hierarchy) would entail higher costs than any gains from performing any profitable arbitrage in the labour market that breaking the castewise segmentation of labour might entail.

Moreover, through the process of 'preference falsification' modelled by Kuran (1995), the system could continue even in the presence of 'hidden dissent'. For the system discourages open protests and disagreements; it uses open voting rather than secret ballots at meetings of caste councils to resolve disputes and it has sanctions against disagreements with the judgement of these councils. Thus a climate of opinion could be maintained that made it virtually impossible for dissenters to reveal themselves and thereby organize caste-breaking coalitions.

Group (but not individual) social and occupational mobility was allowed within the system, which allowed it to take account of changing balances in the demand and supply of different types of labour. Such mobility did occur within the inter-caste or intra-caste status hierarchy. This vertical mobility was dependent on the whole caste moving up the social hierarchy. This was usually done by adopting a different occupation, possibly migrating to a new region and demanding a higher ritual status. The very complicated vertical hierarchy of castes also made it easier to absorb new ethnic groups who arrived in successive waves throughout Indian history. Their place in the hierarchy was determined partly by their occupation and sometimes by their social origin.

That the caste system arose after the Aryans had begun to colonize the Indo-Gangetic plain is supported from the Vedic texts, where in the earlier Vedas going back to the time the Aryans were moving from the Indus along the foothills towards modern-day Bihar, it appears that their society was still organized on tribal lines. The caste differentiation of society only appears in the later Vedic texts which correspond to the later period when they had to clear the forests and cultivate the vast Indo-Gangetic plain and had to tie labour down to land.

Further support for this 'materialist' explanation for the caste system is provided by the different political and social organizations to be found in the foothills along which the Aryans initially travelled, and the plains. The former maintained the republican and tribal nature of the original Aryan tribes. Also, as a less labour-intensive form of agriculture apart from their traditional pastoralism was practised by the Aryans in these foothills, they did not need to tie down labour through the caste system. As such, even after the casteist monarchies were established on the plains, the republics in the foothills remained anti-casteist strongholds where two of the 'Protestant' anti-casteist religions of Buddhism and Jainism arose. These republics also provided a refuge for various groups – particularly the merchants (whose economic power was not matched by political power) – seeking to escape the casteist monarchies. The resulting conflict between tribe (in the foothill republics) and caste (in the monarchical plains) was only settled in the fourth century AD when Samudragupta destroyed the Licchavi republics, marking the final triumph of caste over tribe.

Thus caste only became part of Hindu cosmology after the Aryans had to colonize the plain, while various other aspects of the cosmology like reincarnation go back to the earlier period of the Rig Veda. Hence my argument that caste became part of Indian culture for the instrumental reason of tying labour down to land on the vast Indo-Gangetic plain.

Autarchic villages

The other decentralized element of the Hindu socio-political system were the relatively autarchic village communities which had the tradition of paying a certain customary share of the village output as revenue to the current overlord. The autarchy was the result of the endemic political instability which meant that long-distance trade was highly risky. The tradition of paying a fixed portion of output to the current overlord meant that any political victor had a ready and willing source of tribute already in place.

The caste system's vocational segmentation meant that war was a game for professionals, which saved the mass of the populace from being inducted into the deadly disputes of their changing rulers.¹ For the latter however, the ready availability of revenue from the customary local arrangements greatly reduced the effort required to finance their armies and courts. The village communities for their part bought relative peace and quiet and could carry on their daily business more or less undisturbed by the continuing aristocratic conflict. But this, together with the cosmological beliefs which placed the priest (*Brahmins*) above the rulers (*Kshatriyas*) meant that there was a complete disjunction between state and society.

This system yielded a fairly high standard of living from an early date

(ca second century BC), but it stagnated at that level for virtually the following two millennia. But if some heroic estimates are to be believed, this stagnation was at the level of per capita income only achieved by Britain in the reign of Elizabeth I (Maddison: 1971).² So for a very long time, from about 350 BC, Indian living standards were probably much higher than in other Eurasian civilizations. India was in a 'high equilibrium trap', but given its relative success there was little pressure to change it from within and the foreigners who have ruled India during the last millennia – the Muslims and the British – far from succeeding in changing this system, most often succumbed to it.

Thus it would seem that the social system established in India did put India on a different political and socio-economic trajectory than the West, and given its resilience and functional success there was no chance of the 'European' state system being established in the northern plain.

South India

This still leaves South India, which according to Jones's map of Eurasian core areas in early modern times shows that this was a region of a multiplicity of alluvium areas which were separated by various natural barriers and should again have provided the ecological conditions for a system of stable states. But this did not happen. Why?

Stein (1980) has argued that the South developed a distinctive polity which he calls a 'segmentary state'. This consists of virtually independent local units which at times recognize the moral (but not real) overlordship of a sacred ruler. (See also Kulke 1995 for alternative views on the nature of the Indian state.) The most distinctive feature of the region 'was that of numerous and scattered peasant localities separated by large and small tracts of inhospitable land' (p. 73). These natural barriers between the localities would have made the unification of the region under one ruler problematic. Nor was there a South Indian equivalent of the constantly feuding *Kshatriya* kingdoms of the North. These local units which were composed of a number of large and densely populated villages – the segments of the segmentary state – were governed by assemblies (*sabhas*) of the local Brahmin and dominant landed *Shudra* castes. The constituents governed by these assemblies inhabited a single territorial unit.

There was no massive migration of Aryans from the North. The Aryans moving into the southern peninsula from about the sixth century BC were initially traders in search of the metals which were essential for providing the instruments of the Aryan colonization of the Gangetic plain – swords and ploughshares. The Gangetic supply of these metals had started drying up by the time of Ashoka (268–31 BC). Hence the Aryan thrust to the South. But no attempt was made at active colonization. Instead under the aegis of *Brahmin*

migrants a gradual process of Sanskritization took place, which by the ninth century had created a distinct Hindu-Dravidian society and polity in this macro-region.

These *Brahmins*, by the time of Ashoka, had become the spearhead for the spread of Indian caste society in undeveloped areas all over India (Kosambi 1981): 'They first brought plough agriculture to replace slash and burn cultivation, or food gathering. New crops, knowledge of distant markets, organization of village settlements, and trade also came with them. As a result kings or kings-to-be invited *Brahmins*, generally from the distant, Gangetic basin, to settle in unopened localities' (p. 172). For this, they were given land grants which led to the distinctive *Brahmin* villages (*brahmadeyas*) of the South. With this direct control over the land and those dependent on land, the *Brahmins* in the South came – unlike their northern brethren – to have secular authority in addition to their sacerdotal ones.

The caste society in the South came to be based on a tripartite division of society. At the top were the *Brahmins* in a secular alliance with respectable (*sat*) agricultural *Shudra* castes and the rest of the lower castes – also designated as *Shudras* in terms of *varna* – who in turn were subdivided into left-hand and right-hand castes, with the latter being associated with agricultural production and local trade in agricultural commodities and the former with artisan production and trade in non-agricultural production. The *Vaishya* castes of the North seemed to be merged into the two bifurcated lower castes of *Shudras*.

The *Kshatriya* caste is notable for its absence, in part because as the *Brahmins* did not come to the South in the wake of a martial conquest, they would not have required any warrior class to maintain their position in the secular order (as they did in the North). 'Collaboration with would-be *Kshatriya* warriors could not strengthen, but only weaken, *Brahmin* secular authority' (Stein 1980: 71). They only needed to maintain their alliance with the dominant landed castes in their locality – groups which were probably responsible for inviting them as technical and ideological experts in the first place.

For the landed upper castes, the *Brahmins* provided the form of social organization and ideology (the caste system) to tie down relatively scarce labour to land (as in the North) in these 'core' areas where labour-intensive plough agriculture – also probably brought from the North – was feasible. The *sabhas* and the corporatist nature of the institutions for defence and governance of the localities in the segmentary state could have been an adaptation by the *Brahmins* of the caste system to the older forms of government – with the difference that these were now controlled by the local dominant groups, the *Brahmins* and the upper-caste landlords.

Once established, by about the ninth century AD, this peasant 'ecosystem' remained virtually unaltered up the nineteenth century (see Stein 1980: 24–5).

Thus, even though it had ecological similarities with 'Europe', by the time of the Islamic invasions of North India (AD 1000), the whole of the subcontinent was in the grip of that equilibrium marked by cultural stability (albeit with variations between the North and the South) and economic stagnation which I have labelled the 'Hindu equilibrium'.

III

If ecological conditions did not differ markedly between India and 'Europe', we need to look elsewhere for the Great Divergence between the Eurasian civilizations. In my *Unintended Consequences*, like Weber and more recently Landes (1998), I argued that material differences cannot provide the answer and that cultural differences must be taken into account. As culture is a murky concept which is as a result highly suspect in the eyes of economists, I provided a definition which I hope is both rigorous and useful.

The definition adopted by ecologists is particularly useful (see Colinvaux 1983). They emphasize that unlike other animals, the human one is unique because its intelligence gives it the ability to change its environment by learning. It does not have to mutate into a new species to adapt to the changed environment. It learns new ways of surviving in the new environment and then fixes them by social custom. These social customs form the culture of the relevant group, which are transmitted to new members of the group (mainly children) who do not then have to invent these 'new' ways *de novo* for themselves.

This definition of culture fits in well with the economists' notion of equilibrium. Frank Hahn describes an equilibrium state as one where self-seeking agents learn nothing new so that their behaviour is routinized. It represents an adaptation by agents to the economic environment in which the economy 'generates messages which do not cause agents to change the theories which they hold or the policies which they pursue'. This routinized behaviour is clearly close to the ecologists' notion of social custom which fixes a particular human niche. On this view the equilibrium will be disturbed if the environment changes and so, in the subsequent process of adjustment, the human agents will have to abandon their past theories, which would now be systematically falsified. To survive they must learn to adapt to their new environment through a process of trial and error. There will then be a new social equilibrium, which relates to a state of society and economy in which 'agents have adapted themselves to their economic environment and where their expectations in the widest sense are in the proper meaning not falsified'.

It is useful to distinguish between two major sorts of beliefs relating to different aspects of the environment. These relate to what I labelled the material and

cosmological beliefs of a particular culture. The former relate to ways of making a living and concerns beliefs about the material world, in particular about the economy. The latter are related to understanding the world around us and mankind's place in it which determine how people view their lives – its purpose, meaning and relationship to others. There is considerable cross-cultural evidence that material beliefs are more malleable than cosmological ones (see Hallpike 1986, Boyd and Richerson 1985). Material beliefs can alter rapidly with changes in the material environment. There is greater hysteresis in cosmological beliefs, on how, in Plato's words, 'one should live'. Moreover, the cross-cultural evidence shows that rather than the environment it is the language group which influences these worldviews.

This distinction between material and cosmological beliefs is important for economic performance because it translates into two distinct types of 'transactions costs' (Lal 1999, Chapter 11). Broadly speaking, transactions costs can be distinguished usefully as those costs associated with the efficiency of exchange, and those which are associated with policing opportunistic behaviour by economic agents. The former relate to the costs of finding potential trading partners and determining their supply–demand offers, the latter to enforcing the execution of promises and agreements. These two aspects of transactions need to be kept distinct. Douglass North (1990) and Oliver Williamson (1985) have both evoked the notion of transactions costs and used them to explain various institutional arrangements relevant for economic performance. They are primarily concerned with the cost of opportunistic behaviour, which arises for North with the more anonymous non-repeated transactions accompanying the widening of the market, and for Williamson from the asymmetries in information facing principals and agents, where crucial characteristics of the agent relevant for measuring performance can be concealed from the principal. Both these are cases where it is the policing aspects of transactions costs which are at issue, not those concerning exchange.

Cosmological beliefs are part of the culture which seeks to constrain basic human nature to minimize these policing transactions costs. Evolutionary anthropologists and psychologists maintain that human nature was set during the period of evolution ending with the Stone Age. Since then there has not been sufficient time for any further evolution. This human nature appears darker than Rousseau's and brighter than Hobbes's characterizations of it. It is closer to Hume's view that 'there is some benevolence, however small . . . some particle of the dove kneaded into our frame, along with the elements of the wolf and serpent'. For even in the hunter-gatherer Stone Age environment the supremely egotistical human animal would have found some form of what evolutionary biologists term 'reciprocal altruism' useful. Cooperation with one's fellows in various hunter-gatherer tasks yields benefits for the selfish

human which can be further increased if he can cheat and be a free rider. In the repeated interactions between the selfish humans comprising the tribe, such cheating could be mitigated by playing the game of 'tit for tat'. Evolutionary biologists claim that the resulting 'reciprocal altruism' would be part of our basic Stone Age human nature.

Archaeologists have also established that the instinct to 'truck and barter', the trading instinct based on what Sir John Hicks used to call the 'economic principle' – 'people would act economically; when an opportunity of an advantage was presented to them they would take it' – is also of Stone Age vintage (see Ridley 1996, Chapter 10, esp. pp. 209–10 and references). It is also part of our basic human nature.

With the rise of settled agriculture and the civilizations that evolved around them, however, and the stratification this involved between three classes of men – those wielding the sword, the pen and the plough – most of the Stone Age basic instincts which comprise our human nature would be dysfunctional. Thus with the multiplication of interactions between human beings in agrarian civilizations, many of the transactions would have been with anonymous strangers whom one might never see again. The 'reciprocal altruism' of the Stone Age which depended upon a repetition of transactions would not be sufficient to curtail opportunistic behaviour.

Putting it differently, the 'tit for tat' strategy for the repeated Prisoners' Dilemma (PD) game amongst a band of hunter-gatherers in the Stone Age would not suffice with the increased number of one-shot PD games that will arise with settled agriculture and its widening of the market. To prevent the resulting dissipation of the mutual gains from cooperation, agrarian civilizations internalized restraints on such 'antisocial' action through moral codes which were part of their 'religion'. But these 'religions' were more ways of life, as they did not necessarily depend upon a belief in God.

The universal moral emotions of shame and guilt are the means by which these 'moral codes' embodied in cultural traditions are internalized in the socialization process during infancy. Shame was the major instrument of this internalization in the great agrarian civilizations. Their resulting cosmological beliefs can be described as being 'communalist'.

The basic human instinct to trade would also be disruptive for settled agriculture. For traders are motivated by instrumental rationality which maximizes economic advantage. This would threaten the communal bonds that all agrarian civilizations have tried to foster. Not surprisingly most of them have looked upon merchants and markets as a necessary evil, and sought to suppress them and the market which is their institutional embodiment. The material beliefs of the agrarian civilizations were thus not conducive to modern economic growth.

There were greater similarities in the 'communalist' cosmological beliefs of

the great Eurasian agricultural civilizations than differences. Nowhere was this more so than between Hinduism and Christianity. First, in both there was a disjunction between power and status, where the priests were subject to the king but considered themselves to be religiously or absolutely superior. Second, both – as well as the Greeks – were to an extent individualistic. But this individualism as Dumont (1986) has emphasized was 'out-worldly' rather than the 'in-worldly' individualism that has come to define modern individualism, of the individual in the world. Although for the Greeks, Christians and Hindus salvation was ultimately personal, and they allowed for a role for the individual renouncer, as among the Greek Stoics, the form of individualism was 'out-worldly'. For, as Dumont states: 'the renouncer is self-sufficient, concerned only with himself. His thought is similar to that of the modern individual, but for one basic difference: we live in the social world, he lives outside it' (p. 26).

That this 'out-worldly' individualism was not of the 'in-worldly' type now associated with the West is brought out clearly by Gellner (1988). He tries to picture a Hindu Robinson Crusoe, a polyglot called Robinson Chatterjee. 'A Hindu Crusoe,' he writes, 'would be a contradiction. He would be destined for perpetual pollution: if a priest, then his isolation and forced self-sufficiency would oblige him to perform demeaning and polluting acts. If not a priest, he would be doomed through his inability to perform the obligatory rituals' (p. 121).

The Great Divergence arose in my view because the West alone departed from this 'out-worldly' individualism common to many of the great agrarian Eurasian civilizations. Uniquely for Eurasian agrarian civilizations, whose common cosmological beliefs can be broadly categorized as 'communalist', medieval Europe departed from the pattern and became individualist (Dumont 1986). This was due to the reinterpretation of Pauline Christianity by St Augustine in the fifth century in his 'City of God' which converted the 'other-worldly' individualism of the Christian Church (a trait which it shares with Hinduism) into an in-worldly one by demanding the Church be put above the state (Dumont 1986) a demand that Pope Gregory VII fulfilled in the eleventh century with his injunction 'Let the terrestrial kingdom serve – or be the slave of the celestial', and which led to the so-called Papal legal revolution.

This change in cosmological beliefs is of course the factor which Max Weber and more recently David Landes have identified as the cause of the Great Divergence, but as both base it on the Protestant Ethic, they have got their dates wrong. For as Hicks (1969) noted, an essential element in the rise of capitalism was: 'the appearance of banking, as a regular activity. This began to happen long before the Reformation; in so far as the "Protestant Ethic" had anything to do with it, it was practice that made the Ethic not the other way round' (pp. 78–9).

By contrast I have argued in *Unintended Consequences* that the change in cosmological beliefs was mediated by the Catholic Church in the sixth–eleventh centuries, through its promotion of individualism, first in family affairs by Pope Gregory the Great, and later in material relationships which included the introduction of all the legal and institutional requirements of a market economy as a result of Gregory VII's Papal revolution in the eleventh century (see Berman 1983). These twin Papal revolutions arose because of the unintended consequences of the Church's search for bequests – a trait that goes back to its earliest days.

But this is another story and this is not the place to retell it. Suffice it to say that I hope I have said enough by comparing the similarities in the initial material conditions and cosmological beliefs of India and 'Europe' to show first, that ecology alone cannot explain the rise of the state system in 'Europe', and second, that it is the changes in cosmological beliefs in 'Europe' which must also be included in the 'package' of explanations as Needham (1969) has called it that explains the great divergence of the civilizations of Eurasia.

NOTES

1. I would accept the point made by Erich Weede in his comments on this chapter that this led to the disarming of the population which could not then directly threaten the rulers to obtain various rights. This was a crucial difference from the system used in European manorial feudalism – to tie scarce labour down to land. I would also accept his point that the Muslim centuries perpetuated the economic stagnation because of 'sultanism'. But neither point contradicts my main argument that it was the Indian socio-economic system created over the Hindu millennia which provided cultural stability and economic stagnation in India.
2. The only relative comparisons of standards of living in India and other countries are based on impressionistic travellers' accounts. Amongst them are those by the Greek Megasthenes (ca. 315 BC), the Chinese travellers Fan Hsien (AD 405–411), and Huan Tsiang (AD 630–644) and the Arab Alberuni (AD 1030). These suggest that Indian standards of living were certainly a match for and probably higher than those of these contemporaneous civilizations.

REFERENCES

- Bayly, C. (1983), *Rulers, Townsmen and Bazaars*, Cambridge: Cambridge University Press.
- Berman, H.J. (1983), *Law and Revolution*, Cambridge, MA: Harvard University Press.
- Boyd, R., and P.J. Richerson (1985), *Culture and the Evolutionary Process*, Chicago, IL: University of Chicago Press.
- Colinvaux, P. (1983), *The Fates of Nations*, London: Penguin.
- Domar, E. (1970), 'The causes of slavery or serfdom: a hypothesis', *Journal of Economic History*, **30**, 18–32.
- Dumont, L. (1986), *Essays on Individualism*, Chicago, IL: University of Chicago Press.

- Gellner, E. (1988), *Plough, Book and Sword: the Structure of Human History*, London: Collins Harvill.
- Gibbon, E. (1787), *The Decline and Fall of the Roman Empire*, reprinted 1985, London: Penguin Classics.
- Hahn, F. (1973), *On the Notion of Equilibrium in Economics*, Cambridge: Cambridge University Press.
- Hallpike, C.R. (1986), *The Principles of Social Evolution*, Oxford: Clarendon Press.
- Hicks, J.R. (1969), *The Theory of Economic History*, Oxford: Oxford University Press.
- James, Eric L. (1981), *The European Miracle*, Cambridge: Cambridge University Press.
- Kant, I. (1784), 'Idea of a universal history from a cosmopolitan point of view', reprinted in P. Gardner (ed.) (1959), *Theories of History*, New York: Free Press.
- Kosambi, D.D. (1981), *The Culture and Civilization of Ancient India*, New Delhi: Vikas.
- Kulke, A. (ed.) (1995), *The State in India 1000–1700*, New Delhi: Oxford University Press.
- Kuran, T. (1995), *Private Truths, Public Lies*, Cambridge, MA: Harvard University Press.
- Lal, D. (1988), *The Hindu Equilibrium*, Oxford: Clarendon Press.
- Lal, D. (1998), *Unintended Consequences*, Cambridge, MA: MIT Press.
- Lal, D. (1999), *Unfinished Business*, New Delhi: Oxford University Press.
- Landes, D.S. (1998), *The Wealth and Poverty of Nations*, New York: Norton.
- Maddison, A. (1971), *Class Structure and Economic Growth: India and Pakistan Since the Moghuls*, London: Allen and Unwin.
- Mann, M. (1986), *The Sources of Social Power*, Vol 1, Cambridge: Cambridge University Press.
- Modelski, G. (1964), 'Kautilya: foreign policy and international system in the ancient Hindu world', *American Political Science Review*, **58**, 549–60.
- Needham, J. (1969), *The Grand Titration: Science and Society in East and West*, London: Allen and Unwin.
- North, D. (1981), *Structure and Change in Economic History*, New York: Norton.
- North, D. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.
- Ridley, M. (1996), *The Origins of Virtue*, London: Viking.
- Stein, B. (1980), *Peasant State and Society in Medieval South India*, New Delhi: Oxford University Press.
- Weber, M. (1923), *General Economic History*, reprinted 1961, New York: Collier.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, New York: Free Press.