

**THE COMMUNICATIONS REVOLUTION,  
TRANSACTIONS COSTS, CULTURE  
AND ECONOMICS PERFORMANCE**

by

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ABSTRACT

In examining the effects of the communications revolution on economic performance, the paper makes a distinction between the exchange and policing aspects of transactions costs and shows how they can be mapped into what are distinguished as the material and cosmological beliefs of different cultures. It argues that whilst the transaction costs associated with 'exchange' will decline (using evidence from 15 developing countries on the costs of doing business), the effects on the 'policing' aspects of transactions costs are more ambiguous and likely to vary across cultures.

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by

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"The information highway will transform our culture as  
dramatically as Gutenberg's press did the Middle Ages"  
(Bill Gates)<sup>1</sup>

INTRODUCTION

In understanding the role the communications revolution (encompassing a global information highway potentially linking millions of personal computers around the world, as well as satellite television and the declining costs of air and sea freight), and long run economic performance, it is useful to take note of the role of "transactions costs" in the working of an economy.

The idealized norm of economic efficiency represented by the notion of "perfect competition" assumes away such transactions costs. The importance of transactions costs as explanations of market failure (see Arrow (1970)), as determinants of different forms of economic organization (see Williamson (1979)) and the differing economic histories of currently developed countries (see North (1981)) is well known. Myint (1970, 1985) has also emphasized differences in "organizational structure" with accompanying differentials in transactions costs as an important determination of the differences in the economic performance of developing countries. However, as numerous critics of the notion have noted, "the concept [of transaction costs] waits for definition" (Williamson (1979)).<sup>2</sup>

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<sup>1</sup>This paper is based on a paper prepared for Nemetria's Vith conference on Ethics and Economics, Foligno, Italy, Oct. 1997, and section 1 (a) of Part II on an unpublished working paper Lal-Patel (1988). Patel is the co-author of this section. I am grateful for comments on a earlier draft by Harold Demsetz and Jack Hirshleifer.

The broad notion, however, is well defined by Arrow as follows: "transaction costs are costs of running the economic system" (p.2) <sup>3</sup>

They include costs of information as well as those of exclusion (of non-buyers of the relevant goods). These transactions costs drive a wedge, in effect, between the bid and ask prices of those market participants who have not yet found it in their interest to exchange. The market for a particular good will cease to exist if the wedge is so large as to push the lowest price at which anyone is willing to sell above the highest price anyone is willing to pay.<sup>4</sup>

Transactions costs are also incurred in acquiring, processing and transmitting the relevant information to design public policies, as well as in enforcing compliance. Their presence, therefore, from the viewpoint of technocratic economics provides the most general cause not only for "market" but also bureaucratic or "government" failure, which makes the Pareto efficiency norm of this form of 'nirvana economics' unattainable.<sup>5</sup> For our purpose this nirvana stance is irrelevant as efficiency cannot be defined with respect to an unattainable ideal but only in terms of minimizing avoidable costs. A reduction in these costs undeniably increases the wealth of the community, which is the relevant consideration in assessing the impact of the information revolution.

Broadly these transactions costs can be distinguished in another more useful way. These are the transactions costs associated with the efficiency of exchange, and those which are associated with policing opportunistic behavior by economic agents.<sup>6</sup> 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. The economic historian Douglass North<sup>7</sup> and the industrial organization

and institutionalist theorist Oliver Williamson<sup>8</sup> 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 behavior, 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.

In examining the effects of the ongoing communications revolution on future economic performance I shall argue (in Part II) that, whereas the transactions costs associated with exchange will decline, by using the evidence collected in an empirical experiment on the costs of doing business in developing countries in the late 1980's from Lal and Patel (1988), the effects on policing are more ambiguous, and are likely to vary across existing cultures (in Part III). <sup>9</sup>To see this we will have to make a brief excursus into the realm of culture and a potted and greatly simplified history of the evolution of these transactions costs in the evolution of current Eurasian civilizations (in Part I).

## I

### 1.ON CULTURE AND SOCIAL EQUILIBRIA

We first need a definition of culture. I have found a definition adopted by ecologists particularly useful.<sup>10</sup> 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<sup>11</sup> describes an equilibrium state as one where self-seeking agents learn nothing new so that their behavior 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 behavior 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".

This equilibrium need not be unique nor optimal, given the environmental parameters. But once a particular socio-economic order is established, and proves to be an adequate adaptation to the new environment, it is likely to be stable, as there is no reason for the human agents to alter it in any fundamental manner, unless and until the environmental parameters are altered. Nor is this social order likely to be the result of a deliberate rationalist plan. We have known since Adam Smith that an unplanned but coherent and seemingly planned social system can emerge from the independent actions of many individuals pursuing their different ends and in which the final outcomes can be very different from those intended.

To see how the communications revolution as Bill Gates asserts in the epigraph will effect culture, and how this will in

turn effect economic performance, it is useful to distinguish between two major sorts of beliefs relating to different aspects of the environment. These relate to what have been labelled the material and cosmological beliefs of a particular culture.<sup>12</sup> 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.<sup>13</sup> 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 world-views.<sup>14</sup>

This distinction between material and cosmological beliefs is important for economic performance because it translates into the two distinct types of "transactions costs" noted above. To see this it is useful to briefly delineate how broadly speaking material and cosmological beliefs have altered since the Stone Age in Eurasia.

## 2.CHANGING MATERIAL AND COSMOLOGICAL BELIEFS

### (i) On Human Nature:

Evolutionary anthropologists and psychologists maintain that human nature was set during the period of evolution ending with the Stone Age.<sup>15</sup> Since then there has not been sufficient time for any further evolution. This human nature appears darker than Rousseau's and brighter than Hobbes' 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. Co-operation 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.<sup>16</sup>

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"<sup>17</sup> - is also of Stone Age vintage.<sup>18</sup> It is also part of our basic human nature.

#### (ii) Agrarian Civilizations:

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-<sup>19</sup> 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 who 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 behavior.

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.<sup>20</sup> To prevent the resulting dissipation of the mutual gains from co-operation, agrarian civilizations internalized restraints on such 'anti-social' action through moral codes which were part of their 'religion'.<sup>21</sup> 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.<sup>22</sup> Shame was the major instrument of this internalization in the great agrarian civilizations. Their resulting cosmological beliefs can be described as being 'communalist'.<sup>23</sup>

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.

(iii) The Rise of the West:

The rise of the West was mediated by the Catholic Church in the 6th-11th centuries,<sup>24</sup> through its promotion of individualism, first in family affairs 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 the Great's Papal revolution in the 11th century.<sup>25</sup> This lifted the lid on the basic human instinct to 'truck and barter', and in time to a change in the traditional Eurasian pattern of material beliefs with their suspicion of markets and merchants. This in time led to modern economic growth.

But it also led to a change in the traditional Eurasian family patterns which were based on various forms of 'joint families' and family values, which essentially removed the lid on the other opportunistic basic instincts which the shame based moral codes of Eurasia had placed. To counter the potential threat this posed to its way of making a living- settled agriculture- the Church created a fierce guilt culture in which Original Sin was paramount, and morality was underwritten by the belief in the

Christian God. The classic statement of this Christian cosmology was St. Augustine's "City of God". His narrative of a Garden of Eden, a Fall leading to Original Sin and a Day of Judgment with Heaven for the Elect and Hell for the Damned has subsequently had a tenacious hold on Western minds.

Thus the philosophes of the Enlightenment displaced the Garden of Eden by Classical Greece and Rome, and God became an abstract cause- the Divine Watchmaker. The Christian centuries were the Fall. The Enlightened were the Elect and the Christian Paradise was replaced by Posterity.<sup>26</sup> This seemed to salvage the traditional morality in a world ruled by the Divine Watchmaker. But once Darwin had shown him to be blind, as Nietzsche proclaimed from the housetops at the end of the 19th century, God was dead, and the moral foundations of the West were thereafter in ruins. But the death of the Christian God did not end secular variations on the theme of Augustine's Heavenly City. Marxism, Freudianism and the recent bizarre Eco-fundamentalism are secular mutations of Augustine.<sup>27</sup> But none of them have succeeded in providing a moral anchor to the West. Such an anchor is of importance to the economy because the 'policing' type of transactions costs associated with running an economy are increased in its absence.<sup>28</sup>

There is also the growing collapse of the Western family. It was presaged by the overthrowing of the traditional family patterns of Eurasian civilizations by Gregory I's individualist family revolution<sup>29</sup>. This would have destroyed the Western family much earlier were it not for the subsequent fierce guilt culture the Church promoted in the Middle Ages<sup>30</sup>, which kept the traditional morality in place. But with the exorcising of both guilt and shame as illegitimate moral emotions in the West, there are fewer moral bulwarks left to shore up the family.

Another consequence of Gregory I's family revolution was that the social safety nets provided by the family in most Eurasian societies were from an early date partly provided by the State in the West.<sup>31</sup> This nationalization of welfare accelerated in this century, leading to vast transfer states. The accompanying erosion

of traditional morality in the West is manifest in various social pathologies- such as widespread family breakdown, high levels of illegitimacy and divorce, proliferation of single parent families, soaring crime rates and the perpetuation of an urban underclass.<sup>32</sup>

There is, thus, paradoxically a fin d'siecle pessimism in the West, succinctly expressed by the title of Judge Bork's recent book Slouching Towards Gomorrah, at a time when its prosperity is unparalleled and its material beliefs have triumphed with the worldwide move from the plan to the market.

These material beliefs are being further strengthened world wide by the communications revolution, whilst at the same

time there is growing resistance in the rest of the world to the West's cosmological beliefs. Many fear that the communication revolution will spread this Western virus undermining the cosmological beliefs of other societies. Nowhere is this fear as great as in the lands of Islam. For being like their Christian cousins, people of the Book, they are afraid that any undermining of the authority of their Book by the secularization that seems to accompany the modernization promoted by the West's material beliefs will erode the cement of their societies as it has in the West. But this fear of Westernisation whilst still desiring the cornucopia of riches which modernization offers is also to be found in the non-Semitic civilizations of Asia. The Chinese leadership, Lee Kwan Yew in Singapore and Mohammed Mahatir of Malaysia are emblematic of this trend. They want to embrace the information highway whilst seeking to control any influence it may have on the cosmological beliefs of their subjects, as well as any erosion of their etatism.

## II

### 1.MATERIAL BELIEFS AND TRANSACTIONS COSTS OF EXCHANGE

That the reduction in transaction costs associated with exchange will indubitably increase economic efficiency worldwide is undeniable. The existence of various middlemen between buyers

and sellers who lived by arbitrage attests to the existence of these transactions costs. Bill Gates is right to say that these costs will be transformed and greatly reduced in the new Information Age. Already if you are a book-buyer with a computer and a modem you have access to a universal book shop on the Internet- Amazon.com- which , for the price of a local telephone call can send you any book in print, overnight. Information costs are being steadily reduced. This is all to the good from the viewpoint of economic performance.

Some empirical evidence on how a decline in these costs of communications which are part of the 'costs of doing business' vary across developing countries and effect their economic performance is provided by the following experiment conducted at the World Bank in 1987 by Lal and Patel (1988). It was concerned with the costs of communication in doing business, namely with "the costliness of the information needed to enter and participate in any market" (Arrow, op.cit.). A large part of these costs are in terms of the time and money required in eliciting the requisite information to carry out the exchange.

These information costs of mediating commodity exchanges between producers and consumers will depend upon: (a) the physical "information transmission" infrastructure - e.g. the efficiency of the telephone and postal services - and (b) on social behavior - viz. how rapidly do economic agents react to their emerging net profit opportunities. The importance of emphasizing net profits is that it takes account of the differing incentives facing agents in different economic systems. If the price of a shirt is \$X and the person who sells it receives only \$p.X ( $p < 1$ ), then if p is very low (say because under some forms of state socialism the "seller" gets no net profit from the sale for himself) there may be little or no reaction to a demand signal for the good.

#### (a) The Costs of Doing Business in 15 Developing Countries:

This section provides some crude estimates of these costs of

communication or what are better described as "the costs of doing business" in different developing countries based on Lal-Patel (1991). It is assumed that the cross-country differences observed are due to differences in the costs of physical information transmission and/or the incentive systems in the countries concerned which lead to differing net profits and hence response times of the economic agents (who are otherwise implausibly assumed to be alike) in different developing countries. It also examines if the empirical estimates of the relative costs of doing business can help to explain some aspects of the aggregate economic performance of these countries.

For a sample of 15 countries included in Lal-Myint (1996) and chosen because they were major exporters of garments to the US,<sup>33</sup> the trade sections of the respective Embassies in Washington were asked in 1987 for a list of firms in their countries which could export ready-made garments to the USA. On receipt of this information telexes were sent to 2 to 5 firms in each of the 15 countries requesting the following information: (i) price of 1,000 dozens men's cotton/polyester shirts; (ii) the delivery time of the shirts. (This information was not relevant for the experiment, but was elicited to make the orders credible). The telexes were sent to the various countries at different times in the US, so that they reached each country during normal working hours.

The response time was calculated as the duration between sending the telex and obtaining a reply. These response times are presented in Table 1. For each country the time taken by the corporations to respond (making some rough adjustment for the response of more than one firm) was used to construct a rank order of countries in terms of lowest "transactions costs", (for which response time is a proxy). The shortest response time was that of Hong Kong. There was no response from Colombia and Uruguay, and there were doubts about the response time of Madagascar. So they were excluded from the study. The data on the remaining countries is given in Table I. These 12 countries are rank ordered in terms

of the lowest "transactions costs" in terms of our response time index in column (1) of Table I.

Next, simple rank-order correlations were made to see if there was an association between the index of relative transactions costs and the relative economic performance of these countries. As the 'transactions cost' index relates directly to the export sector, it would be expected to influence the relative export performance of the sample countries. As a measure of this relative export performance two variables were used: (i) the export growth rate (X) for 1986, the year preceding the survey (see column (2) of Table II), and (ii) the rate of growth of exports from 1980-85 (see column (3) of Table II). The Spearman rank-order correlations for both these variables were statistically significant.

(b) The Communications Revolution and the Emerging International Division of Labor:

An equally important effect of the communication revolution is the new international division of labor it is promoting. In California there are now virtual factories, which take orders for and design bespoke products tailored to the particular tastes of individual consumers, and then 'produce' these by placing orders with the most efficient production facilities they can find around the globe.<sup>34</sup> The computer and Federal Express- at least for the least bulky goods- ensure that differentiated tastes can be catered for in a timely and efficient manner through global bespoke mass production.<sup>35</sup>

(c) Political Economy Consequences:

The political consequences of the communications revolution are equally important and unavoidable. I will deal only with those relating to political economy. The State through human history has by and large been predatory.<sup>36</sup> Until the Administrative Revolution associated with the consolidation of the nation-states of post Renaissance Europe, the State's 'take' was limited by necessity rather than choice. Over the intervening centuries irrespective of political forms this 'take' has increased phenomenally in most

countries. It has been aided and abetted by various forms of dirigisme that prevented the mobility of labor and capital, and which allowed the predatory state in particular to tax capital which its policy was to make immobile.

The information age and the gradual emergence of a global capital market has checked but by no means ended this predatoriness. With the progress of various forms of encryption assuring privacy across the electronic web, payments in virtual factories to the 'head' being in the nature of consultancy payments which can then be readily concealed from the tax authorities, human capital is likely to be increasingly as mobile as financial capital. This means that eventually the tax base is likely to shrink to the taxation of immobile factors of production-unskilled labor and land- and any sales taxes the polity will put up with. Even the latter's base is likely to shrink as electronic supermarkets set up in tax free locations which can be accessed by anyone on the information highway. The transactions costs associated with policing taxes are thus likely to rise pari passu as those associated with market exchange fall.

At the same time, as Mahathir and many others in S.E.Asia are currently bemoaning, the mobility of financial capital implies that there is an instantaneous referendum conducted at every moment in time by world capital markets on the economic policies of every country. The predatoriness of the State which has been the main drag on economic efficiency<sup>37</sup> will then have to be curbed, as the wealth of a country can be reduced dramatically by the press of a few buttons as mobile capital leaves a country whose economic policies are no longer considered to be sound by the global capital market. The globalization of capital markets and their instantaneous linkage through the computer is thus equivalent to tying the State, Ulysses like to the mast, to resist the Siren voices of its predatory instincts. This cannot but be good for the welfare of humankind. Hence, the effects of the communication revolution on worldwide material beliefs (including those relating to political economy) are likely to be benign from

the viewpoint of economic performance.

### III

#### 1. COSMOLOGICAL BELIEFS AND TRANSACTIONS COSTS OF POLICING

What of cosmological beliefs?

First, note that, as these beliefs concern questions of values, the effects of changing technology is likely to be limited.<sup>38</sup> Technology is an instrument. Depending upon our values we can use or misuse it.

But there is one sense in which the communications revolution, by the very process of widening the market, increases the range of potential non-repeated anonymous transactions subject to the basic opportunism that characterizes our species. If, as in the West, the traditional morality has been undermined so that personal behavior is more akin to that of our Stone Age predecessors<sup>39</sup> rather than governed by the moral self-restraints that have characterized the ancient agrarian civilizations of Eurasia, the 'policing' transactions costs of economic exchanges would rise, with concomitant detrimental effects.

What of the Rest? Given the potential for the promotion of such opportunism by the new technology, its spread, I would guess, would tend to strengthen the importance of personal bonds, particularly familistic ones underwritten by their ancient socialization practices based on shame. Furthermore as the

brave new world of virtual factories in the West demands flexible production structures in the Rest to meet the needs of bespoke mass production, the family enterprise - as demonstrated spectacularly by the performance of the Chinese family enterprises in both mainland China and the lands of its diaspora- will come into its own.<sup>40</sup>

Also, as long as their traditional families are not undermined as in the West- more by cosmological than material beliefs<sup>41</sup>- the Rest will not have to create the vast transfer States required in the West to substitute public for private social safety nets to deal with the ubiquitous risks associated



with living. Combined with the workings of a majoritarian democracy, such public transfers have tended to corrupt the polity, with competing politicians showing their compassion by indiscriminately buying votes with other people's money. The different but indubitable corruption that currently also exists in the Rest will by contrast be increasingly controlled both by the restraints on dirigisme and the increased 'openness' that the communications revolution will inevitably promote.

There is a grave fear in the Rest of the pollution of their traditional mores by the worldwide spread of the culture promoted by Hollywood films and Western television, increasingly being beamed into homes through satellites around the world. The Rest do not have to fear this pollution even though many of its citizens are watching American television programs like Baywatch- which I am told is the hottest program watched by satellite in Teheran. As long as their traditional socialization processes based on shame remain in place, the antics of the characters in Baywatch are likely to effect the behavior of their populations no more than those of imagined aliens from space watched by enthralled millions around the globe.

## 2.MODERNIZATION AND WESTERNISATION

But will the Rest be forced to change their cosmological beliefs as a result of the modernization that they all seek because of the prosperity it brings and which is being accelerated by the communications revolution? This is an old question in development studies. Will Westernisation follow modernization, and in fact can- as some claim- modernization occur without Westernisation? There has been an influential body of thought that has claimed this necessary connection.<sup>42</sup> It is also the basis of the current belief in the West, reflected in its global moral crusades concerning so called 'human rights', 'democracy ' and 'saving Spaceship Earth' , that with the success of the market its own values will also be adopted worldwide. But this is to assume that material beliefs determine cosmological beliefs.<sup>43</sup> There is

little to support this assumption even though in the rise of the West the two sets of beliefs were conjoined. The important case of a modernized but non-Westernized Japan has shown this is not a necessary connection.<sup>44</sup>

The Rest do not have to make the Faustian compact of the West, where the instrumental rationality promoted by its individualism led to the Industrial Revolution but in the process destroyed its Christian soul<sup>45</sup>. Japan has been able to alter its material beliefs by adopting the institutions of the market. But it has kept its ancient hierarchical social structures- by basing them on acquired rather than ascribed status through the fierce meritocratic competition based on educational attainment- rather than abandoning them for the social egalitarianism espoused by the West. It has also not had to give up its traditional forms of family nor its other cosmological beliefs based on shame. The same opportunity is open to the Rest to adopt the West's material but eschew its cosmological beliefs.

What of the West? Its technological creativity and material prosperity can only be enhanced by the communications revolution. Its problems are of moral decay following the death of its God. Communications technology cannot effect this. It merely amplifies these cosmological beliefs - as a distorting mirror which accentuates the contradictions in the current Western soul.

As Macintyre<sup>46</sup> has powerfully argued, the West's current cosmological beliefs, particularly in its most advanced outpost the US are incoherent. The Western notion of self he argues has three contradictory elements. The first, deriving from the Enlightenment views it as being able to stand apart from the social influences which undoubtedly mould him or her, and allows individuals to mould themselves in accordance with their own true preferences. The second concerns the evaluation by others of oneself. Here the standards are increasingly those of acquisitive and competitive success, in a bureaucratized and individualist market economy. The third element derives from the Western self's remaining religious and moral norms, and is open to various "invocations of values as various as those which inform the public

rhetoric of politics on the one hand and the success of Habits of the Heart on the other".<sup>47</sup> This aspect of the self harks back to the Christian conception of the soul, and its transcendental salvation.

These three elements comprising the Western conception of self are not only mutually incompatible they are incommensurable, and lead to incoherence as there are no shared standards by which the inevitable conflicts between them can be resolved. "So rights based claims, utility-based claims, contractarian claims, and claims based upon this or that ideal conception of the good will be advanced in different contexts, with relatively little discomfort at the incoherence involved. For unacknowledged incoherence is the hallmark of this contemporary developing American self, a self whose public voice oscillates between phases not merely of toleration, but admiration for ruthlessly self-serving behavior and phases of high moral dudgeon and indignation at exactly the same behavior".<sup>48</sup>

Within Western cosmologies there was, however, another way to deal with the death of the Christian God, to provide the moral cement of its society. These were the views associated with the Scottish Enlightenment- in particular of its most eminent sages: David Hume and Adam Smith. Hume, unlike the philosophes, saw clearly that Reason could not provide an adequate grounding for morality. As Nietzsche was to later say so trenchantly about utilitarianism any such attempt would be unsuccessful because : "moral sensibilities are nowadays at such cross purposes that to one man a morality is proved by its utility, while to another its utility refutes it".<sup>49</sup> Kant's attempt to ground a rational morality on his principle of universalisability- harking back to the Biblical injunction "therefore all things whatsoever ye do would that men should do to you, do even so to them"- founders on Hegel's two objections: it is merely a principle of logical consistency without any specific moral content, and worse it is as a result powerless to prevent any immoral conduct that takes our fancy. The subsequent ink spilt by Western moral philosophers has

merely clothed their particular prejudices in rational form.

By contrast Hume clearly saw the role of morality in maintaining the social cement of society and that it depended on a society's traditions and forms of socialization. Neither God nor Reason needs to be evoked (or can be) to justify these conditioned and necessary habits.<sup>50</sup> This is very much the view about ethics taken by the older non-Semitic Eurasian civilizations whose socialization processes are based on shame.

If the West can rediscover and implement these insights of the Scottish sages- the market promoted by Adam Smith, and the 'traditional' morality promoted by Hume- there is no reason for it either to fear the ongoing communications revolution.

#### CONCLUSION

As I have argued the material aspects of transactions costs associated with exchange will have an undoubted beneficial effect on economic performance- pace Adam Smith. But the cosmological aspects of transactions costs associated with policing could increase if the West does not heal its soul. In that case unlike the Rest - which face a much more benign future in the information age- the West though unimaginably prosperous, and inventive, could be an unpleasant and dangerous place to live. Even if this does not effect measured economic performance, most people would say that the resulting deterioration in the quality of life would represent a deterioration in perceived economic performance. The communication revolution is neutral in its effects on cosmological beliefs. The moral regeneration required in the West is independent of technology. For economic performance in the round the teachings of the sages of the Scottish Enlightenment remain as pertinent as ever.

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#### NOTES

1.Bill Gates (1995), p. 9

2.As Stanley Fischer (1977) put it: "Transactions costs have a well-deserved bad name as a theoretical device...[partly] because there is a suspicion that almost anything can be rationalized by invoking suitably specified transactions costs" (p.322).

3. Arrow goes on to argue: "the distinction between transactions costs and production costs is that the former can be varied by a change in the mode of resource allocation, while the latter depend only on the technology and tastes and would be the same in all economic systems." (p.17). However, as Harold Demsetz has rightly pointed out to me this distinction is invalid as production never depends on just technology. (see Demsetz (1964), (1970)). Arrow also distinguishes three sources of transactions costs. The first are exclusion costs, namely, the costs of excluding non-buyers from using a "commodity". The second are "costs of communication and information, including both the supplying and leasing of the terms on which transactions can be carried out." These costs would be related both to uncertainty - and the costs attached to

dealing with the opportunism that it might induce amongst economic agents - as well as the costs of communication. The third are the costs of disequilibrium and the time it takes "to compute the optimum allocation". But as a moment's reflection should show the second and third of these sources are not different.

4. This analogy of transactions costs with taxation adopted eg. by Hirshleifer (1980), p.237, and Niehans (1987) p.676, is repudiated explicitly by Allen (1991) ps.11-12. He defines transactions costs as the costs of establishing and maintaining property rights (p.3), and distinguishes them from information costs. "the acts of finding a trading partner, determining the correct good for a particular need, or search for the 'best price' are information costs not transactions costs" (ps.6-7) he writes. It would seem that his distinction between information and transactions costs is much the same as between my 'exchange' and 'policing' aspects of transactions costs. But I think his definition of transactions costs is too narrow, particularly as he concedes that information costs are a prerequisite for his definition of transactions costs (p.6). It should be noted that Demsetz (1968/1988) 's study of transactions costs on the New York Stock exchange corresponds to my 'exchange' aspects of transactions costs.

5. See D.Lal (1983, 1987) for further explication and references.

6. Demsetz (1964) has also used the same terms to describe what he calls the "exchange and enforcement of property rights" in the context of external effects and public goods. But I am using the distinction between 'exchange' and 'policing' costs in a slightly different way.

7. see North (1990)

8. see O.E. Williamson (1985)

9. Jack Hirshleifer has provided me with a possible rationale for my conjecture that exchange costs will decline over time but policing costs will not. Both suppliers and demanders are motivated to reduce exchange costs. But when it comes to policing costs, the interests of the 'true' traders and the cheaters are opposed. It's like an arms race. The technology of enforcement will improve over time, but also the technology of cheating.

10. see Colvin (1983). This was the definition adopted in Lal (1988) and in Lal (1998).

11. see F.Hahn (1973).

12. see Lal (1998).

13. see Hallpike (1986), Boyd and Richardson (1985).

14. see C.R.Hallpike (1986)

15. See Lal (1998) for references. Two popular surveys of the recent developments in evolutionary biology, psychology and anthropology are Ridley (1996) Wright (1994).

16. see R. Axelrod (1984), and Hirshleifer and Martinez-Coll (1988) for a discussion on the restrictive assumptions on which the Axelrod results depend. For a lucid and accessible account of evolutionary game theory see Skyrms (1996). Also in a perceptive review of Ridley (1996), Hirshleifer (1997) points out that reciprocity cannot be sufficient to generate the virtues which are normally identified with unreciprocated generosity, and that social order requires more than just reciprocity. He writes reciprocity "cannot by itself explain the extent of co-operation among non-kin. A system of exchange based on property rights must rest on more than self-defense and tit for tat responses. In particular, disinterested third parties have to be willing to engage in what has been called 'moralistic aggression' to defend victims and punish defectors. If so, reciprocity is not the origin of virtue. Rather, true morality- pro-social propensities motivated by principle or compassion rather than by expected compensation - must be there already if a system of trade and exchange is to be viable" (p.58). On the origins of virtue Hirshleifer states : " morality might be a human cultural development [or the result of].. 'group selection', a concept currently scorned by most socio-biologists...but to my mind the evidence [for its] power..seems overwhelming" (ibid). These views are very much in consonance with those expressed in this article.

17. Hicks (1979), p. 43. But as Harold Demsetz has rightly pointed out to me, of course Adam Smith said this long before Hicks!

18. see Ridley, op.cit. for references

19. see E. Gellner (1988)

20. Also it should be noted that though there are some evolutionary biologists and anthropologists who seek to provide an account of cultural evolution (see Boyd and Richardson (1985)) the time scale over which evolutionary processes of 'inclusive fitness' work- about 10,000 years to produce a new species- means that the evolutionary process is unlikely to explain historical cultures. These are human creations.

21. It might also be asked why for the cheating human animal it doesn't also pay to feign belief in moral codes? But of course it does, as the ubiquity of Private Truths, Public Lies, documented

by Timur Kuran in his important book of that name on preference falsification attests. However, as he shows that if there are enough believers in particular 'public lies' people will conceal their private truths, and follow the common norms. This is sufficient for the arguments that follow.

22.see Ekman and Davidson (1994). For economists who have discussed the role of emotions see Hirshleifer (1987), and Frank (1988).

23.see T.C.Triandis (1995). I have relabeled Triandis's collectivism as 'communalism' to avoid confusion with collectivism as a contemporary economic system.

24.see LaL (1998).

25.see H.J.Berman (1983).

26.see C.L.Becker (1932).

27.For details see Lal (1998). Thus for instance in Marxism there is a Garden of Eden- before 'property relations' corrupted 'natural man'. then the Fall as 'commodification' leads to class societies and a continuing but impersonal conflict of material forces, which leads in turn to the day of Judgment with the Revolution and the millennial Paradise of Communism. Similarly the deep Christian roots of eco-fundamentalism are shown in Bramwell (1989) and Lal (1995). As regards Freudianism see Webster (1995) and Gellner (1993). Thus as Gellner argues Freud created a new faith with traditional Judaeo-Christian roots. The Unconscious becomes a new version of Original Sin. The analysts form a priesthood, offering personal salvation to the faithful through the confessional of the analysts couch; the priesthood is controlled by a guild of acolytes, who preach a doctrine which though cloaked in the mantle of science is like any religion a closed system. It is tailored to the fears of the modern West. With Nature quelled these fears concern personal relationships. "His fulfillment and contentment, and his self-respect, are at the mercy of other people: of his spouse, other close kin, and work colleagues and superiors". With God's death the Christian Hell had been dismantled. Now is Sartre's words: "Hell is other people", and the analyst now provides a bespoke morality to deal with each person's special circumstances as worked out between the patient and the 'analyst'.

28. Of course there are certain moralities for instance Robin Hood's of helping the poor which certainly increased policing costs for those traversing Sherwood forest.

29. See Jack Goody's brilliant book, Goody (1983).

30.see J. Delumeau (1990).

31.see A.Macfarlane (1979), (1986).

32. The most powerful statement of this position is provided by Magnet (1993) who argues persuasively that the growth of the underclass and associated social pathologies in the US is due more to cultural than purely economic factors. Also see Himmelfarb (1994). The strongest proponent of the economic case is Murray (1984). The econometric evidence on the effects of the US welfare state on incentives is summarised in Moffit (1992) who concludes "The literature has shown..unequivocal evidence of effects on labour supply, participation in the welfare system and on some aspect of family structure...Yet the review has also shown that the importance of these effects is limited in many respects. The labour supply effects, whilst statistically significant, are not large enough to explain the high rates of poverty among female heads..In addition the econometric estimates of family structure effects are not large enough to explain long run declines in marriage rates and, in any case, are incapable of explaining recent upward trends in female headship because welfare benefits have been declining" (pp 56-7).

33. This hopefully reduced though it probably did not eliminate a problem pointed out to me by Harold Demsetz. There is a distinction between transaction costs and the stock of information. Suppose Hong Kong had been doing business with the US on a continuing basis and therefore had an updated stock of knowledge from which it could draw an answer quickly; but Sri Lanka had no such stock of knowledge and shouldn't have as in general it would have been a waste of resources for Sri Lanka to maintain it. In this situation it would be erroneous to claim that Sri Lanka was a high transaction cost country because of its belated response time. Perhaps the answer would have quickly if the good had been rice.

34.see R.Rosecrance (1996)

35.see Gates, op.cit., p. 166

36.This is also true of the political form- democracy. Rather than the king, dictator or clan, the predator in democracies is the median voter. For a fuller explication see D. Lal and H. Myint (1996); D. Lal (1994); D. Lal (1993). Also note that a predatory state would find it in its interest to promote religious and moral beliefs which allowed it to increase its 'take' without making its natural monopoly contestable by either 'new entrants' from within or without. See Lal (1988) Chp.13.2 which presents a model based on 'contestability' and account of the predatory state that has prevailed in India for millenia.

37.This is the major theme of the economic history of Eurasia as accounted by Jones (1988).

38.Gutenberg's press cited in the epigraph by Bill Gates maybe considered to provide a counter-example by showing the impact of technology on cosmological beliefs. I would argue that Gutenberg's Bible only made it easier for those who already shared Christian cosmological beliefs to acquire the scriptures. It had no effect in changing other cosmologies for instance Islam (see Lewis (1982)).

39. Note that the 'tit for tat' strategy which might have resulted in social co-operation in the Stone Age (but see note 16) would not suffice in the more numerous anonymous transactions in any modern economy. Hence the growing need in the West to put all transactions with others -to the extent possible- into a legal framework, even those concerning the domestic domain- like the growth of pre-nuptial agreements in the US.

40.See M.K.Whyte (1996).

41. This is argued in Lal (1998) which also provides the relevant cross- cultural evidence and references.

42. This was identified with the work supported by the Committee on Comparative Politics of the Social Science Research Council in the US during the 1960's. The most important work in this genre remains G.A.Almond and J.S.Coleman (eds) (1960).

43.A belief shared equally by Marxists and Chicago school economists!

44.This is argued forcefully by A.Waswo (1996). Also see S. N. Eisenstadt (1996).

45. It is often argued that the evidence from Church attendance and the professions of religious belief in the US would contradict this. Thus Bellah et. al (1986) note "some 40% of Americans attend religious services at least once a week ( a much greater number than would be found in Western Europe or even Canada) and religious membership is around 60% of the total population" (p.219). But if other aspects of current American behavior concerning Christian moral injunctions are taken into account- against adultery and divorce for instance- to an outsider, these figures for professed religious belief appear to be merely a sign of hypocrisy, or a manifestation of the fractured American self outlined by Macintyre discussed below. Of course, there maybe some, for instance President Clinton from recent reports in the US media, who might claim that they are still faithful Christians but that their purported forms of extra marital sex do not constitute



adultery as defined by the Bible!

There are also those of a Polyannish tendency best represented by Lipset (1996) who claim (p.134) that even the signs of social decay such as the growth of the American underclass does not matter as it is statistically insignificant. The underclass he claims only amounts to about 1-2 per cent of the US population, which makes it about 2-3 million people. This is of course a larger number than the US armed forces. If the latter though about one per cent of the population were let loose in the inner cities as invading armies often were in the bad old days, even Lipset might view this prospect with some trepidation!

46.A. Macintyre (1990) .

47. MacIntyre, op.cit., p.492

48. ibid.

49. Nietzsche (1881/1982), p.220.

50. see Hume (1740/1985), Bk.III, Pt.II, sec I, p.640, and Bk.III, Pt.II, Sec. 1, ps, 535, 551.