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A conjecture on the nature of social systems

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Repeated calls for interdisciplinary research and communication, both within social science and between social, natural and physical scientists, as well as with the rest of the world, frequently meet a fundamental problem: there is no commonly accepted framework or common language within and through which to integrate the largely separate social understandings generated by our social sciences. This paper is an attempt to outline a possible framework, in the hope that it might stimulate debate about why this conception is wrong or how it is incomplete, and so to develop a more generally acceptable common story. The premises of this speculation are social systems exist—there are understandable processes by which we live, capable of both theoretical and empirical exploration through which to develop better rules and tools for living; these social systems evolve by adaptation, invention and replication to better fit their contexts and circumstances, through the characters and cultures of people, interacting through social transactions. As a consequence, we would expect to observe, following the natural world, identifiable phyla of social transactions and interactions—a taxonomy of social systems. This taxonomy should be capable of retrodiction—plausible explanation of how and why these transactions came to be, and how they correspond to contemporary analysis. This conjecture identifies a plausible taxonomy and an outline evolutionary story of the emergence of the major transactional phyla.

Introduction

The guiding text for this paper was enunciated over a decade ago by Ralph Dahrendorf (1995, p. 1).

> There remains a common theme for a science of human society, and that while much progress has been made in developing its various facets and aspects, it is still important to try and tie the parts together—not in search of a 'world formula' but to make sense of the social habitat in which we live, have lived and are likely to live.

Yet our professional literature, as social scientists, still largely fails to deliver on this challenge, while echoes of Dahrendorf's plea in calls for multidisciplinary and interdisciplinary research are practically deafening.

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Repeated calls for interdisciplinary research and communication, both within social science and between social, natural and physical scientists, as well as with the rest of the world, frequently meet this fundamental problem: there is no commonly accepted framework or common language within and through which to integrate the largely separate social understandings generated by our social sciences.

There seem to be three major difficulties in the way of effort to produce a common theme or story. Any initial attempt to tell a complete story of social interaction is unlikely to achieve even modest acceptance. Reactions will span a spectrum from substantial scepticism to outright dismissal. Any initial attempt is likely to be regarded as unwisely ambitious to downright futile. It will certainly be incomplete, under-researched and ill-situated in the massive existing literature. It is little surprise that it has not been attempted. Yet such a story is sorely and surely needed. This teller is simply someone sufficiently past realistic academic aspiration and sufficiently free of immediate intellectual pressures to be prepared to have a go and see what happens.

The second difficulty is related.[1] The present social science community is substantially divided about the underlying conceptions of the ways in which our worlds work, and hence about the appropriate research strategies and practices to pursue in developing our understandings of these workings. In extremely crude terms, at one extreme positivists (such as many economists) believe that the essential structures and processes of social (at least economic) behaviour are well-established, and that appropriate research then consists of elaborating the calculus and mechanics of the theory and of testing (or, better, estimating) the causative relationships of theory with extensive, and frequently secondary data and sophisticated statistical procedures. At the other extreme, relativists believe that the essential structures and processes are far more complex and disguised than is believed by positivists. As a consequence, theories need to be developed on the basis of intensive primary research of actual behaviours and actors, and detailed dissection of competing explanations.

The immediate problem for the present enterprise is that conventional intensive scholarship, involving detailed critical analysis of existing literature and close examination of specific behaviours and social relations, cannot hope to deliver a novel outline metaphysic. Any attempt to tell a coherent story of social interaction will appear as irredeemably positivist and assertive, which will necessarily alienate some social science traditions. This cannot be helped. Furthermore, there will be no conventional empirical research programme (either intensive or extensive) that can hope to validate or verify the conjecture. The test of it has to be through critical debate and discussion of the concepts and their associated implications. If this presents a major challenge to the existing social science community, so be it.

The third major difficulty is that any attempt to tell a general story about our societies and their interactions which is founded on a single established social science discipline is bound to fail. Members of the chosen discipline, whichever it is, will be inclined to accept the argument (within reason) as self-evident, while others from the rest of the social science family will almost inevitably reject it as failing to include their own insights and intellectual cultures. What is needed is a reasonably established and commonly understood framework, without direct

affiliation to any one social science discipline, which can be plausibly applied to our social interactions.

The choice here is evolution, to which no major social science discipline yet lays claim, and to which natural science already hugely subscribes. As, for example, Winter (1988) notes:

> natural selection and evolution should not be viewed as concepts developed for the specific purposes of biology and possibly appropriable for the specific purposes of economics, but rather as elements of the framework of a new conceptual structure that biology, economics and the other social sciences can comfortably share. (p. 614)

However, there is an immediate difficulty with an application of evolutionary principles to social systems: 'natural' selection clearly does not apply—our social systems are human inventions, and are, in that sense, self-selected. Indeed, that is their principal function—to select for and condition behaviour patterns and responses for best fit with the existing community socio-ecosystem, socio-political climate and socio-economic environment. The focus of this story is these rules, codes, norms and behaviour patterns (alternatively termed 'cultures' or 'institutions' depending on the literature), which we use to inform and regulate our social interactions. It follows, especially, that this story is *not* simply socio-biology (Wilson, 1975) or evolutionary psychology (e.g. Buss, 1995) or another attempt at memetics (Dawkins, 1989; Blackmore, 1998), although there are obviously echoes of each here. These are important caveats. I do *not* assert here that social evolution mimics biological evolution, other than that it betrays the fundamental Darwinian principles of 'variation', 'replication' and 'selection', and hence 'persistence' of more desirable traits and characteristics at the expense of those (contextually and circumstantially) less desirable. We do not need, for this story, to pursue the argument so far as to worry about the 'inheritance' processes, to be side-tracked by wondering what the transmission 'vehicle' (meme) is or how we might recognise or define it or them, or be mesmerised by the distinctions between genotypes and phenotypes, and hence by quarrels about whether social evolution is Lamarckian or not (e.g. Hodgson & Knudson, 2006, or, from a different and also illuminating perspective, Ridley, 2003).

The central question can be phrased in terms of the social science disciplines themselves, from anthropology to philosophy, and including psychology, sociology, political science, economics, law, education, humanities and the arts. How have these apparently separate 'disciplines' emerged? Why are they so persistent? One plausible answer is that they represent the principal axes of the human condition, and reflect the major, even essential elements or phyla of human interaction and communication patterns. In short, they can be taken as the 'self-evident' fabric of the common story—the major phyla (or kingdoms) of social relations emerging from our social evolution to date. The story, then, needs to elaborate the essential connections between them as the potential common framework, and to explain (at least in outline) their emergence.

The next section outlines a conceptual framework of the processes of social interaction, as a background for consideration of the possible evolution of social transaction patterns (the third section), as the basis for a possible taxonomy.

The following section briefly discusses some apparent connections between this conjecture and major strands of existing literature, and the final section concludes.

A conceptual framework

This paper asserts that the essential social connections are self-evident, as human communication, discussion, debate, negotiation and transactions—the fundamental processes of living in human societies. At the risk of both annoying committed post-modernists, and of attempting the impossible, a brief caricature of some current positions is that all realities or truths are necessarily social constructs. As such, these constructs are inevitably and continually debated, contested, de-constructed and re-constructed.[2] Any attempt at a common story, from this perspective, is nothing more than a social construct—to be contested and debated—exactly as this story should be. Furthermore, the rules and conventions according to which the contests are to be judged and the debates governed are also social constructs. *Reducto ad absurdiam*, all we have is rhetoric, persuasion and spin (or coercion and oppression), not analysis and conviction.

However, I argue that any workable consensus or synthesis must necessarily imply a story of the way the world works, a 'meta-narrative' or common theme. It is this meta-narrative which provides practical policies, strategies and behaviours with their coherence, rationality and legitimacy (or not), and hence their capacity for persistence. Any sustainable story is necessarily founded on these basic ideas and acceptances of our 'social truths'. These truths are North's *Institutions* (North, 1990), the codes, disciplines and understandings that our societies accept (or not) as the vehicles and arbiters of our behaviours and actions.

Reference to the philosophical literature on the reasonable grounds for truth strongly suggests that there are only four fundamental foundations or axes to these social truths (e.g. Edwards, 1967; also de Bono, 1995). First, what will sell to constituents, either through market places or governing councils and executives, which establish the accepted *rules* of societies (correspondence theory). Second, what can be established beyond reasonable doubt through logic, reason and science as being near enough for farm work, which establish the *reason* accepted by societies (coherence theory). Third, what are taken as articles of *faith*, as self-evident truths, the current social dogma or ideology (performative theory). Fourth, the village, urban, or street *myth*—the habits, conventions and conveniences inherited from the past and neighbours (pragmatic theory), without direct or explicit reference to the trinity of fundamental foundations: rules, reason, faith.

We persuade and convince ourselves of social truths through social transactions and negotiations. Apart from the basics of cognition and communication, the principal forms of social transactions have been identified by Boulding, (1973), echoed by de la Mothe & Paquet (1996) and also, apparently unwittingly, by Strange (1994) as: gifts from those who love us; tributes from those who fear us; or exchange with those willing to trade with us. However, in addition, many of our social transactions are practically autonomic: governed by habit, routines, customs and traditions.

We use these four basic transaction systems in different mixes and balances, to govern and organise our businesses and societies.

These four principal negotiation systems, which I label: 'consent', 'coercion', 'contract' and 'convention', are each concerned with social interactions and transactions that co-establish accepted practices and expectations of mutual behaviours and responses. Each helps to continually reconstruct working concepts of social truth—as a common view of the ways the world works, without which our social worlds cannot work or play.

The 'consent' transaction system involves informal social interactions, carried out on the basis of trust or faith in our friends and neighbours, as well as the reason from our own intellect (the head) and the rules of emotional empathy (the heart).[3] 'Convention' captures the more formal social rules and rulers which communities and societies establish through political interaction, which become enshrined in the various forms of 'ocracy' we develop to manage our public or collective affairs: plutocracy, autocracy, theocracy, and finally, perhaps in despair with all the rest, democracy, and all the bureaucracies that are associated with them. As far as democracy is concerned, this transaction system is founded on faith in the democracy, the reason of rhetoric and debate, and the rule of the majority. 'Coercion' applies the force of law to enshrine the most salient of our social contracts and behaviours in formal codes, based on faith in the legislature, the rule of the law and the reason of jurisprudence and the courts. It is this transaction system that ultimately defines and identifies the state (Dunn, 1999). 'Contract' is at the heart of our economic transactions systems—the basis of trade, specialisation and comparative advantage, based on faith in self-interest and the resulting invisible hand, the reason of economic logic (including rational ignorance) and the rule of the market.

Each of these transaction systems is founded on and defined according to its reliance on the three cornerstones of faith, rule and reason. Unless agreeably based on these pillars, I suggest that any society or community will eventually question and undermine the social organisers through which we generate consensus and social authority. The balance of reliance among the cornerstones shapes the organising plane or negotiating agenda of each transaction system.

The reflection and refraction of these four cognitive planes (agenda) on the ground where we live then forms our socially constructed vernacular. We use this 'consensus' to breed and grow our institutions—our social codes, realities and authorities. Central to the construction of our acceptable social truths, and the authority they exert on our behaviours, is a commonly accepted idea or story. Without the organising power of this constructed idea (or an ideology), embodied in a personality or an organisation and shared between source and subjects, any authority (of person, office or organisation) is ultimately empty.

However, the particular characters and the ancestories (or cultures) of our communities and societies will affect the ways in which we construct our social realities. So, too, will the contexts and circumstances in which we find ourselves, as the product of our own unique histories, and the accidents of our geographies. These ever-changing four Cs (character, culture, context and circumstance) will cloud and obscure the

essential systemic, so the picture implies a continual reconsideration and reconstruction of our vernacular authorities. Furthermore, the orientations of these concepts depend on the weights we attach to the three principal cornerstones of truth, and on the extent to which we need or wish to engage in the principal transaction types (our involvements). Our own weights and involvements breed and nurture our predispositions towards particular versions of our social truths. And, life replies, can we persist and survive without adapting and adjusting our perceptions and preconceptions of these truths?

Governance and social constructions

The way in which human societies reconcile individual and group perceptions and ambitions is typically through some form of government. Governments exist to exercise social authority. Governance, in contrast, is how we choose our governors; not only how we erect our authorities and elect our leaders, but also how we breed and cultivate our ideas and institutions—our social selection criteria and rules for behaviour. We need and breed governance, and develop governments to achieve a sustainable balance between private (individual) and public (or social) interests, where each interacts with the other. In this story, we are, at bottom, driven by gilt (self-interest) and guilt (public interest), which may be simply gilt with a 'you' in it. Our human free will consists essentially in making this collective choice.[4] The richer we become, the greater the scope and responsibility we have for this choice (Margolis, 1982).

Self-interest can be roughly characterised by the simplistic Maslow hierarchy: physiological; safety and security; belonging.[5] Social science literature is more reticent about a corresponding characterisation of public or social needs.[6] Strange (1994) asserts four fundamental social goals: wealth, security, freedom, justice. However, her conception seems to mix aspirations and ambitions with underlying needs, motives and processes. The security and stability of a social system is inherently dependent on the processes used to achieve balance between private and public interest, and on the capacity of the system to resist internal fracture and external threat. In turn, freedom has to do with the extent to which private interests are given free rein within the social system. Since the fundamental role of (collective) free will is to achieve a sustainable balance between private and public interest, it seems sensible to characterise the goals of governance directly as a balance between the two (again following Margolis, 1982).

Efficiency and effectiveness (the primary focus of mainstream economics) is a basic or primitive social need, if not a natural inclination. However, once secured, our history suggests that we become more concerned about justice and equity, if only to assure the reproduction of our society without major internal fracture, about which our current formal economics has nothing to say (although it is not unreasonable to assert that these concerns are at the heart of Marx's analysis). Indeed, it is these concerns, and our beliefs that we can and should do something about them, that fundamentally distinguish us from our animal cousins and ancestors. The naive economic assumption that allocation questions can be divorced from issues of

distribution, though powerful, is a well-known and critical shortcoming of conventional economic policy analysis and management strategy.

Over and above justice, we become concerned about sustainability and coherence, as reflected in present heightened anxiety over the long-run sustainability of human organisations and exploitation of the planet's limited resources and waste-disposal capacity, not to mention our continued search for the meaning of it all, for a more common model. Our social goals, as Strange's quartet of wealth, security, freedom and justice, can thus be seen as the harmonious and simultaneous satisfaction of both self and public interests. Human progress, such as it is, can now be pictured as the growth along these two axes, and of the associated field between them, over which we choose and continually adapt our governance systems. We can return to this basic framework after considering the nature of our essential social transaction patterns, and some supporting evidence from the literature.

Against this outline framework of social transaction processes, the present conjecture depends on how our principal transactions systems and structures came to exist and persist.

An outline evolution of social institutions[7]

Is there a plausible story of how we came to use four principal transactions systems (institutions), and are there others that this outline has forgotten or ignored? The answers, according to the conceptual logic suggested here, lies in the evolutionary history of our human societies.

Following and developing Capra, 1996 (see, also, Deutsch, 1997) evolution happens in phases. Each phase consists of a set of principles or motive forces underlying the observable structures and patterns of the community or ecosystem—the society types and associated transaction systems (communism, capitalism, tribal or feudal systems etc.) as the phyla or kingdoms of institutional forms—with an evolutionary process operating to explain the progress from one phase to the next. Some now believe we are at such a cusp of institutional evolution (as argued, for example, by Fukuyama, 1992, 1995a). But substantiation of this claim requires a conjecture as to the natural progression of institutional phases.

I begin at the beginning of human life as we now know it, to identify the evolutionary taxonomy of 'principles' and the phyla of 'institutional forms' as we trace our apparent history. The methodology employed is reverse engineering, deducing the principal elements and linkages from what we observe as the successful (and thus surviving) institutional forms.

Living systems and human systems

Capra (1996) differentiates living from inanimate systems by observing that the individuals which comprise living systems 'mind' about and 'respond' to what happens to them, whereas non-living things simply exist and react with their environments. Living systems thus adjust and adapt to their surroundings and generate an

evolutionary system as a consequence. The principles through which evolution happens are survival (persistence) and replication. The structures are the species that emerge as being best fitted to the changing environment and habitats. According to this fundamental description, human life is no different from other forms of life.

But human life not only minds about and responds to what happens to it; it 'cares' about and 'replies' to what happens to it—Max Weber's position in a nutshell (e.g. Gerth & Mills, 1946; see, also, Swedberg, 1998). Caring implies at least a primitive love for fellows (and its natural antonym, hate) and some corresponding if rudimentary belief or value systems, a proactive rather than simply responsive process, stemming from a perception of 'self' as distinct from 'other', and a corresponding recognition of others' existence, rights and responses. Roles become established amongst members of a tribe and relationships are formed, with rights, responsibilities and duties assigned and habitualised at each social level in the tribe. Social values thus emerge and become codified in the emergent phenomenon of the myths of early religions and tribal customs.

The innate and autonomic rules of biological survival and reproduction thus become augmented by conceptual codes and conducts, founded on belief. Our early ancestors simply could not have survived and prospered (as they obviously did) in a fundamentally capricious and frequently antagonistic environment without both self-belief and, as a necessary consequence, social (and environmental) belief and trust (even if these are restricted to believing nature or other tribes to be incurably malign). We humans are naturally and irrevocably dogmatic, that is how we began. We may label this early stage of institutional evolution as a *tribe* for convenience, which can be imagined as our ancestral hunter-gatherer villages and communes. It is, therefore, our most primitive and deeply ingrained institution, largely based on belief, and is one to which societies are likely to revert, if and when more advanced institutions fail.

However, caring and replying is not sufficient to distinguish human life from higher forms of animal life. Higher animals are also sentient in that they are able to distinguish between 'self' and 'other' in at least a rudimentary way. Dogmatic dogs are commonplace. Clearly human and intelligent life has moved beyond simply caring and replying, to develop cognition—conscious knowledge and understanding, and associated communication and interrogation. Cognition involves 'recognising' social and natural environments and 'relating' to and with this recognition through the development of inferential beliefs about ourselves, our societies and our environments. Therefore, we humans are also naturally reasonable and reasoning, that is how we began to grow up.

The conscious inference and cognition necessary for this recognition are more obviously special human characteristics, reflected in human brain to brawn ratios. From such conscious thought and its application to the local environment emerged the early cultivator 'community', as opposed to their predecessors, the hunter-gatherer tribes. With cultivation apparently comes a near-necessary development of specialisation of function and trade between members of the community. The intuitive but conscious acceptance of Adam Smith's invisible hand becomes embodied in

community relationships and tolerance of distinctions, roles and hierarchies, and commitment to the associated responsibilities and socio-psychological contracts—barter, in short. The economics of the self-sufficient peasant families and villages has long been recognised as a natural embodiment of our economical general equilibrium theory (see, e.g. Sadoulet & de Janvry, 1995, ch. 6). In effect, inferential reason is used to develop new rules, which may then become enshrined in dogma for the purposes of training, taming and civilising the emerging human population.

Human institutional evolution

Recognisably human institutions thus emerge. Re-cognition (*sic.*) of the processes of human system development requires that the participants at least submit to the implicit or intuitive rationale of these systems, consciously adapting and adjusting their behavioural relations to best fit this apparent (but not yet articulate) rationale. 'Recognition' and 'relation' thus leads to charity in these community relations and specialisations—as the conscious and cognitive acceptance of the capacity of the community and its practices to be benign and welfare-improving (or the exact opposite—malevolent and welfare-threatening, thus requiring substantive and cognitive opposition).

Thus civility emerges as the glue binding (or fracturing) communities into societies, in which each knows their place and understands their roles, rights, responsibilities and duties towards the other members of the society, with charity (or its antonym, intolerance or bigotry) as the fundamental motivation of this phase. The second rung of the invisible hand mechanism is now in place, acceptance through mutual respect for the activities of others as being in the community as well as personal interest (see, e.g. Bromley, 1997). Thus, by adolescence, the human race has become charitable, social and civilised, as well as dogmatic and reasonable.

Without some pressure of relative scarcity of resource (or of some social ambition plus faith in capacity to expand) recognition and relationships seem likely to be a dominant institutional form, our early ancestral tribal cultivators. Our apparently innate curiosity might be the only drive to further development. Indulgence in curiosity is risky and requires some considerable security and relative prosperity. However, scarce resources will augment this natural or paternal curiosity, and mate it with maternal necessity, to produce invention.[8]

Invention is necessarily associated with 'rationalisation' of the way things are and to the emergence of conjectural 'reason' about how things could be different. In so doing, our ancestors begin to make things different, inventing and reconstructing their tools and rules—institutions, organisations, habitats and environments. We now have a recognisably different sort of community, which we might label a 'society', reflecting the particular character of this stage in institutional evolution as embodying more organised and conscious association than the parental forms: the tribes and communities. Human history provides ample evidence of this phase of institutional evolution, strongly suggesting that rationalisation and reason can only take root and thrive in well-established (mature) and relatively secure communities,

requiring sustained self-belief and considerable common understanding as preconditions. Otherwise, societies collapse to communities and tribes, the 'Dark Ages'.

The birth and development of the (western) 'common model'

Once rationalisation and reason emerge to provide for control over the human condition and circumstance, societies naturally develop strong 'hopes' and 'expectations' for their future development and operation. Invention is now additionally spurred by ambitions for further growth. These expectations embrace not only probable futures given current conditions and community actions, but also include an increasing number of possible or virtual alternatives. The natural consequence is for such societies to become fragmented and specialised as groups begin to develop their own comparative advantages and pursue their own ambitions or virtual realities. Or, in the event that they cannot realise their ambitions here, they exit from their parent societies and start again somewhere else: colonies are born. They also learn, perhaps too slowly, to trade with rather than fight one another. Our society has now evolved to a recognisable market *economy*, 'expecting' and 'relying' on outcomes as a consequence of contracts and formal exchange; specialising and trading (again echoing Adam Smith and Weber, see Swedberg, 1998).

However, the long arm of the law is necessarily attached to the invisible hand: to enforce contracts, protect property rights and outlaw theft. Economies need and breed government, at the very least to provide for and enforce common law. Furthermore, when measured against the criteria of the earlier institutional forms, market re-distributions of income, wealth and social power are frequently judged unjust, especially by those whose previous power-base is being eroded by the growth of the market economy. Expectations of the powerful turn out to be ill-judged and reliance misplaced according to the previous institutional habits. As Bromley (1997) remarks (p. 1386): 'The necessary institutional arrangements underlying a viable market economy reminds us that shared values and norms of a particular society are the necessary precursors to such institutional arrangements'. The evolutionary progression now becomes more or less consciously self-selected, since the power to decide in the public interest is now explicitly conceded to the *state*. The law, on which our economy is co-founded, will be required to extend its ambit to include both politically determined re-distributions, and to manage the economy to correct for market failures and malfunctioning in the public interest.[9]

The inevitable tension between the market and the state spawns 'ocracies'

The process of collective decision-making breeds a new institutional form—the 'ocracy': autocracy, plutocracy, theocracy, bureaucracy, and perhaps finally, democracy, when all the previous efforts have been tried and found wanting. Necessary failure to win control over market conditions (enforced by the conditions of competition) for suppliers will inevitably lead to these ambitions for control being pursued

through the political machinery of the state. Here, the marginal net returns to political action for suppliers are necessarily more concentrated than for consumers, because of specialisation in production. Consumer dominion over the market place is thus overridden by producer (or factor ownership) domination of public intervention in the name of fair and just distribution or of prudent economic management.

It follows that income distribution under any political economy general equilibrium, even under ideal competitive conditions, will be determined by political influence and authority, typically manifesting as an uneasy balance between the owners of capital and of labour. Right and left are thus natural manifestations of state politics. The former is predisposed to believe in the supremacy of the market, which apparently generates the factor incomes. Paid labour (and atomistic sectors such as agriculture), on the other hand, find themselves governed by the apparently capricious markets and avaricious capitalists and seek remedy through the political system. Arrow's impossibility theorem demonstrates that such systems, even if defined as perfectly as possible, will frequently generate inconsistent public preferences, and will thus cycle, depending on rhythms of conviction amongst (especially) the labour constituency of the social desirability of unrestrained markets, and on the political control over the negotiating agenda.

The supremacy of the governed market system over other forms of institutional arrangement requires that political constituencies remain convinced of that supremacy. If the market fails to perform according to commonly held opinions of justice, fairness and equity, then it will not be politically legitimised, and political action and intervention will necessarily undermine the social optimality of the market mechanism. The result, then, is an inevitable and concrete mixture of economy, re-enforced by the state and bound together with the glue of 'ocracy'.

Thus, there are two conceptually distinct institutional forms bound together in a complex we typically label 'government'. First, as Dunn (1999, p. 117 and elsewhere) observes: '*coercion* is the core of states'. For the coercion to be acceptable to the governed, and thus be sustainable and persistent enough to spawn offspring, the coercion must be responsive to the collective 'demands' of the population. It is these motives which underpin the 'ocracies' under which we choose to live. Democracy apparently becomes inevitable, albeit serviced (or abused) by bureaucracies, plutocracies and autocracies pretending to be democratic or to service popular or special interests (see, e.g. Kuran, 1995).

But, equal first, populations must also agree to 'concede' superior power to the state, and 'respect' this power above all others. Human conventions are invented to command respect for this concession, to replace the earlier authorities of lineage, gods and nature itself. Our present (and predominantly western) 'common model' is thus founded on contract, coercion and convention.[10]

The present condition of the common model

Much of the frustration with our modern mixed economies stems from the realisation, conscious or not, that nothing serious can be changed in this complex without

bringing into question major adjacent and related parts. Institutional change and progress tends to ossify for fear of the genuine uncertainty of real change. Consequently, public relations and presentation takes over from public participation and substance. As Arrow predicts, we go round in circles, while bemoaning the logic of the vortex. We revert, naturally, to earlier forms of social institutions—the tribes, communities and societies of our ancestry, but re-dressed and re-formed to fit with the state-economy-democracy triad.

This, it seems, is as neat and concise an explanation as yet exists in the exploding literature of the twin features of our now near-global common model—globalisation of market/state/law systems and fragmentation of societies and communities into tribes. We either submit meekly to the ruling hegemony or demand that it takes better care of our own cherished aspirations and necessarily special interests. Meanwhile, we claim the right to our individualities and peculiarities as enshrined in both democratic and consumer sovereignty principles.

A conjecture on necessary and sufficient conditions for institutional sustainability

The brief parables of the previous paragraphs can be seen as an outline of the necessary conditions for successful human civilisations. They seem to contain the essence of much of what we currently observe and of the events and debates (including wars and empires) of our history. In essence, they repeat Fukuyama's (1992, 1995a) argument of 'the end of history?' However, the 'motor of historical change' as outlined here is clearly incomplete. It leaves out much from what we observe. Nor can it be regarded as sufficient for sustainable success, as any intelligent, informed and rational contemplation of our current condition testifies. To identify the sufficient conditions, it is necessary to pursue the evolutionary parable of institutional and social development beyond these necessary (or historically observed) stages. What might our possible futures look like?

More sensibly, since evolution (as a chaotic system) is inherently unpredictable: what would we like our future to look like? If we can agree on a desirable future, it might be possible to cultivate it. We can conceive, in principle, of governing institutions and practices which could, if appropriately framed and implemented, convert the community population to *reverence* rather than mere respect for their governments, and thus to their practically unanimous assent to common governance of our lives and futures. This must be the goal of those who espouse and champion the common model. Otherwise, such systems will continue to generate retaliation and conflict both within and between communities, well evidenced in our current condition. The search for a unique and unambiguous common model against which all human behaviours can be judged and governed thus becomes the social grail. When found, it might provide the foundation for a genuine meritocracy. Furthermore, having found it, our meritocracy would need to develop to an *empire* to be sustainable, as rightly feared by many social commentators.

But, consider the world that some apparently seek, one in which there *is* universal assent to a more common model. Such unanimity, even if achievable, could not be

stable. As people devote time and energy to contemplation rather than the mundane issues of survival and prosperity, so the community's institutions and practices will be 'questioned' and intelligent thought and 're-search' will be undertaken, in the *hope* of discovery of more generally beneficial, acceptable and sustainable rules and procedures.

Such research and question will now be directed towards social institutions and rules rather than physical and biological support systems, resources or tools. As such, it necessarily undermines, or at least questions the conventions of the revered government, market and legal systems. The evolutionary process has made our institutions ever more massive, thus requiring ever more effort and trauma to shift or change. In turn, these present systems can only be sustained through the imposition of particular ideologies and principles on the associated constituencies by current leaders and rulers. These people and their congregations will necessarily defend and protect their local power-bases to ensure their own continuation. Institutional research or thought which does not fit with existing ideologies will tend to be resisted, under-funded and ridiculed, or worse.

However, it is possible to suppose an ideal, though dynamic, outcome in which the population can become convinced that all is for the best in this best of all possible worlds. In such an idealised state, one can imagine a fully 'committed' population, willingly and enthusiastically merging their own self-interests with those of the community in near unanimous harmony, the communist ideal in a nutshell. Obviously, this condition is extremely difficult, if not impossible, to achieve.

However, suppose that we could achieve it. A penultimate phase of institutional evolution then becomes possible, in which a significant fraction of the population engages in creative 'imagination' of how things might be even better and more harmonious, and is engaged in continual 're-creation' of the community and its environments, with the full support and commitment of the whole community in these endeavours. Such societies could reasonably be described as being driven by the pursuit of 'fun', where imagination and re-creation appear as scholarship or as play. A genuine *civilisation* would then be born. The conversion of an empire to a civilisation is clearly not easy.

The end result might be one in which the whole community is convinced and assured of the benevolence of their world—*not* as the best of all possible, but as capable of building and growing the best of all possible—secure in the knowledge and understanding of the ways in which their worlds work compared with all the possible ways in which it could work, and completely self-assured that they and their community can continue to develop and improve their lives indefinitely. In short, such societies can be characterised as having a common *faith* in the ultimate benevolence of their communities and in the 'fitness' of their world views, and an associated freedom to doubt (and hence question and seek to change) the rules, rulers and power-bases, in the common belief and trust that such activity will be regarded as perfectly legitimate, respectable and socially benevolent.

Not that there will be unanimous consent that the ultimate has yet been achieved, but unanimous consent that the principles and practices of the community systems in

conjunction with all its associated environments is both capable of moving towards this state of perfect harmony, and that the whole population is committed to this pursuit above all others, in short 'careful charity'. We could, perhaps, label such an institution as a sustainable *culture* (or a mirage).

Summary conjecture on the processes of institutional evolution: a more common model

Table 1 re-capitulates and summarises the 'natural' progression of social evolution proposed here—a taxonomy of the essential mechanisms of conscious institutional design—a more common story. The central proposition is that our history, and thus also our future, is explainable as an evolutionary process. There is an identifiable pattern to the flow of our evolutionary institutional history. The structures generated by these flows are identified as the archetypal institutional form of each phase. The principles governing its operation are the major characters, responses and motives of people and their communities in each phase, which govern our social choices. The local process of each phase is identified as the result, which generates the archetypal negotiation or transaction system as the pattern of each phase. In the final column of the Table, each phase is associated with its 'natural' social science discipline.

Three major disciplines are missing from this Table: Philosophy, Theology, Science.[11] Philosophy is the study of rationality of cognition, inference and

Table 1. A conjecture of the natural taxonomy of institutional evolution

Institution type	Character	Response	Result	Transaction system	Motives	Discipline
Natural	*Mind* Neglect	*Respond* React	Adapt & Adjust	Food & gene chains	*Life* (death)	Ecology
Tribe	*Care* Fight	*Reply* Retaliate	Hunt & Gather	Consent *(sentient)*	*Love* (hate)	Anthropology
Community	*Recognise* Ignore	*Relate* Tolerate	Cultivate & Tame	Cognition *(Investigative)*	Inference (*instinct*)	Psychology
Society	*Rationalise* Reject	*Reason* Refute	Invent & Reconstruct	Care *(Social)*	Charity (*bigotry*)	Sociology
Economy	*Expect* Exit	*Rely* Re-Invent	Specialise & Trade	Contract *(Enterprising)*	*Barter* *(autarchy)*	Economics
'Ocracy'	*Coerce* Submit	*Demand* Revere	Institute & Regulate	Coercion *(Conventional)*	Fear *(security)*	Law
State	*Concede* Lead	*Respect* Reign	Govern & Preach	Convention *(Realistic)*	Habit *(anarchy)*	Politics
Empire	*Question* Accept	Re-search *Test*	Exhort & Display	Commitment *(Curious)*	Hope (*despair*)	Humanities
Civilisation	*Imagine* Play	Re-create *Teach*	School & Train	Curiosity *(Artistic)*	*Fun* (spite)	Education
Culture	*Believe* Doubt	Trust *Legitimise*	Commune & Cohere	Charity *(Aesthetic)*	Faith (*distrust*)	Aesthetics

concept, and thus is the all-embracing discipline. If philosophy departments are shut, the lights go out and the heat of enquiry dissipates to entropy. Both science and theology are the social implementation of philosophy. If science is shut down, the motors of human (as opposed to animal) life support systems die; unless theology takes its place.

The rows of Table 1 could be interpreted as the primary institutional types or phyla. Each can be thought of as a 'conceptual organism', consisting of interactive and mutually supporting systems of motivations, transactions, characteristics and responses, embracing and defining an underlying idea of social cohesion. As such each is capable, within limits, of independent recognition and taxonomy. However, like their biological analogues, all will exhibit local variation over both time and space, while none is actually capable of independent existence. Each relies on the other for its continued sustenance and reproductive capacity, and is modified according to its local circumstance and context, its local culture. The proto-typical institutional evolutionary cycle exhibits as a full circle. The careful charity of the 'last' phase underpins the 'foundation' phase of human cognitive and institutional evolution, the love, care and reply phase of the early tribes, generating the necessary consent to community and society. There is no beginning or end to this cycle; there is no first or last step to human happiness. The end of history is necessarily also the end of future. There is only a meta-process offering progress towards more complete lives and worlds; threatening to malfunction or dissipate into chaos when the tolerances of each phase are exceeded without the necessary foundations and counterbalances of the 'parental' and 'descendent' phases being in place.

Reflections on existing conditions and literature

Table 1 identifies the four key motives mentioned above (love, barter, fear and habit) but adds a further four (over and above the human preconditions of *life* and conscious *inference*). Of these, 'fun' is probably uncontroversial as a fundamental motive for human behaviour. For example, Pervin (1993) identifies the prime axes of personality in terms of how individuals react to unfamiliar circumstances, which correspond very closely to this taxonomy. It is also of interest that the archetypal transaction systems identified in Table 1 correspond closely with Holland's (1973, 1985) characterisation of peoples' attributes in relation to appropriate 'job fits' (noted in parenthesis in the transaction system column). Holland's archetypes have proved remarkably robust in providing useful recruitment service (see e.g. Furnham, 1992, especially 104ff). The taxonomy suggested here indicates that there are two missing archetypes, curious and aesthetic. Thus, a proposition—inclusion of these two would improve the Holland characterisation of 'occupation space'.

However, there may well be more quarrel over the final three motives: faith, hope and charity, at least amongst those not convinced of St. Paul's recipe for human happiness. To echo and reflect the foundations of the social truths with which I began this conjecture, we need charity in our rules, lest we be mistaken; hope in our reason, that it is both veracious and valid; and faith in our beliefs about the way the world works. On this basis, the underpinning predispositions to form societies (expressed as

personality traits) might indeed have become 'hard-wired' in our genes rather than continually learned in our memes.[12]

There are two major strands of literature that appear to be closely related to this conjecture. The first, pioneered by Hofstede (e.g. 2001), on the basis of extensive empirical research, proposes that different cultures solve their fundamental social problems of harmonising personal and social ambitions, with their associated attributions and transaction system mixes, in identifiably different ways. Hofstede detects five principal axes of cultural difference, where differences can be measured according to the balance particular societies chose along these principal axes. The axes are: individual/collective, the major axis suggested here, and, as noted by Hofstede 'positioning itself between these poles is a very basic problem all societies face' (2001, p. xx); uncertainty avoidance (the extent to which society tries to control for or guard against the unknown and uncontrollable); power distance (the degree of inequality the society is prepared to accept and expect); male/female (a major emotional dimension of society's accepted practices); long term/short term (the extent to which society accepts delayed gratification of ambitions and is prepared to be patient and wait). The suggestion here is that these differences actually manifest through different framings and mixes of the basic social transaction systems.

The second major strand, brought to my attention by a reviewer of an earlier draft, is the development of grid-group cultural theory, pioneered by Mary Douglas and by Mike Thompson and his colleagues. Mamadouh (1999) has provided an easily accessible, useful and critical introduction, while the companion papers in this source (which she introduces and previews) amply illustrate the scope and application of the theory. We clearly agree that culture matters, and also that we should expect to observe some identifiable patterns to our social organisations and behaviours. The principal argument of the grid-group theory is that there are a limited number of viable (persistent) cultures (as social organisations and behaviour patterns), commonly identified as four (or possibly five), labelled by Thompson *et al.* (1990, p. 8) as: fatalism; hierarchy, (autonomy); individualism; egalitarianism. However, Mamadouh (1999) argues that:

> cultural types (ways of life, cultures, rationalities or solidarities) have been defined as viable combinations of social patterns and cultural patterns, but it is now common to distinguish three levels of analysis instead of two: (1) interpersonal relations, (2) cultural biases, and (3) behavioural strategies. It underlines the freedom of each individual to choose a strategic behaviour that fits the social environment, the cultural bias or both, or to choose a strategic behaviour that disrupts the social environment, discredits the cultural bias or do both. Although the cultural map portrays dimensions of the social environment, descriptions of the cultural types generally blur the analytical distinction between patterns of interpersonal relations, cultural biases and behavioural strategies. This is also reflected in the labels used to name the types. (p. 400)

I suggest that it is not inconsistent with at least some versions of cultural theory that individualism and contract, and hierarchy and convention, are closely similar in their conceptions, while fatalism could be interpreted as being similar to consent, in that this transaction system in the present conjecture is pre-conditioned by an acceptance

of the autonomous power of nature, and a capacity to cope with these external forces and constraints. However, egalitarianism is more problematic for this conjecture. It appears to imply a combination of care and charity (Table 1), which in turn implies an aspirational quality to the cultural type.

However, the potential correspondence between this conjecture and grid-group culture theory can, perhaps, be clarified by returning to the framework outlined above (second section), and relating the governance field explicitly to the transactions systems employed, Figure 1 portrays, in stark simplicity, the final conjecture of this paper.

As argued above (second section), the primary field over which our social transactions systems operate is the resonance or reconciliation field between individual (self) and collective (social) aspirations and ambitions. The nine primary, conceptually distinct but interrelated transactions systems suggested here have different capacities to resonate private with public interests. In particular, those that dominate the western common hegemony (contract, coercion and convention), are, I suggest, constitutionally incapable of securing wealth, freedom, security and justice on their own. According to my story, our common model needs more care, consent, charity, curiosity and commitment, apparently requiring a rather radical development of our social science cognition to achieve.

One possible interpretation of the grid-group theory in the terms of this conjecture might be as follows. The group axis relates to interpersonal (inter-community) involvement, both in terms of intensity and extent. In this conjecture, involvement is also dissected by type (motive) and transaction activity. The grid axis apparently relates to both the rules, conventions and institutional constraints on interpersonal interaction (here, the transactions systems themselves), and may also include ideas of the relative

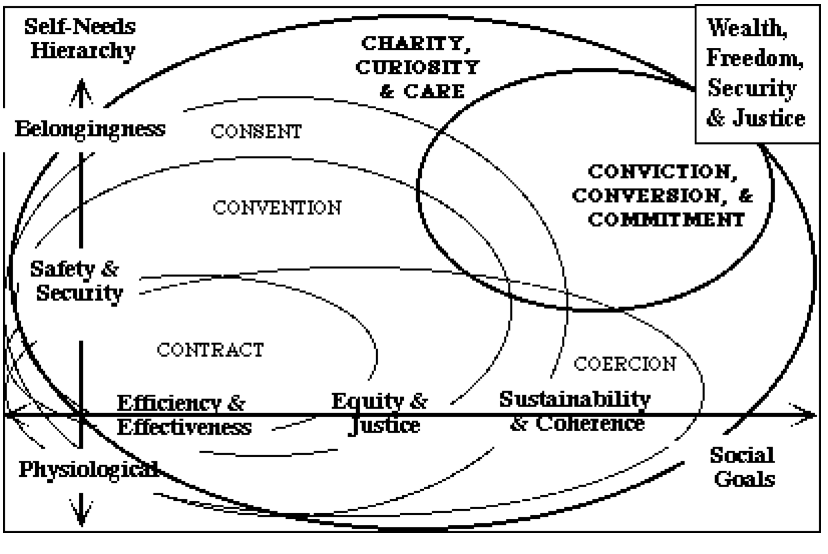

Figure 1. A schematic representation of social systems

weights of public versus private interest (e.g. reciprocity). In other words, grid-group cultural theory might possibly be interpreted as a much reduced form of the present conjecture. Even a casual acquaintance with grid-group literature indicates that there remains some considerable debate about the exact nature of the group, and especially the grid axes of this theory (e.g. Mamadouh, 1999, especially p. 397ff), not to mention remaining scepticism of its general reliability or utility. Nevertheless, cultural theory clearly enjoys substantial success amongst a considerable cohort of social scientists. I suggest that some of the ideas in this conjecture might, at least, help to clarify and develop this already successful approach.

Conclusions and implications

If approximately legitimate, this conjecture of institutional evolution implies that the apparent hegemony of the present common model is 'unsustainable'. Barter, habit and fear are insufficient grounds for progressive human development. Yet, to a very large extent our national and international institutions rely only on these fundamentals. Education or other forms of persuasion of the truth of our present common model are quite simply incapable of reaching the goals we seek. Some version of our common model might be a 'necessary' condition for the pursuit of sensible and sensitive development and human contentment, but it is clearly not 'sufficient'. More importantly, the *more* educated and informed the world becomes, the *less* sufficient it is likely to be. If we persist in believing that bribery, coercion, training or education are all we need to do to secure universal acceptance of western hegemony, we condemn ourselves to extinction. This appears to be a counter-traditional if not counter-intuitive result, suggesting that this conjecture is worthy of more consideration and examination.

At present, it is apparent that many communities and societies are *not* willing to grant that our rulers (rich governments, mighty multinational companies and powerful international organisations) are genuinely committed to general social progress, or ready to be openly and transparently curious, or sufficiently careful of our human (and thus planetary) inheritance. To many, these trust-failures are the obvious consequence of primitive understandings. They reflect either more or less deliberate ignorance or self-seeking exploitation of love, thought and charity. In short, the traditional bureaucrats' creed that the devil is in the detail is exactly wrong. According to this account life is in the detail; the devil is in the conception.

No doubt there will be considerable dispute about the particular words (and associated concepts) chosen here to outline the nature of human institutional evolution. Such semantic debate is clearly fundamental to developing this outline into a serious multi-discipline, (psychohistory?—Asimov, 1951ff,) in order to establish its consistency. In addition, further refinement and closer definition of the terms used here will be necessary to confront the outline proposed here with the evidence from the development of human societies and institutions, to establish the coherence of the story. Furthermore, much more work needs to be done on understanding the essential mechanisms and processes through which institutions translate information

into knowledge, and cooperate (perhaps too infrequently) to breed and grow understanding and wisdom.

However, the semantics themselves can only make sense when clearly and unequivocally linked through an appropriate grammar, which establishes the rules through which the concepts and constructs are connected so as to make sense, which is here taken as the logic of evolution. Even then, the consequent sentences and paragraphs can only make serious sense if they seem to tell a credible and believable story. The story itself is the emergent phenomenon. It cannot be deduced from the parts, neither from the semantics nor the grammar. It emerges only as the words unfold in a sensible and comprehensible order.

The fundamental problem facing our attempts to reconcile policy relevance with academic excellence is that our social sciences are fragmented and isolated from one another. We cannot trade ideas and concepts because we operate in self-contained disciplinary islands. When we attempt to trade, we tend to resort to barter or war. Our common models lack common understanding of the processes which generate what we see, so we argue about both our observations and interpretations. We have also been here before. Tarnas (1991, especially p. 27ff) observes that the Sophists of ancient Greece mediated the transition from an age of myth to an age of practical reason. However: 'In such critical circumstances, the philosophical denial of absolute values and sophistical condemnation of stark opportunism seemed both to reflect and to exacerbate the problematic spirit of the times' (Tarnas, 1991, p. 29).

Are we caught now in a similar cusp between our age of practical reason and a future age of sustainable rationality? If so, then the need for a more common story seems undeniable. Without it we continue to condemn ourselves and the societies we study and (presumably) hope to improve, to continued dispute and debate. The emergence of genuine and sustainable progress will then continue to be largely accidental, and rather unreliable. I strongly suggest that we ought to be able to do better than this, and to do so we need to learn to trade and exchange our ideas and concepts more efficiently and effectively than we do at present. This conjecture is a modest attempt to provide a framework or theme within which we might try and develop such exchange, and hence breed and nurture more productive understandings of our human natures.

Notes

1. I am grateful to a reviewer for alerting me to this difficulty, which I did not address in the initial draft of this paper.
2. The recognition that this caricature will considerably antagonise some readers has been well demonstrated in the comments of one of the anonymous reviewers on an earlier draft. My own understanding of the post-modern conceptions is superficial, as with most social analysts and potential users and clients I suspect, but has been informed by Midmore (1996), for example.
3. Frank (1988) provides a substantial and compelling account of the role of emotions in the conduct of social (especially economic) transactions. Hayami (1989) outlines the same transactions system as community relations in village economies.

4. In this conception, in contrast to much of the present debates, human free will is an emergent property of community and society—it makes no sense in isolation, and cannot be identified within the biophysical constructs of our individual brains and minds. It only emerges as a consequence of the social interaction.
5. The Maslow hierarchy is frequently regarded as overly simplistic. However, it suffices here for illustration of the argument. For a discussion of the psychological understandings of egotistical needs and self-interest, for example see Steers *et al.* (1996) p. 13ff.
6. The social psychology literature does deal extensively with 'helping behaviours', though these explorations are typically restricted to individual behaviours and actions towards other specific individuals, rather than with a generic notion of the public good or interest. However, Banyard & Hayes (1994) note that 'there is a growing body of evidence which suggests that altruism may be an important and frequent form of social behaviour which serves to ensure social cohesion' (p. 477), while Margolis (1982) develops an economical theory of altruism, and Frank (1988) explores the roles of passion and emotion in shaping our transactions.
7. One reviewer has noted about this section that 'Marx is missing from the sources here, as well as Michael Mann and other historical sociologists'. While I certainly agree that there is much more work to be done to ground this account in current literature, the task is beyond the bounds of a single paper, and also probably beyond the capacity of single author. I hope that some ensuing debate will clarify and substantiate the outline account advanced here.
8. Incidentally, there is a curious anomaly in our human evolutionary history. Our genotypic diversity is inconsistently narrow relative to the span of our palaeontoligical record. The only sensible explanation of this anomaly is that there was at least one, and possibly several, natural catastrophes during our early development, which eliminated those tribes and communities which were less well adapted to coping with adversity and resource scarcity. Our current concise genotype reflects the survivors of adversity, and is preconditioned to adopt the inventive phase of institutional evolution capable of resolving resource scarcities, and also (perhaps) a 'natural' sense of superiority and governing ability.
9. Here, we need to be careful about the meanings of the words 'state' and 'government' (Bromley, private correspondence). The previous institutional forms of tribe, community and society all manifest some form of government or governance, and frequently exhibit forms of collective power that can be labelled as states. However, until an economy develops to generate a 'self-made' power base, the legitimacy of previous states rests on some faith in god, lineage or natural authority, including historical accumulation of brute power. The emergence of substantial economic power forces societies to judge between this self-made power and the ancestral and apparently exogenous sources of leadership and social control. The term 'state' is used here to encapsulate this emergent phenomenon of explicit and conscious collective judgement of the public interest (e.g. Dunn, 1999). This is in contrast to the term 'government', which we can interpret to represent the more easily observable implementation apparatus of this collective judgement.
10. You may object that consent is also included in the common model—that being the point of universal suffrage and democratic control. But convention is a more accurate description of our present democratic transaction systems. The ubiquitous resort to pressure groups, protests and social disobedience are the exact responses to be expected from a lack of general consent or to the means of continually generating and granting it. If such protest does not reflect a widespread lack of consent, then it will not command sufficient popular support to be tolerated. Yet it is not obviously withering; the very opposite. If we are not sufficiently antagonised by our conventions to be antipathetic to them, we lapse into apathy, which is a chronic condition of our present conventional democracies. One cross, on one piece of paper, once every four years or so, hardly qualifies as a transaction system for consent.

11. History, as the study of the changing contexts within which societies and their people evolve, and Geography, as the study of the circumstantial effects and consequences of the social evolution, are seen here as enabling disciplines, rather than as fundamental reflections of social transaction systems. As such, and in common with planning and archaeology, such disciplines are already inherently multi-disciplinary, but lack a common story.
12. Incidentally, it is widely commented that lack of trust is an important problem for modern institutions, which generally substantially increases transaction costs and the probability of transaction failures (e.g. Fukuyama, 1995b). Yet trust seems an extremely elusive concept. In this story, *trust* appears as an *emergent phenomenon* or response only at the climax of the evolutionary progression, itself only sustainable given the continuation of the supporting phases of evolutionary development, encapsulated in the present operations and patterns of social behaviour. Its elusiveness is inherent in its character as an emergent phenomenon that is not deducible from its constituent parts. Its essential character is fundamentally dependent on both its breeding and its nurture.

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