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Law for an Ecological Civilization
Arran Gare

Introduction

The call by Chinese environmentalists for an ecological civilization to supersede industrial civilization, subsequently embraced by the Chinese government and now being promoted throughout the world, requires a fundamental rethinking of the role of law in society. If governments are going to prevent ecological destruction then law will be essential to this, yet law as it has developed in the West, particularly in Anglophone countries, is in a state of crisis. To overcome the deficiencies in the theory and practice of law in so-called ‘liberal democracies’ it will be necessary to revive the philosophies of law associated with the ‘Radical Enlightenment.’ While having developed in Europe, this was influenced by Chinese thought. It is this tradition, it will be argued here, that can provide the legal foundations for an ecological civilization. Overcoming the deficiencies in the theory and practice of ‘liberal legalism’ through the revival and development of the notion of law associated with the Radical Enlightenment should be seen as part of the process of creating an ecological civilization.

Before going on to consider how the ideas of the Radical Enlightenment need to be developed in order to support and function as part of an ecological civilization I will first sketch the history of law to highlight the challenge to liberal legalism posed by the Radical Enlightenment. This requires some analysis of the origin of law to see how the specialized institutions of law, which were originally associated with the rise of hierarchically organized societies, came to be understood by the Athenian Greeks and then the Republican Romans as the essence of their liberty, a view revived with the Renaissance in Italy in the fifteenth century.

Law from the Ancient World to the Renaissance

Getting back to basics, all societies must have procedures for resolving conflicts and maintaining or achieving order, and law is one of the means to these ends. Laws are explicitly defined rules or principles that members of society are obliged to follow, the abrogation of which will lead to penalties with satisfaction for the injured. As such they have evolved with the evolution of societies. Traditional hunter-gatherers had no law as such. Maintenance of order was entirely based on informal relations, often, but not always, with kinship relations playing the central role. With more complex societies there emerged ‘customary law’ with procedures for bringing complaints, making and enforcing judgments, and specialized roles associated with judging and enforcing judgments. As with the Kuba, a horticultural kingdom in what is now the Republic of the Congo, these procedures could be quite complex, although what was being upheld and interpreted and applied to new situations was custom rather than law. Fully developed legal systems with explicitly formulated laws and people permanently filling specialized roles only began to emerge with agricultural civilizations and the development of centralized governments based in cities. Almost invariably, they were the product of conquests and involved exploitation of rural populations and sustained great divisions of power and status. Ancient Babylon was an

2 For a study of these, see Lucy Mair, Primitive Government, Harmondsworth: Penguin, 1964.
example. Hammurabi, the sixth king of Babylon who reigned from 1792 BCE to 1750 BCE, united diverse cities into one empire and promulgated his famous ‘Hammurabi Code’ which served to unify his empire, rendering it controllable while at the same time gaining support for his rule, mainly from elite groups. Initially, judges were priests, and the full separation between the priesthood and the judiciary only took place after Hammurabi.

Being associated with oppressive hierarchical societies formed through conquest and with power concentrated in cities, these early legal systems were characterized by varying degrees of oppressiveness, and as such, generated opposition. This could involve repudiation of law, or with the embracing and transformation of law to serve the community. Repudiation of law in response to oppressive rule was manifest in China with the reaction to the Qin dynasty (221 to 206 BCE) with its Legalist philosophy. The Qin having defeated all other states and unified China, was characterized by stringent laws and brutal punishment of anyone who transgressed the law, devaluation of individual rights, an extreme utilitarianism which denied any significance to scholars and merchants, and later, the burning of books and execution of scholars of an opposing school of thought. Repudiation was less radical in the case of Confucian thinkers and more radical in the case of Daoists. Each regarded such law as a violation of human morality and of the cosmic order. In opposition to Legalism, the Confucians argued that order should be achieved through the cultivation of the virtues, most importantly, ‘humanity’ or ‘benevolence’ (Jen) and ‘righteousness’ or ‘conscientiousness’ (Yi), the proper disposition and reasons for actions and the characteristics of will and emotion bearing on these, ‘ritual action’ according to social norms (Li), with rulers setting an example, and wisdom (Chihe), knowledge of right and wrong and commitment to the ideals of Jen, Yi and Li. However, even after the overthrow of the Qin and the eclipse of Legalist philosophy, formal legal institutions were utilized by Emperors to exert control over their subjects, and a system of codification of law was largely completed with the Tang Code of 624 CE. Law was regarded as a necessary supplement due to weaknesses in virtue and was mainly criminal law. Subsequently, law was less developed in China than in Europe or Islamic civilizations, and partly for this reason maritime trade between China and elsewhere came to be dominated by Muslims. Although Confucians did allow that law had a moral purpose in upholding the virtues, before the late Nineteenth Century when the Chinese started importing European ideas, law had almost entirely negative connotations associated with the failure of virtue, coercion and punishment.

A legal system, once established, becomes a site of contestation, and an alternative response from subordinated groups to oppressive laws has been the modification of laws by subordinates or rival elites, using laws to their own advantage. This is the strategy which proved highly successful in Ancient Greece. Ancient Greek civilization emerged from the remnants of the Bronze Age Mycenaean civilization of even greater antiquity, and did not achieve unity. Rather, the Greeks developed the polis, the city-state as a community of citizens, their dependents and servants in a defined area living under a defined constitution independent of outside authority. With the development of philosophies that implied the possibility of self-governance, most importantly the philosophy of Anaximander, reforms by Solon (c. 638 BC–558 BCE) and the subsequent development of democracy in Athens, this independence came to be

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5 See Vitaly A. Rubin, Individual and State in Ancient China, trans. Steven I. Levine, New York: Columbia University Press, 1976. The Qin king was Qin Xiaoong. The statesman who implemented this philosophy was Shang Yang. The first emperor, the grandson of Qin Xiaoong, was Qin Shi Huang.
conceived as ‘autonomy’, that is, as ‘self-legislating’, the people giving themselves their own laws. Law came to be seen as the basis of freedom, protecting citizens from arbitrary use of power and facilitating their flourishing by promoting the common good. This idea influenced the Romans of the Republic, particularly those concerned to defend the Republic against threats to it, and those who lamented the lost liberty with the overthrow of the Republic. For Athenians and Roman Republicans, participating in public life, legislating and implementing law and then contributing to the common good were conceived as the highest form of life.

This development of law as the basis of autonomy and liberty was challenged from two directions. Firstly, there were those who simply took advantage of the freedom and prosperity created by the legal system to advance their own personal interests and careers at the expense of the common good, often subverting not only the functioning of the law but the ideals which it embodied. In Ancient Greece, Sophists who for money provided an education oriented towards personal advancement, argued that the goal of life is having the power to satisfy every desire and that the notion of justice merely serves the interests of rulers. These views provoked a reaction from philosophers, most importantly Socrates, Plato and Aristotle. Plato and Aristotle provided philosophical systems, including cosmologies, to defend notions of justice and the virtues of excellence required to uphold the common good. They defended a conception of cosmic order, conceived in terms of musical harmony through right proportions and organic relations, against the background of which reason upholding the common good could be defended. Aristotle argued that the inculcation and promotion of virtue is the proper end of law. Secondly, power elites, in some cases reacting against what they took to be decadence, struggled for ascendancy and concentration of power, developing philosophies to justify the hierarchical ordering of society. Plato contributed to this tendency. Such philosophers influenced the way law was developed in the later Roman Empire, and then in Medieval Europe. While scholastic philosophers of the Middle Ages argued that only laws which were just, that is, accorded with ‘natural law’, were true laws, justice had been redefined to uphold a hierarchical social structure legitimated through the elaboration of a hierarchically ordered cosmology in which all power, and rationality itself, were seen to derive from and flow down from God through the heavenly bodies to the Pope and the Church, then to Emperor and temporal rulers and their military aristocracies, through merchants to the peasantry, who were conceived as barely above animals. This hierarchical cosmology facilitated first the concentration of power in the hands of the Emperor, then the triumph of the Church over the Emperor and other temporal rulers, and throughout the subjugation of peasants and merchants to an hereditary military aristocracy.

Taking advantage of these legal institutions, this feudal order in turn was challenged by philosophers and historians of law in support of townspeople, and in some cases temporal rulers, in their struggle for liberty from the Emperor and Church. This came to fruition in the Renaissance where legal theorists, historians and philosophers, known as the ‘civic humanists,’ revived the ideas of autonomy and liberty of the Ancient World. This inspired the development of a non-hierarchical cosmology more akin to the cosmology of the pre-Socratics such as

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8 These were portrayed by Plato in Gorgias and The Republic, illustrated by the examples of Gorgias and Thrasymachus.
Anaximander to defend and radicalize such views. Its proponents, who celebrated nature as divine and creative, came to be known as the ‘Nature Enthusiasts’. Giordano Bruno was the outstanding figure in this regard. While the Renaissance began in Italy, it influenced the rest of Europe and played a central role in the English Revolution. King Charles I was tried by a republican court, charged among other things with acting outside the law and in so doing, enslaving the people, and was executed in 1649.11

Modernity, Law and the Current Crisis in Legal Philosophy

It is generally assumed that modernity was a further development of the ideas that inspired the English Revolution, presaging later revolutions in the Americas and France, and efforts to emulate these societies in other countries. This, it is assumed, is the source of a successful political transformation associated with the establishment of the rule of law and entrenchment of liberty. In fact, as Quentin Skinner and others have shown, there was a major hiatus brought about by what has been called the ‘counter-Renaissance’ developed in opposition to civic humanism and the Nature Enthusiasm of Bruno, including a rejection of Renaissance ideas of law.12 Central to this was the development, defence and elaboration of the mechanistic worldview. While in the natural sciences this was undertaken by Galileo, Descartes, Boyle and Newton, in social philosophy and thereby law the major figures were Hobbes, Locke and Bentham. Of these, Hobbes was by far the most important. Initially a royalist offering a new defence of autocracy, after the revolution he defended Oliver Cromwell’s re-establishment of autocracy in his most important work, Leviathan, published in 1651. More significantly, Hobbes set about destroying the very language through which liberty, understood as being a participant member of an autonomous, self-governing community, had been defended by the civic humanists.13 He argued that humans are nothing but complex machines moved by appetites and aversions who by their very nature must strive to have the whole world fear and obey them, and that they enter into society only because it serves their self-interest. From this starting point Hobbes argued that laws are promulgated and enforced to serve the interests of the sovereign, although the ruler benefits his subjects by keeping order, and he identified justice with existing laws. Hobbes was effectively defending the cynicism of the Ancient Greek Sophists who had argued that the end of life is having the means to satisfy every desire, and that notions of justice are mere instruments serving those with power.

In fact, Hobbes was defending tyranny and the enslavement of people by their rulers as these terms had been understood in the Ancient World. In place of participation in public life he was concerned to divert people’s activities into commerce. This social philosophy complemented the work of Descartes and Robert Boyle who were seeking to replace the cosmology of Bruno which celebrated the creativity of nature, upheld the quest for liberty and promoted concern for the poor and had inspired radical political movements. In place of Bruno’s ‘Nature Enthusiasm’, nature came to be seen as nothing but matter in motion, moving endlessly, meaninglessly

according to immutable laws. Both nature and human community were denied any intrinsic significance. This inaugurated the philosophy of what C.B. MacPherson called ‘possessive individualism’ which was later promulgated through the work of the economists. The source of the assumptions of the economists and their real implications were later exposed by Marx.

Hobbes effectively provided the framework of thinking about society that has dominated the modern world, particularly the English speaking world, and the framework of thinking that has dominated thinking about the law, even by those reacting against it. It has not been overcome but merely disguised by legal theorists inspired directly or indirectly by Kant who, by arguing that scientific thought has only a limited domain of validity, have attempted to carve out a realm of practical reason associated with ethics, politics and the law beyond the instrumental reason of mechanicist thought. This does not mean, however, that law has been seen as nothing but an instrument of social control serving the ruler. Various philosophers have attempted to reformulate Hobbes’ bleak philosophy to defend the claims of various groups. While Hobbes argued on the basis of his notion of the contract by which society is formed that people only have a right to their lives, Locke argued that they also have right to their property and that those with property, the wealthy, should rule in their own interests. In the Twentieth Century John Rawls attempted to defend the right to social welfare provisions and defended limited democracy. Hobbes also cautioned rulers that to avoid rebellion they should look after the welfare of their subjects. Utilitarians, originally accepting Hobbes’ notion of humans and that government policies should first of all be concerned to deter rebellion, embraced the formula that society should be governed for the greatest happiness for the greatest number; that is, the aggregate of the pleasurable subjective states of individuals minus the painful subjective states. Bentham and his disciples used this formula to promote laws to ameliorate the conditions of the poor, and even animals. The contractarian notion of rights and utilitarianism were embraced and incorporated into economic theory, with markets defended on the grounds that these were based on the acceptance of rights to property and that progress, driven by individual greed, would eventually lead to the greatest happiness for the greatest number. The prime focus of law then became defining and protecting property to serve the functioning of the market.

Both the Hobbesian and the Kantian frameworks have failed to provide a foundation for a coherent legal philosophy. Theories of law developed on the assumption that society is a social contract or that government should be for the greatest happiness for the greatest number have been unable to provide compelling grounds for choosing what laws to enact or how to make decisions in particular cases. Those theories of law which attempted to defend the legal system simply in terms of its internal functioning have not overcome this failure. They have not provided objective grounds for judgments nor formal procedures for making objective decisions. Efforts to ignore the underlying theoretical justification for law by treating law as an independent object of study (legal positivism), or focusing on the system of formal rules of reasoning within the law (formalism), simply disguise this failure. As the foremost critical legal theorist, Roberto Unger put it: ‘The modern lawyer may wish to keep his formalism while avoiding objectivist assumptions. … He is plainly mistaken; formalism presupposes at least a

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15 I include here not only neo-Kantians such as Hans Kelsen, but those who have attempted to found legal theory on hermeneutics (Ronald Dworkin) or discourse ethics (Habermas).
16 For a Marxist analysis of this failure, see Valerie Kerruish, Jurisprudence as Ideology, London: Routledge, 1991. See especially the section on Ronald Dworkin, pp.66-78.
qualified objectivism.'18 By objectivism, Unger meant 'the belief that the authoritative legal materials … embody and sustain a defensible scheme of human association.'19 The real outcome of the domination by this framework of thinking has been ‘legal indeterminacy’ in which ‘there are hard cases where the apparently relevant statutes, common law, contracts, or constitutional law provisions at issue do not clearly resolve the dispute.’20 This indeterminacy has not been ameliorated by efforts to revive some non-mechanistic notion of reason based on transcendental arguments about the necessary conditions of rational action or discourse, such as Kant’s ethical philosophy or Habermas’ discourse ethics.21 This implies that the rule of law is largely a myth. As Lawrence Solum pointed out, ‘(1) judges will rule by arbitrary decision, because radically indeterminate law cannot constrain judicial decision; (2) the law will not be public, in the sense that the indeterminate law that is publicized could not be the real basis for judicial decision; and (3) there will be no basis for concluding that like cases are treated alike, because the very ideal of legal regularity is empty if law is radically indeterminate.’22 What we have in the legal system, as in the polity generally, ‘is civil war carried out by other means’ in which ‘government does not express or represent the moral community of the citizens, but is instead a set of institutional arrangements for imposing a bureaucratized unity on society which lacks genuine moral consensus.’23 As Unger pointed out, this means that ‘the legal order is merely the outcome of power struggles and practical compromises.’24 The winners in such power struggles will generally be those who have the most money. The failure of the modern tradition should not be surprising when the egoism and nihilism and the denial of community which are presupposed by these doctrines is properly appreciated.

In fact modern Western law has not been as bad as would be expected from this sketch, particularly in mainland Europe. This is because the ideas of the legal theorists have not totally dominated the way legal systems work. Despite the nihilism of modernist cosmology and the debased notion of humans promulgated by mainstream Anglophone philosophy, economic theory and psychology, people continued to believe in and act on the basis of notions of justice with deep metaphysical roots in different traditions of thought.25 Their ideas of justice came from traditional Christian thought, even when people no longer believe in Christianity, and from Ancient and Renaissance notions of justice, autonomy and liberty.

While these traditions have been embodied in the organization and practices of communities, the ways of thinking associated with and required to support these communities have lost ground in recent years. Their influence was vigorously attacked in the 1970s by the original proponent of neo-liberalism, Friedrich Hayek, who in The Mirage of Social Justice argued that the very idea of social justice is an illusion that threatens the freedom of

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individuals.26 Hayek’s ideas and those of his disciples have triumphed around the world, creating what James Galbraith described as ‘the predator state’ in which ruling elites have plundered the natural and accumulated social wealth of nations in the drive for increased profits and accumulation of wealth, and in so doing, have crippled the capacity of nations to govern themselves, effectively enslaving them and their members to the global market and its financial institutions.27 The general population has been deluded into believing that freedom means freedom to shop. Hayek’s ideas have produced an immensely wealthy global ruling class that has succeeded in controlling governments, atomizing communities and crippling efforts to avoid a global ecological catastrophe.28 This development has not been accompanied by the contraction of legal systems, but by their massive expansion with exponentially increasing costs as governments have tried to intensify exploitation of employees and compensate for the corrosion of communities and the virtues sustained by them with a vast increase in government regulation. This process has been characterized by an almost complete dissociation of law from any notion of justice, and a working population and a growing population of the socially excluded, with little protection from the law, who often can only survive by evading regulations; that is, by acting outside the law. The vast majority of houses built in the world, for instance, are built illegally. In Anglophone countries, winning court cases is largely a matter of who can afford the best lawyers.29 Expanding in a value vacuum in which the only comprehensible order is either the order of atoms governed by immutable laws bouncing against each other or a mechanical order in which parts are mere instruments of the whole, legal systems that have followed this path, most prominently the legal system of USA, are failing even at the most basic level of achieving social order.

Overcoming the Crisis: Reviving the Radical Enlightenment

If the market dominated economy had continued to expand the goods available to people it is possible that the deficient state of law would never have been fully exposed. Countries would claim to be establishing legal systems upholding the rule of law despite such systems being a fiction, deluding enough of their populations to keep them under control while facilitating their continued exploitation. While there have always been winners and losers in the market, with most of the losers being in the peripheries of the world economy, now there are an increasing number of losers in the affluent countries, and even the winners live in constant ‘fear of falling’.30 ‘Winners’ here means those who make more money. When the destruction of communities, both human and ecological, is taken into account, everyone is losing. The lives of even the economic winners are being hollowed out and rendered meaningless as everything and everyone are being defined as nothing but items to be bought, exploited and sold, and the only end in life is increasing consumption.31 The constant quest for novelty in consumer goods is so frenetic because, as with drug addiction, people are denied fulfillment in their lives. People have no real control over their destinies, all that is solid melts into air, as Marx and Engels put it in The Communist Manifesto, and the dynamics of the market, which is really determining the future, is inexorably destroying the ecological communities required for humanity’s continued

existence. It is this crisis which has forced people to face up to the failure of legal systems around the world.

This crisis has also revived interest in suppressed traditions of thought. In the West, the most important ideas are those deriving from the Ancient world and the Renaissance. The quest for autonomy and liberty as they had been understood before the rise of Hobbesian thought were not totally destroyed but survived, firstly in an underground movement where it developed and eventually came to the surface in Germany at the end of the eighteenth and early nineteenth centuries. This was the Radical Enlightenment, in fact the original Enlightenment that opposed the mechanistic view of nature and the atomistic, utilitarian view of human society.  

Major figures of the Radical Enlightenment in the eighteenth and early nineteenth century were Rousseau, Herder, Fichte, Schelling and Hegel. As far as the philosophy of law is concerned, of these, Hegel was the most important. Following the Greeks and rejecting the Hobbesian conception of society, he argued that the first task of a philosophy of law is to consider what is a good society, and, following Fichte and Schelling, argued that the good life is one which recognizes people as free. As Charles Taylor wrote, in Hegel’s philosophy of law ‘public institutions and practices – the “laws” – [are] based on the understanding that they [are] the common repository of the citizens’ dignity. Citizens love the laws because they are the common repository of their freedom…’

Hegel argued that to become a legal person is not only to be recognized as a free agent responsible for one’s actions and works, but through achieving such recognition a person becomes free agents. Freedom here does not mean freedom from constraint, but freedom to be part of a community, freely constraining oneself in accordance with the law because it is the law which is necessary to maintain both the freedom of the community and the freedom of each individual within it. It involves a shared appreciation of and responsibility for the value of this form of life, and this shared appreciation is a condition for maintaining and advancing this form of life. As Taylor wrote: ‘To have a viable society requires not just that I and others think it is a good thing, but that we come to a common recognized understanding that we have launched a particular common enterprise of this sort, and this creates a particular bond around this society, this tradition, this history.’

These ideas have been further developed by Hegelians, neo-Hegelians, Marxists and process philosophers. Writing in England in the 1870s, the neo-Hegelian T.H. Green defined his own ideas on law in opposition to the utilitarianism and legal positivism of the most influential British jurist, John Austin. As Paul Harris and John Morrow portrayed Green’s ideas on law:

Green argues that the essential social dimension to individual self-realization means that the individual must regard social institutions and practices (political organization, customs, mores, laws) as collective efforts after a common good. They are the result of the need to secure and maintain the conditions within which individuals can pursue their self-realization in their own ways, and of the need to harmonize the ways in which they do so. As such, these institutions and practices need to be acknowledged by the individual as deserving his allegiance and consideration as essential to his own self-realization – provided they continue to act as means to the common good and not impediments to it. … The state could best be understood as the culmination of a process.

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35 Taylor, p.70.
through which rights had been refined and extended to facilitate the fullest possible degree of self-development. Austin had regarded rights as created by the commands of the sovereign, and so thought any obligation to recognize rights was quite independent of the nature of the right … Green, by contrast, understood rights as historical phenomena that were embodied in an increasingly wide range of social institutions reflecting men’s growing recognition of the conditions under which moral action was possible.\textsuperscript{36}

Recently, such ideas have been revived not only by neo-Hegelians but also by process philosophers influenced by Alfred North Whitehead, notably Jay Tidmarsh, Franklin Gamwell, Doug Sturm, Howard Vogel and Mark Modak-Truran. Sturm, for instance, has called for a ‘jurisprudence of solidarity’ rather than a ‘jurisprudence of individuality’ in which ‘the driving passion of law is not so much to protect the individual against trespass as it is to create a quality of social interaction conducive to the flourishing of a vibrant community of life across the world.’ In a jurisprudence of solidarity rights are not defined in opposition to community but an achievement of communities necessary for their healthy functioning. As Sturm argued, ‘human rights are of greatest importance as a form of empowerment, enabling people, as individuals and in their associations, to participate effectively in and through political community.’\textsuperscript{37} Modak-Truran in particular has been concerned to show how this provides a strong substantive notion of the good which avoids the problems of legal indeterminacy.

From the Radical Enlightenment to Ecological Civilization

Despite the promise of the Radical Enlightenment, its development is a project rather than something completed, and its advance has been hindered by entrenched opposition from people in positions of power, in business and government, in academia and in the legal system itself, whose deep assumptions are being brought into question by this tradition of thought. But then the failure of the legal system along with the failure of the global economy are manifestations of a much bigger failure, a failure which amounts to a crisis of civilization, the civilization of modernity, or of industrial civilization, which originated in Europe and through the imperialism which it legitimated through Social Darwinism, now dominates the entire world. This crisis is many faceted and involves a whole range of problems and issues. However, the greatest crisis of all, and the crisis that brings all other problems into perspective, including the failure of modern legal systems, is the crisis of the global ecosystem and the inability of humanity so far to effectively address this crisis. Underlying this crisis is the continued dominance, despite advances in science which have gone beyond it, of a cosmology which makes the existence not only of humans as sentient, creative, social beings unintelligible, but life itself. It is not enough to defend the social philosophy of the Radical Enlightenment in isolation. It is necessary to defend and develop the Radical Enlightenment cosmology to provide a conception of order to underpin the legal system. This, essentially, is the cosmology of process metaphysics; that is, the cosmology of reconstructive postmodernism.

As I have suggested, this cosmology has its roots in the Nature Enthusiasm of Giordano Bruno who in turn was reviving ideas of pre-Socratic philosophers. However, its development involved far more than a simple elaboration of Bruno’s ideas. It was infused by ideas from Leibniz to produce what Joseph Needham called the organic view of the world. Needham referred to Alfred North Whitehead as the foremost representative of this view, but argued that

Whitehead was the culmination of a tradition of thought going back through Lloyd Morgan, S. Alexander, Smuts, Engels, Marx, Hegel, Schelling and Herder to Leibniz. He further argued that the spectacular originality of Leibniz, the ultimate source of the opposition to the tradition of Galilean-Newtonian science, derived from the influence on him of the Song dynasty neo-Confucian philosopher, Zhu Xi (Chu Hsi) (1130-1200). Of Zhu Xi, he wrote: "Behind him he had the full background of Chinese correlative thinking, and ahead of him he had - Gottfried Wilhelm Liebniz." Needham argued that neo-Confucian thought had not been able to be understood properly in the past by Western thinkers because "they lacked the background ... of modern organicist philosophy." As he went on to argue:

On the organic view of the world, the universe is one which simply has the property of producing the highest human values when the integrative level appropriate to them has arisen in the evolutionary process. ... From the point of view of the scientist ... the levels of organization can be described as a temporal succession of spatial envelopes; thus there were certainly atoms before there were any living cells, and living cells themselves contain and are built up of atoms. It would, of course, be absurd to suggest that Chu Hsi and his Neo-Confucian colleagues talked like this, or even to interpret what they said as implying any of these detailed conceptions, still less to translate their words accordingly. But I am prepared to suggest, in view of the fact that the term Li always contained the notion of pattern, and that Chu Hsi himself consciously applied it so as to include the most living and vital patterns known to man, that something of the idea of "organism" was what was really at the back of the minds of the Neo-Confucians, and that Chu Hsi was therefore further advanced in insight into the nature of the universe than any of his interpreters and translators, whether Chinese or European, have yet given him credit for. ... [T]he modern view of the universe, as the natural scientist and the organic philosopher sees it, are Matter-Energy on the one hand, and Organisation, the principle of Organisation on the other. If, therefore, it were indispensible to translate the Li of Chu His into English, ‘Organisation’ or ‘Principle of Organisation’ would be the choice I would make.

Needham argued that Qi (Chhi), the second concept deployed by Zhu Xi, should be equated with Matter-Energy. In other words, Needham was arguing that post-mechanistic science is a product of the synthesis of the most profound insights of European and Chinese civilizations. As such, it is no longer Western science, but world science, and presages the development of a new, world civilization.

Needham himself, apart from being an historian of science and civilization, was a biochemist and theoretical biologist. He was also strongly influenced by advances in early twentieth century physics which were a main source of inspiration for the organic philosophy of Whitehead. However, Whitehead also had a major influence on the development of ecology, and it could be argued that it is ecology that most fully exemplifies the new, post-mechanistic science. As the theoretical ecologist Robert Ulanowicz recently argued: ‘A new perspective on how things happen in the ecological world might conceivably break the conceptual logjams that currently hinder progress in understanding evolutionary phenomena, developmental biology, the rest of the life sciences, and, conceivably, even physics.’ This will form the basis of an ‘ecological metaphysic’ which focuses on processes and configurations of processes. It was Whitehead’s insight that evolutionary progress occurs not through the struggle between

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organisms for survival but through the way organisms modify their environments, with those organisms that modify their environments to assist each other being most likely to survive. It is now realized that it is environmental transformations that are the prime cause of the destruction of species, and the species that survive are those that augment the ability of the ecological communities of which they are part to maintain environments in which they can flourish. It was this insight that led to the appreciation of the central role of symbiosis in the evolution of life. Community ecology now sees ecosystems as communities of communities ranging from Earth itself as a global ecosystem, characterized by James Lovelock as ‘Gaia’, to the most elementary forms of life. Organisms themselves are regarded as tightly integrated ecosystems. Broader communities provide the niches for more local communities which then function as part of the dynamics of the broader communities. Communities develop by fostering the conditions for those communities which augment the conditions of their own existence and eliminating those that destroy these conditions. It is in this way that the global ecosystem, or ‘Gaia’, has generated humanity with its cultures and civilizations. If humanity develops its potential to augment the life of Gaia it will be sustained; if it undermines the common good of life, it will be eliminated.

Ecology has advanced rapidly in recent years based on non-equilibrium thermodynamics and hierarchy theory, particularly as this was developed by Howard Pattee. For hierarchy theorists, the very being of any system involves self-constraining, and such self-constraining is the basis of the freedom of these systems. As Pattee wrote:

The constraints of the genetic code on ordinary chemistry make possible the diversity of living forms. At the next level, the additional constraints of genetic suppressors make possible the integrated development of functional organs and multi-cellular individuals. At the highest levels of control we know that legal constraints are necessary to establish a free society, and constraints of spelling and syntax are prerequisites for free expression of thought.

Hierarchies of constraints are now recognized by community ecologists as the key to understanding the functioning of ecological communities. Ecosystems can be identified as unitities that exist through constraining their sub-communities to augment the environmental conditions of the whole community, generating hierarchies of communities of communities harmonizing with each other and thereby providing the environments within which these communities can flourish. This echoes the ‘process-relational’ conception of nature developed by Zhu Xi, with patterns of patterns now seen by ecologists as communities of communities cycling energy and materials and generating enduring forms or structures. Each of these communities has its own dynamics, yet they are constrained to augment the conditions for each other.

Understanding the relationship between such communities at the same time reveals how these relations should be. Ecosystems can be healthy or unhealthy. ‘Health’ is characterized by communities mutually augmenting each other at multiple levels, facilitating their continued successful functioning, their resilience in response to perturbations, new situations and stress,

47 This claim has been contested, particularly by Mark Sagoff, but it has been defended, notably by Ernest Partridge and Robert E. Ulanowicz. On this debate, see David Pimentel, Laura Westera, and Reed F. Noss (eds), Ecological Integrity: Integrating Environment, Conservation, and Health, Washington: Island Press, 2000.
and for ongoing change and development to maximize developmental options. Health is associated with the generation of forms and processes consisting of mutually augmenting centres of activity at multiple scales, with a great deal of diversity and redundancy. While mathematical models have been designed to measure such health, more than mathematics is required to comprehend what health is. A feature of science of the Radical Enlightenment is that it takes the goal of science to be understanding rather than simply making predictions, and gives a place to non-mathematical concepts and also feelings in achieving this understanding. The complexity theorist and theorist of architecture, Christopher Alexander, has shown that it is when centres do augment each other that people experience structures as more alive, and what they experience as more alive and thereby as more conducive to life, they see as more beautiful. This experience of beauty involves a feel for the unity in diversity of the whole which is not merely a subjective quality but a quality of reality associated with vitality that people can perceive. As Alfred North Whitehead wrote: ‘Beauty is the internal conformation of the various items of experience with each other, for the production of maximum effectiveness. Beauty thus concerns the inter-relations of the various components of Reality, and also the inter-relations of the various components of Appearance, and also the relations of Appearance to Reality.’ This supports Aldo Leopold’s land ethic, according to which ‘A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it does otherwise.’ Beauty requires Truth. As Whitehead put it:

There is a blunt force about Truth, which in the subjective form of its prehension is akin to cleanliness – namely, the removal of dirt, which is unwanted irrelevance. The sense of directness which it carries with it, sustains the upstanding individualities so necessary for the beauty of a complex. Falsehood is corrosive. … When Appearance has to Reality, in some important direct sense, a truth-relation, there is a security about the Beauty attained, that is to say, a pledge for the future. From these functions of Truth in the service of Beauty, the realization of Truth becomes itself an element promoting Beauty of feeling. … The element of anticipation under the influence of Truth is in a deep sense satisfied, and thus adds a factor to the immediate Harmony. … In the absence of Truth, Beauty is on a lower level, with a defect of massiveness. In the absence of Beauty, Truth sinks to triviality.

Appreciation of beauty is required to constrain people’s actions and to inspire them to augment the life of their communities, and to augment revulsion against injustice and exploitation. Seeing falsehood, injustice (which is really a form of falsehood) and exploitation (which is really a form of injustice) as ugly is, part from anything else, recognizing that these damage the vitality of communities, and that ugliness is characteristic of the practices and activities that destroy ecological communities. Appreciation of beauty is also important to the development of science itself, playing a central role in elaborating theories and thereby guiding research, and those scientists associated with the Radical Enlightenment characteristically also have a strong interest in art and beauty. People’s appreciation of beauty not only constrains them to live in a

52 Whitehead, Adventures of Ideas, 343f.
way that augments life, but is itself an augmentation of life, and of beauty. Thus Whitehead could justifiably claim that ‘[t]he teleology of the universe is directed to the production of Beauty’.56

This development of the science of the Radical Enlightenment, and the central place of ecology within it, offers support for and substance to the call by Chinese environmentalists, accepted by the Chinese government in November, 2007 for the creation of an Ecological Civilization. It will be a civilization based on a fusion of the best of thought from all civilizations, that is, an ecological world-view, something which is now absolutely necessary to avert a global ecological catastrophe. What this will involve was well summed up by Brian Goodwin, until his death in 2009 the leading figure in the theoretical biology movement begun by Needham and C.H. Waddington:

The Great Work, the Magnum Opus in which we are now inexorably engaged, is a cultural transformation that will either carry us into a new age on earth or will result in our disappearance from the planet. The choice is in our hands. I am optimistic that we can go through the transition as an expression of the continually creative emergence of organic form that is the essence of the living process in which we participate. … This Gaian Renaissance will lead to what Thomas Berry calls the Ecozoic Age, in which all inhabitants of the planet are governed by the principles of Earth Jurisprudence in an Earth Democracy.57

Ecological Civilization and Law

What are the implications of all this for law? Clearly, an ecological civilization will involve constraining how people interact with each other and with the rest of nature. The development of law will be essential to such constraining, most importantly, to constraining how the market operates and ensuring the maintenance of the conditions for such constraint, so that the market works for the common good and vitality of communities rather than undermining them. However, what I am suggesting here is that the ecological world-view is required for the proper functioning of law as such, that is, law that serves to liberate people rather than reduce them to instruments of powerful elites. As I pointed out at the beginning of this essay, the Ancient Chinese and the Ancient Greeks responded to oppressive laws in different ways, the Chinese by opposing rule by law and governing as much as possible by cultivating virtues and preserving customs, the Greeks by transforming laws into instruments of their freedom. I have suggested here that it is the Greek path which must be embraced; it is inconceivable with the complexity of the present world that societies could avoid utilizing legal systems to achieve and maintain order, and if this is the case, we should be striving for legal systems that liberate rather than oppress people. However, I also pointed out that despite the central place of law in European civilization the conditions for its proper functioning have been undermined or subverted. While there is a tendency for corruption of legal systems by various members of society, the deeper problem has been the acceptance of a cosmology that legitimat es egocentric greed as both inescapable and as the driving force of economic and evolutionary progress. This has eliminated any basis for evaluating competing claims to justice. It is this that has rendered the application of law increasingly arbitrary, except for a massive bias towards serving the interests of those with power and wealth. The ecological world view, as a development of the Radical Enlightenment, provides a background sense of good order which can form the basis for dealing with the

56 Whitehead, Adventures of Ideas, p.341.
problem of indeterminacy, not by providing determinate judgments, but by overcoming the need for them.

To begin with, it should be noted that the quest for a formal procedure to generate determinate judgments in all particular cases presupposes the Hobbesian view that the relationship between humans is necessarily antagonistic, and the prime function of law is to suppress this conflict. Determinate judgments are required to avoid the appearance of arbitrariness in the law and thereby maintain its legitimacy so that people will accept its judgments. Hobbes denied the possibility that human virtues could be cultivated in a way that would enable people to live harmoniously, the view proclaimed by Confucius and Mencius and defended by Aristotle. One of the most important insights to emerge from the Radical Enlightenment, an insight which underlay Hegel’s philosophy of law and those he influenced, was that people only become self-conscious beings and establish satisfactory identities through being recognized as free agents by others who are in turn recognized by them as free agents. Secondly, that the consolidation of such an identity requires some notion of the good life and the common good that individuals can contribute to and achieve recognition for such contributions. This means that while there are real grounds for conflicts between people, and even more so between groups of people, there is an impetus to achieving a social order based on mutual respect upholding the significance of goods worth striving for, and to extend this respect to encompass the whole of humanity.\(^{58}\) A third insight, rediscovered and amplified by hierarchy theorists, is that freedom and constraint are not opposed. Constraints are the condition of freedom. Constraints can be facilitating. The very being of any entity is constituted by the constraints that form it. As the constraints of grammar facilitate the complex forms of communication made possible by language, which in turn reproduces language with its grammar, the constraints associated with respecting others, including other forms of life, are the essential aspects of the process of maintaining and augmenting the life of the diverse forms of human and natural communities. Laws are constraints, but they should be facilitative constraints, and by virtue of this, gain the support of people they constrain as the condition of their freedom. Conceived in this way the legal process should be conceived of in a very different way than in a Hobbesian world of egoists. Judgments can be accepted as creative responses to difficult situations on the basis of the wisdom of the judges, without assuming that there is one best possible judgment.

The ecological view of the world as communities of communities supplies a background conception of order to evaluate legal systems and support their functioning in this way. Through this ecological worldview, not only can Hegel’s notion of humans be defended and the conditions for communities understood,\(^{59}\) but it becomes possible to judge what kinds of legal constraints augment or undermine communities. It also becomes possible to judge when these constraints are being adhered to and when subverted, and whether a legal system itself is augmenting or undermining the life of the community. It is possible to do this while taking into account diversity and the different situations faced by different communities, and of the different constraints that need to be developed by different communities. When constraints facilitate flourishing of communities it is healthy, and is perceived and appreciated as being more alive, and thereby as more beautiful, although people can be deceived and it is necessary to augment


immediate perceptual judgments of beauty with more reflective and abstract forms of thinking. These reflective and abstract forms of thinking should not replace the experience of wholeness and beauty but should enrich this experience. As such, beauty is a felt quality of what is in reality itself, not something merely in the eye of the beholder. The sense of beautiful order, transcending the opposition between aesthetic experience and analytic rationality, allows both uniqueness and universal features of reality to be understood. The feeling of wholeness in diversity associated with this experience of beauty is required of the members of communities for them to function properly, and for those studying these communities to recognize them as such and understand them. The capacity to identify and judge what is beautiful enables people to understand the ultimate telos or end of human existence, and this augments their capacity to make evaluative judgments of unique situations. As Whitehead argued, the ultimate goal of their endeavors should be ‘Perfection’ understood as ‘Truthful Beauty’. People aligned by the sense of beauty to pursue this goal of ‘Truthful Beauty’, is ecological civilization, for as Whitehead wrote: ‘civilization is nothing other than the unremitting aim at the major perfections of harmony.’

For the ecological conception of the world to function in this way it has to be taught. It should be at the core of education systems throughout the world, providing a common global culture which at the same time can acknowledge and appreciate differences and diversity. However, it is not enough to merely accept this conception of the world intellectually. It is necessary for people to embody this way of understanding the world in their practices and forms of life, and to develop forms of life that cultivate such practices and the appreciation of beauty and justice that go with them. It is necessary to combine the Greek quest for autonomy through law with the Confucian concern for the cultivation of virtues of harmonious living with the legal system playing a role in this. The more general virtues associated with wisdom, humanity, conscientiousness and fairness or justice should underpin the more specific virtues associated with and required for more specific roles such as those required for the proper functioning of the legal system. These, it has been argued, are judicial temperance, judicial courage, judicial temperament, judicial intelligence and judicial wisdom. It is important to emphasize, though, as Modak-Truran argued, that a specific judicial virtue ‘cannot be fully understood without specifying its relationship to the intellectual virtue of practical wisdom and the telos of the good life.’

This, essentially, is the message of ‘process natural law’. As Modak-Truran, the leading exponent of process natural law, wrote:

Process natural law ... mediates many of the cultural differences between the East and the West through the telos of beauty (unity-in-diversity), which entails maximizing both an Eastern aesthetic sense of order (emergent harmony or spontaneous order) and a Western rational sense of order (complexity arising from diverse individual orderings). In accordance with the telos of beauty, process natural law further supports a culturally sensitive conception of the rule of law because, as Whitehead emphasizes, “[e]ach society has its own type of perfection.”

Modak-Truran has pointed to other developments in legal thought based on process philosophy that accord with process natural law. Tidmarsh has argued that principles like perfection, order

60 Whitehead, Adventures of Ideas, p.349.
and harmony could be used as a framework to determine what best achieves beauty (in Whitehead’s sense) in particular cases. Vogel has argued that the telos of beauty could reinvigorate the sense of vocation among lawyers through understanding law-as-a-process-with-a-purpose. He also argues that ‘[t]he legitimacy of constitutional interpretation is to be found in the growth and nurture of participatory democracy, as an expression of the principle of internal relations, seeking community large enough to embrace the elements of discord in our experience…’ In a similar vein, Sturm replaces the individualistic ontology of ‘classical Western liberalism’ with a process-based ‘communitarian political ontology,’ which ‘is more relational and ecological, even organic, in character.’ Following Sturm, Modak-Truran argues that process natural law can allow more than one conception of the rule of law. ‘Rather than imperialistically imposing a Western conception of the rule of law (formal legality + individual rights + democracy), process natural law supports a conception of the rule of law that takes into account the important cultural differences among countries like U.S. and China.’ This could involve emphasizing social welfare requirements more strongly than individual rights.

Modak-Truran shows why legal indeterminacy does not pose a threat to the legitimacy of process natural law. A situation which generates indeterminacy, he argues, ‘presents an occasion for judges to rely directly on the rational foundation of the law.’ What this means is that judges can reason not only downwards from abstract principles to particular cases but also from the bottom up, from particular cases to these principles, adding something new by judging new situations and justifying these in light of their felt relation to the telos of beauty. In doing so they should follow the consequences of their decisions, paying attention to their effects on people. This really means respecting people outside the legal system, acknowledging that judges and all those involved in the legal system are active participants in their broader moral communities and working towards the telos of the cosmos. They should see themselves as participants in questioning and developing the culture of these communities in the process of confronting new situations, guided by their feel for the whole, their sense of what is alive and beautiful, and their understanding of the nature the communities of which they are part and their place in nature and the cosmos.

Purely on the basis of theoretical arguments it would be difficult to demonstrate the viability of these ideas in practice. These ideas need to be tested. Fortunately, there is at least one country where Renaissance ideas of politics and law were not obliterated by the Hobbesian tradition of thought, Switzerland. The functioning of the legal system there provides some idea of what is possible. Formed by an alliance of four cantons in 1291 as a unique combination of rural areas and cities based on strict political equality of all participating cantons, Switzerland expanded and was recognized as an independent nation in 1648 and then united in a federation in 1848. Throughout its history it has maintained its commitment to autonomy. It now consists of 26 cantons and half-cantons, each with its own constitution, parliament, government and courts. These cantons are divided into municipalities or communes, of which there are at present 2760. Switzerland’s most important national laws are decided on by referenda of all citizens. Local power is constrained by federal law, but power is decentralized as much as possible to cantons and communes. Although only two cantons now decide on laws through collective public

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65 Sturm, Solidarity and Suffering, 19, 20.
meetings, there is genuine participation by citizens in legislation in all cantons. As a consequence laws are enacted that do serve the people and are seen by the Swiss as their own. This has resulted in a very low incidence of crime, and at the end of 2006, the incarceration rate of Swiss citizens was 31 per 100,000 compared to 740 per 100,000 in USA.\(^{68}\) Laws and policies vary greatly between cantons, although not in such a way to undermine the unity of the federation. This variation has served to enrich Swiss society and to increase its resilience. Participation cultivates a conception of the world as communities of communities with an appreciation that communities are constituted by facilitative constraints and the virtues of self-constraint. The Swiss have avoided what Marx referred to as the ‘metabolic rift’ whereby populations are concentrated in cities and cities exploit rural areas in a way that impoverishes the land.\(^{69}\) It is noteworthy that the Swiss are among the most environmentally concerned people in the world, and while running a much healthier economy, produce less than a third the greenhouse emissions per head of population than countries such as USA, Canada and Australia.\(^{70}\)

While Switzerland is only a small country and it would be impossible to run large countries in the way Switzerland is run, Switzerland does show that it is possible to achieve organized decentralization of power while maintaining unity in a country of different languages, different religions and different cultures. The challenge humanity faces is to work out how to achieve such organized decentralization on the much greater scale of the biggest countries such as China, in doing so, providing a model for other regions of the world and for the world as a whole.

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