



# Radical Anthropology

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*Interpreting the world – and changing it*

## The scarcity myth

What hunter-gatherers can teach us about sharing



Jerome Lewis on abundance  
 Interview with Noam Chomsky  
 Lionel Sims decodes Stonehenge  
 Keith Hart: a philosophy for life  
 Marek Kohn: can we learn to trust?

£3

**Editor:**

Stuart Watkins

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**On the cover:**

The journal's logo represents the emergence of culture (dragons feature in myths and legends from around the world) from nature (the DNA double-helix, or selfish gene). The dragon is a symbol of solidarity, especially the blood solidarity that was a necessary precondition for the social revolution that made us human. For more on this, see our website at [www.radicalanthropologygroup.org](http://www.radicalanthropologygroup.org).

The cover picture features Baka Pygmies using software to precisely map a valuable moabi tree so that it can continue to provide them with fruit, oil and medicines for generations to come. See Jerome Lewis's article on page 11 for details.

# Who we are and what we do

*Radical Anthropology* is the journal of the Radical Anthropology Group.

**Radical:** about the inherent, fundamental roots of an issue.

**Anthropology:** the scientific study of the origin, behaviour, and physical, social, and cultural development of humans.

Anthropology asks one big question: what does it mean to be human? To answer this, we cannot rely on common sense or on philosophical arguments. We must study how humans actually live – and the many different ways in which they have lived. This means learning, for example, how people in non-capitalist societies live, how they organise themselves and resolve conflict in the absence of a state, the different ways in which a 'family' can be run, and so on.

Additionally, it means studying other species and other times. What might it mean to be almost – but not quite – human? How socially self-aware, for example, is a chimpanzee? Do non-human primates have a sense of morality? Do they have language? And what about distant times? Who were the Australopithecines and why had they begun walking upright? Where did the Neanderthals come from and why did they become extinct? How, when and why did human art, religion, language and culture first evolve?

The Radical Anthropology Group started in 1984 when Chris Knight's popular 'Introduction to Anthropology'

course at Morley College, London, was closed down, supposedly for budgetary reasons. Within a few weeks, the students got organised, electing a treasurer, secretary and other officers. They booked a library in Camden – and invited Chris to continue teaching next year. In this way, the Radical Anthropology Group was born.

Later, Lionel Sims, who since the 1960s had been lecturing in sociology at the University of East London, came across Chris's PhD on human origins and – excited by the backing it provided for the anthropology of Karl Marx and Friedrich Engels, particularly on the subject of 'primitive communism' – invited Chris to help set up Anthropology at UEL. Since its establishment in 1990, Anthropology at UEL has retained close ties with the Radical Anthropology Group.

RAG has never defined itself as a political organisation. But the implications of some forms of science are intrinsically radical, and this applies in particular to the theory that humanity was born in a social revolution. Many RAG members choose to be active in Survival International and/or other indigenous rights movements to defend the land rights and cultural survival of hunter-gatherers. Additionally, some RAG members combine academic research with activist involvement in environmentalist, anti-capitalist and other campaigns. For more, see [www.radicalanthropologygroup.org](http://www.radicalanthropologygroup.org).

## Subscriptions

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Radical Anthropology, c/o Stuart Watkins, 2 Spa View,  
Leamington Spa, CV31 2HA.  
Email: [stuartrag@yahoo.co.uk](mailto:stuartrag@yahoo.co.uk).

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# Anthropology is for everyone

In the editorial for our first issue, we said we were proud to feature representatives of the most exciting and important trends in anthropology. Which left us with a difficulty. How were we to top our initial achievement? There was an obvious answer, if one that seemed doomed to disappointment: just contact *all* the very best and most important names in the field, and ask them to contribute too. That's what we did. Amazingly, unbelievably, they all said yes. Even better, they all delivered on their promise, and you can read what they have to say in these pages. If we may be so immodest to say so, that makes the first two issues of our journal an essential – if not, of course, definitive – guide for anyone interested in creating a future fit for our species and the planet.

For the present, however, what we seem to need as much as anything is inspiration and the confidence that things could be changed and improved. Because if the prospects for radical change are as gloomy as most people insist, there would seem to be little point doing anything but console ourselves as the economy tanks and the planet burns. Where better to find such inspiration than **Jerome Lewis's** work with African hunter-gatherers on **page 11**? Lewis pursues a classic anthropological strategy – to learn something about ourselves by paying close and sympathetic attention to how others see us. In his article for *Radical Anthropology*, Lewis considers what the Yaka hunter-gatherers of Congo-Brazzaville make of Western 'conservation' efforts. The clue to the truth of what 'conservation' is all about is to be found in a simple but puzzling fact: the Yaka do not discriminate between the activities of the loggers cutting down their forest for private gain – supposedly the main villains of the piece – and conservationists.

This is not because the Yaka have made a stupid mistake. It's because both loggers and well-meaning conservationists do in fact work hand in hand. They both come from a culture that has already destroyed its

forests and put a safety fence around the charred ruins that remain. Conservationists pursue a strategy that makes sense if what you want is to accept defeat and preserve the ruins. If, on the other hand, we truly want a future for the forests, maybe we should turn for advice to those who have been its custodians for millennia. From their point of view, the forest is not a scarce resource to be protected, but an abundant resource to be shared. As Lewis puts it, the onus is on us to change our point of view from "one that endlessly chases and protects scarce natural resources to one that sees natural resources as adequate, even abundant. Seeing that there is enough for everybody, but it just needs to be shared properly, is the lesson that we can learn from the Yaka". How the Yaka achieve this sharing way of life is also touched upon in Lewis's brilliant article.

That they *have* achieved it is not in any serious doubt, which may come as a surprise to those who insist that human nature must militate against such communist arrangements. This confidence about what human nature is and must be is another dominant feature of Western thought – if you like, our inherited common sense. Common sense can be a reliable guide in our lives – how could we account for its existence otherwise? But sometimes it is so disastrously wrong that we need a way to think beyond it. We need to know the truth behind appearances because better knowledge of our human nature will allow us to make living arrangements that are in accord with that nature. We also need to know the truth if our moral codes are to be anything more than hot air – what kind of behaviour can we expect from human animals? And if that leaves something to be desired, what social arrangements can we make so that the darker sides of our inherited behavioural strategies can be better managed in the interests of all? The first question, though, must be, how are we to acquire the truth about human nature if common sense is no guide?

It is scarcely possible to consider what a science of human nature could tell us without engaging with the work of **Noam Chomsky**. More than anyone else, he has changed the way we think about what it means to be human, gaining a position in the history of ideas arguably comparable with that of Darwin or Descartes. As if that wasn't enough for one lifetime, he is also essential reading for anyone critical of US militarism and imperialism, and global capitalism. Here, we limit ourselves to an area of his thought not so often discussed, the evolution of language. See our interview on **page 19**. (We in the Radical Anthropology Group have our differences with Chomsky, which we hope come out in the interview. In the next issue, we'll be talking to anthropologist Chris Knight, where an alternative view on the evolution of language will be spelled out. In the meantime, see [www.radicalanthropologygroup.org/class\\_text\\_070.pdf](http://www.radicalanthropologygroup.org/class_text_070.pdf).) We continue the human nature theme later in the journal by considering under what conditions we can expect humans to trust each other. See our interview with **Marek Kohn** on **page 29**.

**W**e are delighted to have such eminent names onboard. But our journal must ultimately be judged a failure if all we end up creating is yet one more forum for that small minority of people lucky enough to make their living from the production of new knowledge. Such knowledge is useful – as **Lionel Sims** puts it on **page 24**, it strengthens our resolve by arming us intellectually. But it can be more than that: it can help us decide what we can and should make of our lives – it is "the practical arm of moral philosophy", as **Keith Hart** says in a guest editorial starting on **page 4**, and must be popular, not academic. That means anthropology is for everyone. With the appointment of activists to our new editorial board (see left), as well as the development of a Radical Anthropology Network (see **page 31**), we hope we have taken a small step towards making these worthy aspirations a reality. ■

# Towards a new human universal: rethinking anthropology for our times

We should take Kant as our inspiration and reclaim anthropology as a practical guide for living, argues Keith Hart

Magellan's crew completed the first circumnavigation of the planet some 30 years after Columbus crossed the Atlantic. At much the same time, Bartolomé de las Casas opposed the racial inequality of Spain's American empire in the name of human unity. We are living through another 'Magellan moment'. In the second half of the 20th century, humanity formed a world society – a single interactive social network – for the first time. This was symbolised by several moments, such as when the space race in the 1960s allowed us to see the earth from the outside or when the internet went public in the 90s, announcing the convergence of telephones, television and computers in a digital revolution of communications.

Our world too is massively unequal and the voices for human unity are often drowned. Emergent world society is the new human universal – not an idea, but the fact of our shared occupation of the planet crying out for new principles of association. In this editorial, I will explore the possible contribution of anthropology to such a project. If the academic discipline as presently constituted would find it hard to address this task, perhaps we need to look elsewhere for a suitable intellectual strategy.

**Keith Hart** is honorary research professor in the School of Development Studies, University of Kwazulu-Natal, and professor emeritus at Goldsmiths, University of London. Email: [johnkeithhart@gmail.com](mailto:johnkeithhart@gmail.com). See [www.thememorybank.co.uk](http://www.thememorybank.co.uk).

## Kant's Anthropology

Immanuel Kant published *Anthropology from a pragmatic point of view* in 1798. The book was based on lectures he had given at the university since 1772-3. Kant's aim was to attract the general public to anthropology – and it was Kant more than anyone who gave 'anthropology' as an independent discipline its name. Remarkably, histories of anthropology have rarely mentioned this work, perhaps because the discipline has evolved so far away from Kant's original premises. But it would pay us to take his *Anthropology* seriously, if only for its resonance with our own times.

Shortly before, Kant wrote *Perpetual peace: a philosophical sketch*. The last quarter of the 18th century saw its own share of 'globalisation' – the American and French revolutions, the rise of British industry and the international movement to abolish slavery. Kant knew that coalitions of states were gearing up for war, yet he responded to this sense of the world coming closer together by proposing how humanity might form society as world citizens beyond the boundaries of states. He held that 'cosmopolitan right', the basic right of all world citizens, should rest on conditions of universal hospitality, that is, on the right of a stranger not to be treated with hostility when he arrives on someone else's territory. In other words, we should be free to go wherever we like in the world, since it belongs to all of us equally. He goes on to say:

*The peoples of the earth have entered in varying degree into a universal community, and it has developed to the point where a violation of rights*

*in one part of the world is felt everywhere. The idea of a cosmopolitan right is not fantastic and overstrained; it is a necessary complement to the unwritten code of political and international right, transforming it into a universal right of humanity.*

This confident sense of an emergent world order, written over 200 years ago, can now be seen as the high point of the liberal revolution, before it was overwhelmed by its twin offspring, industrial capitalism and the nation-state.

Earlier Kant wrote an essay, 'Idea for a universal history with a cosmopolitan purpose' which included the following propositions:

1. In man (as the only rational creature on earth) those natural faculties which aim at the use of reason shall be fully developed in the species, not in the individual.
2. The means that nature employs to accomplish the development of all faculties is the antagonism of men in society, since this antagonism becomes, in the end, the cause of a lawful order of this society.
3. The latest problem for mankind, the solution of which nature forces us to seek, is the achievement of a civil society which is capable of administering law universally.
4. This problem is both the most difficult and the last to be solved by mankind.
5. A philosophical attempt to write a universal world history according to a plan of nature which aims at perfect

civic association of mankind must be considered to be possible and even as capable of furthering nature's purpose.

Our world is much more socially integrated than two centuries ago and its economy is palpably unequal. Histories of the universe we inhabit do seem to be indispensable to the construction of institutions capable of administering justice worldwide. The task of building a global civil society for the 21st century, even a world state, is an urgent one and anthropological visions should play their part in that.

This then was the context for the publication of Kant's *Anthropology*. He elsewhere summarised 'philosophy in the cosmopolitan sense of the word' as four questions:

*What can I know?  
What should I do?  
What may I hope for?  
What is a human being?*

*The first question is answered in metaphysics, the second in morals, the third in religion and the fourth in anthropology.*

But the first three questions 'relate to anthropology', he said, and might be subsumed under it. Kant conceived of anthropology as an empirical discipline, but also as a means of moral and cultural improvement. It was thus both an investigation into human nature and, more especially, into how to modify it, as a way of providing his students with practical guidance and knowledge of the world. He intended his lectures to be 'popular' and of value in later life. Above all, the *Anthropology* was to contribute to the progressive political task of uniting world citizens by identifying the source of their 'cosmopolitan bonds'. The book thus moves between mundane illustrations and Kant's most sublime vision, using anecdotes close to home as a bridge to horizon thinking.

If for Kant the two divisions of anthropology were physiological and pragmatic, he preferred to concentrate on the latter – 'what the human being as a free actor can and should make of himself'. This is based primarily on observation, but it also involves the construction of moral rules. The book

has two parts, the first and longer being on empirical psychology and divided into sections on cognition, aesthetics and ethics. Part 2 is concerned with the character of human beings at every level from the individual to the species, seen from both the inside and the outside. Anthropology is the practical arm of moral philosophy. It does not explain the metaphysics of morals which are categorical and transcendent; but it is indispensable to any interaction involving human agents. It is thus 'pragmatic' in a number of senses: it is 'everything that pertains to the practical', popular (as opposed to academic) and moral in that it is concerned with what people should do, with their motives for action.

In his Preface, Kant acknowledges that anthropological science has some way to go methodologically. People act self-consciously when they are being observed and it is often hard to distinguish between self-conscious action and habit. For this reason, he recommends as aids 'world history, biographies and even plays and novels'. The latter, while being admittedly inventions, are often based on close observation of real behaviour and add to our knowledge of human beings. He thought that the main value of his book lay in its systematic organisation, so that readers could incorporate their experience into it and develop new themes appropriate to their own lives. Historians and philosophers are divided between those who find the book marginal to Kant's thought and those for whom it is just muddled and banal. And the anthropologists have ignored it entirely. I hope to show that this was a mistake.

### **The anthropology of unequal society**

Following Locke's example, the 18th-century Enlightenment was animated by a revolutionary desire to found democratic societies to replace the class system typical of agrarian civilisation. How could the arbitrary social inequality of the Old Regime be abolished and a more equal society founded on the basis of what all people have in common, their human nature? The great Victorian synthesisers, such as Morgan, Engels, Tylor and Frazer, were standing on the shoulders of

Enlightenment predecessors motivated by a pressing democratic project to make world society less unequal. Seen in this light, the first work of modern anthropology is not Kant's, but Jean-Jacques Rousseau's *Discourse on the Origins and Foundations of Inequality among Men* (1754).

Here Rousseau was concerned not with individual variations in natural endowments which we can do little about, but with the artificial inequalities of wealth, honour and the capacity to command obedience derived from social convention which can be changed. In order to construct a model of human equality, he imagined a pre-social state of nature, a sort of hominid phase of human evolution in which men were solitary, but healthy, happy and above all free. This freedom was metaphysical, anarchic and personal: original human beings had free will, they were not subject to rules of any kind and they had no superiors. At some point humanity made the transition to what Rousseau calls 'nascent society', a prolonged period whose economic base can best be summarised as hunter-gathering with huts. This second phase represents his ideal of life in society close to nature. The rot set in with the invention of agriculture or, as Rousseau puts it, of wheat and iron. Cultivation of the land led to incipient property institutions whose culmination awaited the development of political society.

*The first man who, having enclosed a piece of land, thought of saying 'This is mine' and found people simple enough to believe him, was the true founder of civil society.*

The formation of a civil order (the state) was preceded by a Hobbesian condition, a war of all against all marked by the absence of law, which Rousseau insisted was the result of social development, not an original state of nature. He believed that this new social contract was probably arrived at by consensus, but it was a fraudulent one in that the rich thereby gained legal sanction for transmitting unequal property rights in perpetuity. From this inauspicious beginning, political society then usually moved, via a series of revolutions, through three stages:

*The establishment of law and the right of property was the first stage, the institution of magistrates the second, and the transformation of legitimate into arbitrary power the third and last stage. Thus the status of rich and poor was authorized by the first epoch, that of strong and weak by the second and by the third that of master and slave, which is the last degree of inequality and the stage to which all the others finally lead, until new revolutions dissolve the government altogether and bring it back to legitimacy.*

One-man-rule closes the circle.

*It is here that all individuals become equal again because they are nothing, here where subjects have no longer any law but the will of the master...*

For Rousseau, the growth of inequality was just one aspect of human alienation in civil society. We need to return from division of labour and dependence on the opinion of others to subjective self-sufficiency, Kant's principal concern and mine. This subversive parable ends with a ringing indictment of economic inequality which could well serve as a warning to our world.

*It is manifestly contrary to the law of nature, however defined... that a handful of people should gorge themselves with superfluities while the hungry multitude goes in want of necessities.*

Lewis H. Morgan drew on Rousseau's model for his own fiercely democratic synthesis of human history, *Ancient Society*. If Rousseau laid out the first systematic anthropological theory and Kant then proposed anthropology as an academic discipline, what made Morgan's work the launch proper of modern anthropology was his ability to enroll contemporary ethnographic observations made among the Iroquois into analysis of the historical structures underlying western civilisation's origins in Greece and Rome. Marx and Engels enthusiastically took up Morgan's work as confirmation of their own critique of the state and capitalism; and the latter, drawing on Marx's extensive annotations of *Ancient Society*, made the argument more accessible as *The*

*Origin of the Family, Private Property and the State*. Engels's greater emphasis on gender inequality made this strand of 'the anthropology of unequal society' a fertile source for the feminist movement in the 1960s and after.

The traditional home of inequality is supposed to be India and Andre Beteille (eg, *Inequality among men*) has made the subject his special domain of late, merging social anthropology with comparative sociology. In the United States, Leslie White at Michigan and Julian Steward at Columbia led teams, including Wolf, Sahlins, Service, Harris and Mintz, who took the evolution of the state and class society as their chief focus. Probably the single most impressive work coming out of this American school was Eric Wolf's *Europe and the People without History*. But one man tried to redo Morgan in a single book and that was Claude Lévi-Strauss in *The Elementary Structures of Kinship*. We should recall that, in *Tristes Tropiques*, Lévi-Strauss acknowledged Rousseau as his master. The aim of *Elementary Structures* was to revisit Morgan's three-stage theory of social evolution, drawing on a new and impressive canvas, 'the Siberia-Assam axis' and all points southeast as far as the Australian desert.

Lévi-Strauss took as his motor of development the forms of marriage exchange and the logic of exogamy. The 'restricted reciprocity' of egalitarian bands gave way to the unstable hierarchies of 'generalised reciprocity' typical of the Highland Burma tribes. The stratified states of the region turned inwards to endogamy, to the reproduction of class differences and the negation of social reciprocity. Evidently, the author was not encouraged to universalise the model, since he subsequently abandoned it, preferring to analyse the structures of the human mind as revealed in myths.

My teacher, Jack Goody has tried to lift our profession out of a myopic ethnography into a concern with the movement of world history that went out of fashion with the passing of the Victorian founders. Starting with *Production and Reproduction*, he has produced a score of books over the last three decades investigating why Sub-Saharan Africa differs so strikingly

from the pre-industrial societies of Europe and Asia; and latterly refuting the West's claim to being exceptional, especially when compared with Asia. Goody found that kin groups in the major societies of Eurasia frequently pass on property through both sexes, a process of 'diverging devolution' that is virtually unknown in Sub-Saharan Africa, where inheritance follows the line of one sex only. Particularly when women's property includes the means of production – land in agricultural societies – attempts will be made to control these heiresses, banning premarital sex and making arranged marriages for them, often within the same group and with a strong preference for monogamy. Direct inheritance by women is also associated with the isolation of the nuclear family in kinship terminology, where a distinction is drawn between one's own parents and siblings and other relatives of the same generation, unlike in lineage systems. All of this reflects a class basis for society that was broadly absent in Africa.

The major Eurasian civilizations were organized through large states run by literate elites whose lifestyle embraced both the city and the countryside. In other words, what we have here is Gordon Childe's 'urban revolution' in Mesopotamia 5,000 years ago, where

*...an elaborate bureaucracy, a complex division of labour, a stratified society based on ecclesiastical landlordism...[were] made possible by intensive agriculture where title to landed property was of supreme importance.*

The analytical focus that lends unity to Goody's compendious work is consistent with an intellectual genealogy linking him through Childe to Morgan-Engels and ultimately Rousseau. The key to understanding social forms lies in production, which for us means machine production. Civilization or human culture is largely shaped by the means of communication – once writing, now an array of mechanized forms. The site of social struggles is property, now principally conflicts over intellectual property. And his central issue of reproduction has never been more salient than at a time when the aging citizens of rich countries depend

on the proliferating mass of young people out there. Kinship needs to be reinvented too.

### **A new human universal: the unity of self and society**

A lot hinges on where in the long process of human evolution we imagine the world is today. The Victorians believed that they stood at the pinnacle of civilisation. I think of us as being like the first digging-stick operators, primitives stumbling into the invention of agriculture. In the late 1990s, I asked what it is about us that future generations will be interested in. I settled on the rapid advances then being made in forming a single interactive network linking all humanity. This has two striking features: first, the network is a highly unequal market of buyers and sellers fuelled by a money circuit that has become progressively detached from production and politics; and second, it is driven by a digital revolution in communications whose symbol is the internet, the network of networks. So my research over the last decade has been concerned with how the forms of money and exchange are changing in the context of this communications revolution.

My case for global integration rests on three developments of the last two decades:

1. The collapse of the Soviet Union, opening up the world to trans-national capitalism and neo-liberal economic policies.
2. The entry of China's and India's two billion people, a third of humanity, into the world market as powers in their own right and the globalisation of capital accumulation, for the first time loosening the grip of America and Europe on the global economy.
3. The shortening of time and distance brought about by the communications revolution, linked to a restlessly mobile population.

The corollary of this revolution is a counter-revolution, the reassertion of state power since 9/11 and the imperialist war for oil in the Middle East. As Kant said, conflict is the catalyst for seeking a lawful basis of world society. Certainly humanity has regressed significantly from the hopes

for equality released by the Second World War and the anti-colonial revolution that followed it. On the other hand, growing awareness of the consequences of our collective actions for life on this planet might be another stimulus to take world society seriously. Society is caught precariously between national and global forms at present; and that is why new ways of thinking are so vital.

What this adds up to is the possible formation of a new human universal. By this I mean making a world where all people can live together, not the imposition of principles that suit some powerful interests at the expense of the rest. The next universal will be unlike its predecessors, the Christian and bourgeois versions through which the West has sought to dominate or replace the cultural particulars that organise people's lives everywhere. The main precedent for such an approach to discovering our common humanity is great literature which achieves universality through going deeply into particular personalities, relations and places. The new universal will not just tolerate cultural particulars, but will be founded on knowing that true human community can only be realised through them.

There are two prerequisites for being human: we must each learn to be self-reliant to a high degree and to belong to others, merging our identities in a bewildering variety of social relationships. Much of modern ideology emphasises how problematic it is to be both self-interested and mutual, to be economic as well as social, we might say. When culture is set up to expect a conflict between the two, it is hard to be both. Yet the two sides are often inseparable in practice and some societies, by encouraging private and public interests to coincide, have managed to integrate them more effectively than ours. One premise of the new human universal will thus be the unity of self and society.

**M**arcel Mauss held that the attempt to create a free market for private contracts is utopian and just as unrealisable as its antithesis, a collective based solely on altruism. Human institutions everywhere are founded on the unity of individual and society, freedom and

obligation, self-interest and concern for others. Modern capitalism thus rests on an unsustainable attachment to one of these poles. The pure types of selfish and generous economic action obscure the complex interplay between our individuality and belonging in subtle ways to others. If learning to be two-sided is the means of becoming human, then the lesson is apparently hard to learn. Each of us embarks on a journey outward into the world and inward into the self. Society is mysterious to us because we have lived in it and it now dwells inside us at a level that is not ordinarily visible from the perspective of everyday life. All the places we have lived in are sources of introspection concerning our relationship to society; and one method for understanding the world is to make an ongoing practice of trying to synthesise these varied experiences. If a person would have an identity – would be one thing, one self – this requires trying to make out of fragmented social experience a more coherent whole, a world in other words as singular as the self.

Kant is the source for the notion that society may be as much an expression of individual subjectivity as a collective force out there. Copernicus solved the problem of the movement of the heavenly bodies by having the spectator revolve while they were at rest, instead of them revolve around the spectator. Kant extended this achievement for physics into metaphysics. In his *Preface to The Critique of Pure Reason*, he writes,

*Hitherto it has been assumed that all our knowledge must conform to objects... but what if we suppose that objects must conform to our knowledge?*

In order to understand the world, we must begin not with the empirical existence of objects, but with the reasoning embedded in our experience itself and in all the judgments we have made. This is to say that the world is inside each of us as much as it is out there. Our task is to unite the two poles as subjective individuals who share the object world with the rest of humanity. Knowledge of society must be personal and moral before it is defined by the laws imposed on each of us from above.

Kant's achievement was soon overthrown by a counter-revolution that identified society with the state. This was launched by Hegel in *The Philosophy of Right* and it was only truly consummated after the First World War. As a result, the personal was separated from the impersonal, the subject from the object, humanism from science. Twentieth-century society was conceived of as an impersonal mechanism defined by international division of labour, national bureaucracy and scientific laws understood only by experts. Not surprisingly, most people felt ignorant and impotent in the face of such a society. Yet, we have never been more conscious of ourselves as unique personalities who make a difference. That is why questions of identity are so central to politics today.

**M**oney in capitalist societies stands for alienation, detachment, impersonal society, the outside; its origins lie beyond our control (the market). Relations marked by the absence of money are the model of personal integration and free association, of what we take to be familiar, the inside (home). This institutional dualism, forcing individuals to divide themselves, asks too much of us. People want to integrate division, to make some meaningful connection between themselves as subjects and society as an object. It helps that money, as well as being the means of separating public and domestic life, was always the main bridge between the two. That is why money must be central to any attempt to humanise society. Today it is both the principal source of our vulnerability in society and the main practical symbol allowing each of us to make an impersonal world meaningful.

How else can we repair this rupture between self and society? Mohandas K. Gandhi's critique of the modern identification of society with the state was devastating. He believed that it disabled citizens, subjecting mind and body to the control of professional experts when the purpose of a civilisation should be to enhance its members' sense of their own self-reliance. He proposed instead that every human being is a unique personality and participates with the

rest of humanity in an encompassing whole. Between these extremes lie proliferating associations of great variety. He settled on the village as the vehicle for Indians' aspirations for self-organisation; and this made him in many respects a typical 20th-century nationalist. But what is most relevant to us is his existentialist project. If the world of society and nature is devoid of meaning, each of us is left feeling small, isolated and vulnerable. How do we bridge the gap between a puny self and a vast, unknowable world? The answer is to scale down the world, to scale up the self or a combination of both, so that a meaningful relationship might be established between the two. Gandhi devoted a large part of his philosophy to building up the personal resources of individuals. Our task is to bring this project up to date.

Novels and movies allow us to span actual and possible worlds. They bring history down in scale to a familiar frame (the paperback, the screen) and audiences enter into that history subjectively on any terms their imagination permits. The sources of our alienation are commonplace. What interests me is resistance to alienation, whatever form it takes, religious or otherwise. How can we feel at home out there, in the restless turbulence of the modern world? The digital revolution is in part a response to this need. We feel at home in intimate, face-to-face relations; but we must engage in remote, often impersonal exchanges at distance. Improvements in telecommunications cannot stop until we replicate at distance the experience of face-to-face interaction. For the drive to overcome alienation is even more powerful than alienation itself. Social evolution has reached the point of establishing near-universal communications; now we must make world society in the image of our own humanity.

### **Crisis of the intellectuals**

The universities have been around for a long time, but they came into their own in the last half-century, as the training grounds for bureaucracy that Hegel envisaged. Most contemporary intellectuals have taken refuge in them by now and human personality has been in retreat there for some time. In *Enemies of Promise: publishing, perishing and the eclipse of scholarship*, Lindsay Waters,

humanities editor for Harvard University Press, claims that the current explosion of academic publishing is a bubble as certain to burst as the dotcom boom. Publishing, he says, has become more concerned with quantity than quality and mechanization 'has proved lethal'. He warns academics, in the face of the corporate takeover of the university, '...to preserve and protect the independence of their activities, before the market becomes our prison. (...) Many universities are, in significant part, financial holding operations (...) The commercialization of higher education has caused innovation in the humanities to come to a standstill.'

Because Waters blames the humanities' decline on money and machines, his call for resistance has no practical basis in contemporary conditions. Anna Grimshaw and I, in the pamphlet that launched our imprint, Prickly Pear Press, once tried to locate anthropology's compromised relationship to academic bureaucracy in the crisis facing modern intellectuals, as identified by the Caribbean writer, CLR James in *American Civilization*. We held that intellectual practice should be integrated more closely with social life, given their increasing separation by academic bureaucracy. The need to escape from the ivory tower to join the people where they live was the inspiration for modern anthropology. But this had been negated by the expansion of the universities after 1945 and by the political pressures exerted on academics since the 1980s.

Edward Said, in *Representations of the Intellectual*, without ever mentioning anthropology, made claims for intellectuals that could be taken as a metaphor for the discipline. He emphasised the creative possibilities in migration and marginality, of being an awkward outsider who crosses boundaries, questions certainties, a figure at once involved and detached. Narrow professionalism poses an immense threat to academic life. Specialisation, concern with disciplinary boundaries and expert knowledge lead to a suspension of critical enquiry and ultimately a drift towards legitimating power. The exile and the amateur might combine to inject new radicalism into a jaded professionalism. Said credited James



with being an intellectual of this kind, but James placed intellectuals within a historical process that had aligned them with power and made them increasingly at odds with the people. Said did not identify how and why intellectual life had been transformed from free individual creativity into serving the needs of bureaucracy.

For James there was a growing conflict between the concentration of power at the top of society and the aspirations of people everywhere for democracy to be extended into all areas of their lives. This conflict was most advanced in America. The struggle was for civilisation or barbarism, for individual freedom within new and expanded conceptions of social life (democracy) or a fragmented and repressed subjectivity stifled by coercive bureaucracies (totalitarianism). The intellectuals were caught between the expansion of bureaucracy and the growing power and presence of people as a force in world society. Unable to recognise that people's lives mattered more than their own ideas, they oscillated between an introspective individualism (psychoanalysis) and service to the ruling powers, whether of the right (fascism) or left (Stalinism). As a result, the traditional role of the intellectual as an independent witness and critic standing unequivocally for truth had been seriously compromised. Their absorption as wage slaves and pensioners of bureaucracy not only removed intellectuals' independence, but also separated their specialised activities from social life.

One anthropologist who addressed these questions of intellectuals and the public, of ideas and life, knowledge and power, was Edmund Leach in his prescient BBC lectures, *A Runaway World?* There he identified a world in movement, marked by the interconnectedness of people and things. This provoked the mood of optimism and fear that characterized the 60s, when established structures seemed to be breaking down. The reality of change could not be understood through conventional cultural categories predicated on stable order. Moral categories based on habits of separation and division could only make the world's movement seem alien and frightening. An ethos of scientific detachment reinforced by

binary ideas (right/wrong) lay at the core of society's malaise. Leach called for an intellectual practice based on movement and engagement, connection and dialectic. In short he was calling for the reinsertion of ideas into social life.

**T**he solution to anthropology's problems cannot be found in increased specialisation, in the discovery of new areas of social life to colonise with the aid of old professional paradigms or in a return to literary scholarship disguised as a new dialogical form. It requires new patterns of social engagement extending beyond the universities to the widest reaches of world society. We must acknowledge how people everywhere are pushing back the boundaries of the old society and remain open to universality, which has been driven underground by national capitalism and would be buried forever if the present corporate privatisation of intellectual life is allowed to succeed.

The expansion of academic bureaucracy has accentuated the objectification of thought as a marker of status and reward. Ideas have become commodities to be possessed, traded and stolen. An intensified focus on the formal abstraction of performance has led to the academic labour market being driven by the empty measures of print production that Waters rightly denigrates. Subjective contributions, like the qualities of a good teacher, inevitably carry less weight. And so the academic intellectuals, who might have offered a critique of the corporate takeover of the universities, find themselves instead drawn passively into a vicious variant of the privatisation of ideas. Something must be done to reinstate human personality in our common understanding of how the world works. But this should be through the medium of money and machines, not despite them. Kant's cosmopolitan moral politics offer one vision of the course such a renewal might take.

### **Anthropology now and to come**

Anthropology can no longer be summarised as what a few luminaries in the centres of imperial power think and do. Americans dominate a much larger profession, for sure, while British and French anthropology are in decline

and the European Association grows in stature. The annual AAA (American Anthropological Association) meetings have become a global gathering point where anthropologists are more likely to meet national colleagues than at home, rather like the African politicians of the interwar period who got to meet each other in Paris or London. The second largest annual meetings are in Brazil, where anthropologists have expanded from their Amazonian base to offer informed commentary on all aspects of national society and culture. Scandinavian anthropologists draw on their social-democratic tradition to exhibit a high level of public engagement. Countries like Nigeria and India sustain large numbers of anthropologists in the study of 'tribal' areas. The discipline appears to be flourishing in the lands of new settlement, such as Australia, Canada and South Africa. New varieties of national anthropology are springing up all over Eastern Europe. I could go on, but the point is made. 'Anthropology' has slipped its colonial bonds and is now many things all over the world.

The same cannot be said of its institutional setting. Like most other intellectual activities, the discipline has become largely locked up in the universities. Anthropology's modernist moment – the commitment to join the people where they live in order to find out what they do and think – became ossified as the professional mantra that we do 'fieldwork-based ethnography'. The universities themselves, in most countries outside the US, are centrally organised by the state; and the ethnographic model of society – indigenous, culturally homogeneous, bounded territorial units – uncomfortably mimics the nationalism that it was originally designed to promote and, worse, dissolves world society into a plethora of local fragments, each aspiring to self-sufficiency. If cultural relativism was once a legitimate reaction to racist imperialism, the legacy of the ethnographic turn has been to make it impossible for most academic anthropologists to respond effectively to our own 'Magellan moment'. We generate fine-grained accounts of human experience, but without the aspiration to universality that still animated the discipline up until the 50s. We now address only ourselves and our students.

This is not to say that anthropology sits well with the university. We retain the will to range across disciplinary boundaries; the humanism and democracy entailed in our methods contradict bureaucratic imperatives at every turn.

Anthropology has always been an anti-discipline, a holding company for idiosyncratic individuals to do what they like and call it 'anthropology'. This is coming under pressure today. Increasingly, academic anthropologists turn inwards for defence against all-comers and this often leaves them exposed and without allies in the struggle for survival in the universities. We can't assume that the identification of anthropology with the academy in the previous century will continue in the next. It is now harder for self-designated guilds to control access to professional knowledge. People have other ways of finding out for themselves, rather than submit to academic hierarchy. And there are many agencies out there competing to give them what they want, whether through journalism, tourism or the self-learning possibilities afforded by the internet. Popular resistance to the power of disembodied experts is essentially moral, in that people insist on restoring a personal dimension to human knowledge.

So the issue of anthropology's future needs to be couched in broader terms than those defined by the profession itself. I have been building a case that 'anthropology' is indispensable to the making of world society in the coming century. It may be that some elements of the current academic discipline could play a part in that; but the prospects are not good, given the narrow localism and anti-universalism that is prevalent there. Rather I have sought inspiration in Kant's philosophy and in the critique of unequal society that originates with Rousseau. 'Anthropology' would then mean whatever we need to know about humanity as a whole if we want to build a more equal world fit for everyone. I hope that this usage could be embraced by students of history, sociology, political economy, philosophy and literature, as well as by members of my own profession. Many disciplines might contribute without being exclusively devoted to it. The idea of 'development' has played a similar role in the last half-century.

Disciplines thrive when their object, theory and method are coherent. In the 18th century, anthropology's object was human nature, its theory 'reason', its method humanist philosophy. In the 19th century, anthropology's object was to explain racial hierarchy, its theory was evolution, its method world history. The object of British social anthropology in the 20th century was primitive societies, its theory was functionalism and the method fieldwork. We need a new synthesis of object, theory and method suitable to conditions now. The ethnographic paradigm has been moving for half a century in response to the anti-colonial revolution and other seismic changes in world history. But anthropologists have retained the method of face-to-face encounters while dumping the original object and theory. Paradoxically, while the anthropologists have rejected philosophy, history and anything else that could give meaning to the purpose of their discipline, the idea of ethnography has been adopted in everything from geography to nursing studies. Of course the anthropologists claim that the others don't understand what ethnography is really about or how it is done. But they have forgotten what it is about 'anthropology' that makes their version of 'ethnography' special. They no longer ask the basic questions that launched anthropology – what makes inequality intolerable or how people can live together peaceably. So they can't explain what is missing when others take up 'ethnography'.

I have made much of Kant's example here because he attempted to address the emergence of world society directly. He conceived of anthropology primarily as a form of humanist education; and this contrasts starkly with the emphasis on scientific research outputs in today's universities. We could also emulate his 'pragmatic' anthropology, a personal programme of lifetime learning with the aim of developing practical knowledge of the world. He sought a method for integrating individual subjectivity with the moral construction of world society. World history, as practised by the likes of Jack Goody and Eric Wolf, is indispensable to any anthropology worthy of the name today. The method of biography is particularly well-suited to the study of self and society and I would predict that its use will be more

commonplace in future. No one, in my view, better exemplifies the vision and methods needed for anthropology's renewal than Sidney Mintz. Apart from his record as a Caribbean ethnographer, he has produced an outstanding biography in *Worker in the Cane*, and in *Sweetness and Power* world history of the first rank. The 'literary turn' in anthropology, symbolised by the publication of *Writing Culture* two decades ago, has also opened up anthropology to fiction – novels, plays and movies. This is surely for the good.

The rapid development of global communications today contains within its movement a far-reaching transformation of world society. 'Anthropology' in some form is one of the intellectual traditions best suited to make sense of it. The academic seclusion of the discipline, its passive acquiescence to bureaucracy, is the chief obstacle preventing us from grasping this historical opportunity. We cling to our revolutionary commitment to joining the people, but have forgotten what it was for or what else is needed, if we are to succeed in helping to build a universal society. I grew up in an education system designed to prepare graduates for the Indian civil service, so I have had to retool late in life with the help of younger and more skilled companions. The internet is a wonderful chance to open up the flow of knowledge and information. Rather than obsessing over how we can control access to what we write, which means cutting off the mass of humanity almost completely from our efforts, we need to figure out new interactive forms of engagement that span the globe and to make the results of our work available to everyone. Ever since the internet went public, I have made online self-publishing the core of my anthropological practice. It matters less that an academic guild should retain its monopoly of access to knowledge than that 'anthropology' should be taken up by a broad intellectual coalition for whom the realisation of a new human universal – a world society fit for humanity as a whole – is a matter of urgent personal concern. ■

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# Managing abundance, not chasing scarcity: the real challenge for the 21st century

Humanity must move away from seeing natural resources as scarce commodities to be controlled by the most powerful, says Jerome Lewis

In Congo–Brazzaville in the 1990s it was striking that local people, and particularly the Mbendjele Yaka Pygmy hunter-gatherers with whom I lived<sup>1</sup>, did not distinguish between the activities of conservationists and those of logging companies. But they did distinguish between the Euro-Americans currently present in the forest and their colonial predecessors.

Whereas the colonial administrators and traders of the past are called ‘elephants of our fathers’ (*banjoku na batata*) in ordinary speech, today’s ‘white people’ (*mindele*) are referred to as ‘red river hogs’ (*bangwia*). During colonial times Europeans involved in this area mostly lived alone and travelled in the forest accompanied by Chadian or Senegalese soldiers. Today, whether loggers or conservationists, Euro-Americans live grouped together in substantial purpose-built settlements and travel around the forest in teams, locating and counting forest species using Yaka guidance and expertise.

The impressive wealth of Euro-Americans is picked out by these metaphors. Whereas large elephants had a high trade value in the past, today, with the development of the bush-meat trade, red river hogs have become more commercially valuable. The hogs’ habit of living in groups means that three or four may be killed at a time. Everyone lives in the same forest, yet all white *Mindele* appear to be incredibly wealthy, just as all red river hogs somehow grow surprisingly fat. There is a certain mystery in how pigs become so fat from the forest that all creatures share, which is also attributed to the way Euro-Americans generate huge wealth from Yaka forest using baffling technology.

The implications of this grouping together of loggers and conservationists led me to think harder about the way Euro-Americans engage with the forest and its resources in comparison to the Yaka. This article explores the cultural conceptions and observations that underpin their conflation of what seem to us opposed activities. The Yaka’s analysis challenges basic assumptions underpinning dominant western approaches to environmental conservation, particularly current attempts to assure the future of the flora and fauna of the Congo Basin by establishing protected areas. Somewhat surprisingly, however, the Yaka’s analysis accords with the principles behind the latest attempts to improve forest management through forestry certification schemes which allow for sustainable human exploitation of the forest.

Broadly speaking, people use two contradictory models to conceive and understand forest resources in Northern Congo-Brazzaville. In general, people coming from industrialised countries value forest resources because of their scarcity whereas those people living in or near the forest value them because of their abundance. Here it is argued that Yaka understanding of how people can maintain an abundant nature offers conservation organisations a new paradigm for conceptualising their role in the management of Central African forests, and establishes the basis for a meaningful dialogue with local people. Local conceptions of forest resources as abundant provide a more appropriate model for resource management in Central Africa than the continuing imposition of Euro-American derived models based on scarcity.

## The Mbendjele Yaka

The Yaka (*Mbendjele*) Pygmies<sup>2</sup> living in northern Congo are forest living hunter-gatherers who are considered the first inhabitants of the region by themselves and their farming neighbours, the Bilo<sup>3</sup>. Each Yaka associates her or himself with a hunting and gathering territory called ‘our forest’. Here, local groups of Yaka visit ancestral campsites in favoured places where they will gather, fish, hunt and cut honey from wild beehives depending on the season and opportunities available. Though many occasionally make small farms or work for money or goods, they value forest activities and foods as superior.

Yaka value travelling through the forest and camping in different places. Social organisation is based on a temporary camp generally containing at most some 60 people in ten or so quickly but skilfully built leaf and liana huts. Camps are able to expand or contract easily in response to changing conditions relating to the viability of hunting and gathering activities or social events and needs. If Yaka have difficulty finding game in one area of forest, they simply move to another area, allowing game to replenish. In general, Pygmy peoples use their mobility and flexibility to avoid or resolve problems like hunger, illness, conflict, political domination or disputes among themselves.

**Jerome Lewis** is an anthropologist at University College London. His research interests concern hunter-gatherers in Central Africa and he studies child development, play, religion, and political and social organisation.

Hunter-gatherers such as the Yaka have been characterised as ‘egalitarian societies’, where differences in power, wealth or authority are systematically avoided or undermined (Woodburn 1982). This characterisation is based on an analytical distinction between an ‘immediate-return’ hunter-gatherer economy and agricultural, herding or capitalist ‘delayed-return’ economies that is helpful for understanding the differences in approach to resource management and the environment.

In delayed-return societies work is invested over extended periods of time before a yield is produced or consumed. This delay between labour investment and consumption results in political inequality because it becomes necessary to establish hierarchical structures of authority to distribute work, yields and control vital assets as labour matures into a yield. The majority of contemporary human societies are based upon delayed-return economies. Efforts by communist states to develop more egalitarian structures inevitably yielded to these fundamental forces, reasserting new types of hierarchies and inequalities to manage the delay between labour and yield.

‘Immediate-return’ hunter-gatherers such as the Yaka are strongly orientated to the present. People like to obtain a direct and immediate return for their labour – eating most of their production on the day they obtain it, as hunters, gatherers and sometimes as day labourers paid in food. They value consumption over accumulation and will share their food with all present on the day they acquire it. Without the authority and power derived from the ability to withhold vital resources, hierarchy has great difficulty establishing itself. Thus societies whose economies are based on immediate-returns tend to be egalitarian societies. These are common among hunter-gatherers such as Central African Pygmies, Southern African San and the Hadza of Tanzania, as well as among Orang Asli groups such as the Batek or Chewong in South East Asia.

Yaka, like other immediate-return societies, greatly stress obligatory, non-reciprocal sharing as a moral principle. A person who happens to have more of something, such as meat or honey, than they immediately need, is under a

moral obligation to share it without expectation of return. In this way resources taken from the forest are equitably distributed among all present, and accumulation is both unfeasible and impractical. Other camp members will, if necessary, vociferously demand their shares from someone with more than they can immediately consume.

Anthropologists have characterised this type of sharing as ‘demand-sharing’<sup>4</sup> and observe that it leads to a high degree of economic and social equality. There is a noticeable absence of social inequality between men and women and between elders and juniors. Any individual, man or woman, adult or child, has the opportunity to voice their opinion and resist the influence of others as they see fit.<sup>5</sup> Yaka actively shun status since it will attract jealousy that may ruin their success in valued activities. Thus, in contrast to western expectations, good hunters will refrain from hunting too often. They will avoid anything that could be interpreted as boasting about their skill or success, lest their colleagues become jealous and curse them (see Lewis 2003).

The forest is idealised as the perfect place for people to live, in contrast to cleared spaces such as farms or rivers. Mbendjele Yaka women like to give birth to their children in the forest. Everyday conversations are obsessed with the forest, with the locations of desirable wild foods, with different tricks and techniques for finding and extracting them, with the intricacies of animal behaviour or plant botany, on stories of past hunting, fishing or gathering trips, or on great feasts and forest spirit performances. Yaka say that when they die they go to a forest where Komba (God) has a camp. They cannot conceive of their lives, or deaths and afterlife, without the frame of the forest around them. They express their dependency on and the intimacy of their relationship with the forest in the proverb, “A Yaka loves the forest as she loves her own body.”

The Yaka believe that Komba created the forest for them. It has always been, and will eternally be there for them. They, similar to many other forest hunter-gatherers, as Bird-David discusses (1990; 1992), have a faith that the forest will always provide them

with what they need. Abundance is taken as natural. Should people not experience abundance, it is not because resources are diminishing but due to improper sharing.

The emphasis on sharing as the means to maintain abundance is peculiar to egalitarian societies. Conceiving of resources as abundant can lead to a variety of approaches to them. To illustrate this I will describe divergences between the Yaka conceptions that inform my argument and those held by their Bilo neighbours<sup>6</sup>, and others.

### Abundance

Most local Congolese conceive of the forest and its resources as abundant. In the 1990s conservationists confirmed this by designating this area as one of rich biodiversity. But unlike Yaka hunter-gatherers, Bilo groups depend on subsistence farming that requires the felling of large trees and the clearing of forest to create fields for cultivation and dwellings. The forest bordering their clearings requires constant and energetic cutting if it is to be prevented from reclaiming domesticated land. From this perspective the abundant forest is a wild force that needs to be conquered for successful social life to occur. Bilo often justify claims to own forest areas in terms of conquest.

As the experience of Europeans and Americans attests, a ‘conquering’ relationship with an abundant nature can have disastrous consequences on natural systems, especially when combined with modern industrial technology. Only relatively recently, with the expansion of scientific research into industrialisation and capitalism’s impact on environmental systems, have Euro-American conceptions of an abundant nature been replaced by careful estimations of the value of individual resources in terms of their scarcity and human demand for them. A striking example of this is the planned launch of carbon trading on international stock markets in 2012, in which trees standing in Northern Congo can be traded by bankers as carbon stocks in environmentally ‘feel-good’ investment portfolios.

Bilo and earlier Euro-American views of an abundant and wild nature placed human society outside it, and emphasised metaphors of control and

conquest in describing human relations with natural environments. In contrast, the Yaka see themselves as part of a socially interacting and generous nature that provides abundantly to all so long as rules about sharing are respected.

### ***Ekila*<sup>7</sup> as a guide to proper sharing**

For Yaka, people should be successful in their activities because nature is abundant. If they are not, it is because they, or somebody else, has ruined their *ekila* by sharing inappropriately. Sharing is fundamental to sociality. Yaka share even when there would seem to be no need to share, for instance, when huge amounts of fish are captured by everyone in the dry season; and they still share even if this means the producer remains with almost nothing. They explain that if they didn't share, their *ekila* would be ruined and they would no longer catch fish or find food.

*Ekila* regulates Yaka environmental relations by defining what constitutes proper sharing. For example, by not sharing food, especially meat, properly among all present, a hunter's *ekila* may be ruined so that he is unsuccessful in future. A hunter who is too often successful may stop hunting for a while for fear that his successes will attract envy and ruin his *ekila*. If either a husband or wife inappropriately shares their sexuality with others outside their marriage, it is said that both partners have had their *ekila* ruined. A menstruating woman is said to be *ekila* and her smell will anger dangerous forest animals. She must share part of her menstrual blood with forest spirits in order that her male relatives continue to find food. Even laughter, a highly valued activity, should be properly shared. Whereas laughter shared between people in camp during the evening makes the forest rejoice, laughing at hunted animals ruins the *ekila* of the hunter.

If *ekila* has been ruined it causes men to miss when they shoot at animals, and for women it causes them to have difficulties in childbirth. If parents eat certain *ekila* animals when their children are still infants, this can provoke illness in their children and even death. Failure or difficulties in the food-quest or procreation are discussed in relation to *ekila* rather than to

inadequacies in human skill or the environment's ability to provide. People recognise each other's skills, but in this egalitarian society it is impolite to refer to them. Rather, success or failure may be discussed in terms of *ekila*.

A whole area of forest may become *ekila*. This becomes apparent when hunting is consistently unsuccessful, and successive misfortunes befall those who camp in or pass through a certain area. Yaka hunters from the clan responsible for that area will place leaf cones stuffed with earth on all foot paths leading into the *ekila* forest. This warns other Yaka that the forest is dangerous, and that they should not attempt to find food but turn back or simply pass through quickly. Despite a non-scientific reasoning, the effect of this allows degraded areas of forest to be left in order that their resources increase to sustainable levels again.

Although couched in unfamiliar idioms, *ekila* is a theory for maintaining abundance. Adherence to these practices, and their explanation, has established a relationship with resources that has assured Yaka people have experienced the forest as a place of abundance for the entirety of their cultural memory. *Ekila* teaches that by not sharing properly resources become scarce. By sharing properly, resources will be experienced as abundant.

### **From abundance to scarcity**

Even in the short time I have been visiting the forest, areas I stayed in during the 1990s are considerably less abundant now than they were then. While visiting in 2003 I found myself walking in wide elephant trails (*mbembo*) that were obviously becoming overgrown from lack of use. I remarked this to my companions. They responded that the elephants walk elsewhere now due to the noise of the loggers' bulldozers, not that elephants were becoming scarce.

Explained within the logic of *ekila*, outsiders coming into Yaka forest have not understood the importance of proper and equitable sharing as the means to guarantee the continuing abundance of its resources. Indeed, the opposite is occurring as outsiders, such as loggers, obtain exclusive rights to resources that they systematically remove without replacement for great

personal enrichment, and others such as conservationists, who obtain large grants to exclude all other people from areas of forest they occupy. This colonial-like expansion by loggers and conservationists is far advanced in forest belonging to another Yaka group, the Baka of Cameroon. When I visited Cameroon in November 2002 Lambombo, a Baka elder, explained:

*Before all this was our forest, our ancestors were all hunters who lived in the forest. Our fathers told us to live in this forest and to use what we needed. Komba [God] made the forest for all of us, but first of all for the Baka. When we see the forest we think, 'That is our forest'. But now we are told by the government and the conservationists that it is not our forest. But we are hunters and need the forest for our lives.*

*Of these others who say our forest is theirs, there is Ecofac [the conservationists], MINEF [the ministry for forests] and the loggers. When the loggers cut our trees we got nothing, and we still get nothing. We who are older notice that all that was in the forest before is getting less. We used to always find things – yams, pigs and many other things – we thought that would never end. Now when we try and look we can't find them anymore.*

*The government and the conservationists have messed up our forest. When we looked after the forest there was always plenty. Now that we are forbidden to enter our forest when we put out traps they remain empty. Before if we put out traps and nothing walked on them we would take them elsewhere to let the forest rest. We know how to look after the forest.'*

Lambombo describes the movement from abundance to scarcity that he has witnessed. His perceptive analysis of how this situation came about and the persecution they continue to experience is unfortunately marginalised by those, such as the government and the conservationists, which have been entrusted with responsibility for these areas.

Though it goes back further than Lambombo may realise, the increasing

scarcity of forest resources coincides with Euro-Americans' engagement with the Yaka. Since the Atlantic Trade Era and the arrival of Europeans in Central Africa the demand for forest products has been steadily increasing. The Atlantic Trade Era brought ivory, slaves, and cam wood onto international trade circuits. In the colonial period ivory, rubber, copal resin, duiker skins and red wood were the main exports. Since independence those resources that remain valuable, namely hard woods and minerals, have been increasingly intensively exploited using industrial technology combined with political and military strategising.

**I**n practical terms, for local people their forests have been converted into floral and faunal assets that have been traded or rented out by the national government under pressure from international financial institutions, such as the World Bank, wishing to reclaim loans. It is this system of intensive and unsustainable exploitation of forest resources by outsiders, euphemistically called economic development, that is the root cause of the severe environmental problems facing the forests of the Congo basin.

By contrast, the sustainability and success of Yaka forest management over many centuries is portrayed as unrestrained and primitive by non-Yaka. Traditional subsistence activities such as hunting, petty trade in forest products or slash and burn agriculture are often depicted as destructive. Local people are stereotyped as careless about their environment, uneducated, easily corrupted and only interested in short-term gain. However, the majority of intensive commercial poaching is organised by local educated elites who manipulate their power to set up effective poaching and trafficking networks that are immune from prosecution. The weak majority is being scapegoated due to the activities of a powerful minority. Such misreading of local realities serves to justify international elites sending expatriate conservation managers to apply Euro-American ideas about wildlife management, developed in industrialised countries, to places such as Yaka forest. The result is militaristic management regimes that convert part

of the forest into an animal refuge for northern scientists to study forest ecology, and for northern tourists to watch forest animals, while the land around the park is 'developed'. In Congo, government and international attitudes perceive of hunting and gathering in areas around the park as primitive and wasteful, whereas industrial logging, extensive commercial tree plantations and similar activities are desirable developments.

Yet this view of development is bringing about the steady impoverishment of the world's resources to the benefit of rich nations and national elites. Forest resources are now so effectively destroyed throughout the rest of the world that they are increasingly scarce and the subject of guilt and intense anxiety from industrialised governments and their peoples. However, their commitment to globalising industrial capitalism overrides this realisation. The current fashion to promote protected areas legitimises this while condemning the Congo Basin to become just like European or American landscapes where nature is subjugated to the needs of people. Conservationists promoting protected areas seem to have already given up on the possibility of maintaining the forests of the Congo Basin intact. Without change this is likely to be a self-fulfilling prophecy.

**A**mazingly, the relationship between the intensification of industrial extraction and the increasing diminishment of natural resources continues to be ignored or glossed over. So a recent effort to impose more industrial exploitation on the Congo Basin was presented as a conservation initiative called the Congo Basin Forest Partnership (CBFP). In September 2002, the United States and South Africa joined 27 public and private partners to launch the CBFP at the World Summit on Sustainable Development in Johannesburg, South Africa. Its stated goal is to promote economic development, alleviate poverty, and improve governance and natural resource conservation through support for a network of protected areas and well-managed forestry concessions in the Congo Basin. These initiatives promote alliances between huge logging companies, national

governments and international conservation organisations to impose militarily enforced protected areas in small areas of forest while encouraging industrial development in remaining areas. At the time the CBFP was conceived, no forester in Central Africa had Forest Stewardship Council (FSC) certification<sup>8</sup> demonstrating that they could log sustainably and many loggers publicly claimed it would be impossible for FSC to work in Africa.

Enforcement of forestry regulations was, and continues to be, undermined by rampant corruption. Available documentation of illegality and abuse of cutting regulations<sup>9</sup> provides strong evidence of the profoundly unsustainable logging practiced by most companies in Central Africa. Yet, despite all this, conservation organisations have encouraged, facilitated and established numerous such partnerships. The World Wide Fund for Nature (WWF) even created its own network called Central African Forest Trade Network (CAFTN) when substantial funds became available from USAID (the United States Agency for International Development) in 2002.

But the evidence suggests that many logging companies use the panda (the WWF logo) to shield themselves from criticism that could damage their image in high value European and American markets, and to facilitate getting public funds and cheap bank loans. In 2005 Greenpeace released a damning report on Danzer's illegal activities and urged a general boycott of Danzer products<sup>10</sup>. In spite of this WWF continued to support Danzer by facilitating access to markets to sell their goods through WWF's Global Forest Trade Network, and in 2007 WWF was actively lobbying a major German bank for a loan on Danzer's behalf.

There seems to be a significant risk that supporting such initiatives as the model for the future of forest conservation in the Congo Basin will condemn Central Africa to become an expanse of unsustainably logged and impoverished woodland surrounding small islands of militarily protected forest.

### **Red river hogs: loggers and conservationists**

A partnership between loggers and conservationists seems strange at first

sight. However, conservationists and loggers have been mutually dependent for some time already. Since the 1970s industrial logging has rapidly expanded with the importation of improved technology and skills to exploit the forest in ways that mostly earn money for international companies and local elites. This has had numerous consequences.

Industrial logging requires a substantial labour force and large infrastructural developments to sustain it. Regular wages create demands for goods and services from employees that attract other people to provide them. Employees' less well-off relatives come to live with them in town. These communities need feeding; intensive farming or hunting to supply the town with food offers an attractive income for traders and others. Roads used to evacuate logs also provide transport for bushmeat and other forest products. They also disenclave remote villages. People flock to the logging town out of curiosity, to seek employment and to enjoy the intense social life available there.

Urban developments suddenly emerge in areas of high biodiversity, changing the land for kilometres around and leading to the common problems associated with rapid urbanisation in a forest environment. Local elites see lucrative opportunities for gain by combining their political immunity with modern technologies and the access to the forest provided by the loggers' infrastructure.<sup>11</sup>

The consequences of opening up forest by loggers draws wider attention to it from international environmentalists who take an interest in logging's impact, and associated activities on forest resources. The impact is great. To date most environmentalists' reaction to this focuses on establishing small areas of protected forest for isolation from local people, and intensively policing them rather than seeking to ensure that industrial activities such as logging are only permitted if they are sustainable.

Despite this peculiar myopia, current trends are to establish even larger protected areas that cross national boundaries in what is being called a 'landscape management approach'.

Major international finance for this has been provided through the Central African Forest World Heritage Initiative (CAFWHI), whose focus, like most conservation projects in Central Africa, is policing the bushmeat trade – 84% of the budget is for this activity alone. The illegal bushmeat trade is cited as the single greatest threat to the Central African forests and used to justify the draconian imposition on local people of exclusion zones protected by armed 'eco-guards'. The activities of illegal and unsustainable logging companies are not addressed. Despite many millions of dollars, no funding is planned for community consultations, co-management initiatives or local capacity building.

Exclusion zones and protected areas displace the problem, they do not solve it. Elephant poachers I met near the Nouabale Ndoki National Park in 1996 in Congo explained that they simply crossed the river into Cameroon to hunt there for the local Congolese mayor. Corruption allows the biggest culprits of environmental crime to escape with impunity. Commercial bushmeat traders and farmers go elsewhere. But for Yaka hunter-gatherers it is much more difficult since each zone will have important seasonal wild resources not necessarily available elsewhere in the territory they normally live and travel in. The militaristic enforcement of hunting restrictions around protected areas does not address the root causes of the bushmeat trade. These are economic and political.

Using shocking images of dead apes, monkeys and other game, conservationists obtain funds in rich countries to support their activities. But this focus is acting as a diversion from addressing the root causes of the serious environmental problems facing Central Africa. Local people are being scapegoated unfairly, while the urgent need to reign in corruption and develop practices that ensure sustainable resource use continues to be neglected.

As international capital draws out more and more of the forest's resources, international environmentalists are seeking to isolate increasingly large areas of forest and exclude local people from them. The implications of this dual occupation of the forest by loggers

and conservationists are potentially very serious for Yaka and other Pygmy people. They are the easy victims of those outsiders extracting resources and those 'protecting' them.

From Yaka perspectives conservation, like logging, makes abundant forest scarce. By sealing off areas to all except the privileged (Euro-American scientists and tourists, important officials and project workers), conservationists claim to protect wildlife. This enforced preservation of forest in some areas serves to justify the forest's destruction elsewhere. International institutions such as the World Bank promote and finance conservation initiatives at the same time as promoting, funding, and even obliging governments to open their national resources to exploitation by foreign corporations.

Surprisingly, this contradictory behaviour only occasionally provokes outrage. In 2005, for instance, in a campaign spear-headed by the Rainforest Foundation and Greenpeace, the World Bank was widely criticised for appearing to have pushed through surreptitiously forest legislation that was advantageous to international logging interests and international conservation organisations but ignored civil society and local forest peoples' needs. The furore that followed resulted in a moratorium on new logging concessions in Democratic Republic of the Congo and a very critical World Bank Inspection Panel Report (2007).

Justifying the promotion of industrial exploitation by providing grants at the same time to conservation organisations is not a new strategy. Already in 1992 Polly Ghazi, writing in *The Guardian*, noted how the World Bank, despite a 'green forestry policy', offered commercial rate loans to boost Congo-Brazzaville's timber exports. 'To help tempt the government of the Congo, which already owes the West huge debts, the loan offer is being linked to a free UN grant for setting up protected conservation areas. The \$10 million grant will come from the new Global Environment Facility, raising fears that the much heralded green fund could be misused to damage rather than protect rainforests...'

Like the World Bank, loggers and conservationists are each using the

other to justify their actions and obtain funding to develop their activities. Loggers are able to divert attention from the harmful impact of their activities by pointing to efforts being made to protect conservation areas and by paying lip-service to the ideals of sustainable forestry. Conservationists justify the draconian repression of local peoples' traditional rights by referring to the destruction caused by activities associated with logging or that depend on the infrastructure created by loggers. As exclusion zones encompass more and more forest, logging companies use their existence to justify enlarging and accelerating their activities around the protected areas.

**W**hy conservation agencies focus activities on limiting local peoples' hunting or bushmeat trading activities rather than on the massive road building activities of multinational companies seems to be an issue of scale linked to what is achievable in a funding cycle – often just three years. It is less daunting to attempt to control local people than to address the underlying causes of environmental destruction – the obligatory capitalisation of resources imposed by the big international lenders on poor countries governed by corrupt political systems.

The dominance of protected-area thinking in conservation planning means that the economics of industrial forest exploitation are rarely challenged by national governments or conservationists working in Central Africa. Within the context of the debt arrears facing the Congo the value of the forest is calculated according to its value on international markets – ie, the commercial worth of its timber. The value of non-timber forest products to forest people, one of the most impoverished social groups, in addition to the ecological functions of watershed maintenance and biodiversity protection that a large forest provides, have been ignored. Promoters of industrialisation couch their arguments in terms of wealth generation and poverty reduction. However, the substantial profits generated by industrial exploitation are unequally distributed. The lion's share goes to a few, probably foreign, businessmen and members of the national elite.

The political economist Bayart (1993) characterised these political systems as based on 'the politics of the belly'; the principle that a person will use their position of authority and power to 'eat' whatever they can, and grow fat (wealthy). Indeed this tendency among civil servants and politicians has created a context of pervasive corruption that undermines the normal way that states redistribute wealth through taxation and local investment. Major social investments in infrastructure or in equipping buildings to serve the public interest, such as schools or hospitals, are undermined by corrupt individuals siphoning off money and equipment. This makes social planning subject to all kinds of unexpected problems that often cause actions to fail spectacularly.

Omitting these factors in conventional economic analysis undervalue the forest's resources and make industrial and commercial land use appear more attractive than they are. In one of the rare studies to quantify the alternative value of forest resources to local people, Camille Bann's (2000) 18-month study in Ratanakiri, Cambodia, estimated the value of harvesting non-timber forest products (NTFP) to yield US\$3,922 per hectare to local people in comparison to no more than US\$1,697 per hectare if harvested for timber.

NTFP are a very important source of subsistence for the poorest sectors of society. All households in the study relied on NTFP, but only 30% of households in the region have a family member engaged in the wage economy. Forest products provide an important natural mechanism for alleviating poverty without explicit government investment. Additionally forest must remain intact for local peoples' unique cultures, values and traditional knowledge to continue. Given the negative ecological impacts of timber harvesting on watershed maintenance and biodiversity conservation, then the net benefits from harvesting timber are diminished further.

Not calculating the value of the forest from local peoples' perspectives is condemning huge areas of Central Africa's forests to become resources for industrial activities, the great majority of which are not conducted in a sustainable way. Of the hundreds of logging companies operating in the

Congo Basin, not even a handful have achieved Forest Stewardship Council (FSC) certification, indicating that they are sustainable forest managers. And among those that have been certified, controversy often surrounds the legitimacy of the certificate, to such an extent that some founders of FSC militantly oppose the Council today.

### Scarcity

Euro-Americans, and people from capitalist countries more generally, are infatuated with goods that are scarce in their own countries. The discourse of endangered species is premised on this. Rarity is an explicit theme in media portrayals of Yaka forest. It is depicted as the last great wilderness of the Congo basin (Congo. Spirit of the Forest, 2000), or more dramatically in the National Geographic as 'Ndoki, Last Place on Earth' (Chadwick 1995). These sensational portrayals are promoted by documentaries glamorising their material and underpin conservationists' funding applications.

Both loggers and conservationists are monopolising what they conceive of as scarce resources; loggers want control of precious trees, conservationists of rare animals and undisturbed forest areas. The perception of scarcity is the ideological bedrock of both these activities, and a driving force in the industrialisation and capitalisation of the world's resources. The Yaka's conflation of loggers and conservationists is more perceptive than most people realise.

Most conservationists come from industrialised nations where the awesome power of industrial exploitation has devastated the original environment and turned it into patchworks of spaces in use by people in different ways, with the occasional token to the original appearance of the land in the form of well-managed parks. Industrialised-nation conservationists then go out to non-industrialised nations like Congo and apply the same model of development, focusing themselves on delimiting and protecting small pockets of faunal and floral resources from local and industrial exploitation.

The competition for scarce funding puts pressure on conservation to



appear to be effective; to be seen to achieve goals and be successful. Indeed, these pressures are so great that most conservation organisations need to be more concerned with appearances to the rich north than to the local area where work is being done. The quickest way of appearing to be doing something in this context is to take the protectionist approach and isolate an area of forest, exclude locals and enforce protection.

The enforcement and protection of protected areas becomes a military-like operation, sometimes described by conservationist field-workers as a 'war on poaching'. Since the mid 1990s when Eco-guard militias became a popular conservation tool, I have recorded a number of cases of serious human rights abuses, including murder, by Wildlife Conservation Society Eco-guards in northern Congo, and complained to those responsible. I have also been told by victims of very serious abuses by WWF Eco-guards in south-eastern Cameroon ranging from torture and public humiliation to the burning down of an entire village.

This aggressive and colonial-like imposition of protected areas on local people understandably antagonises many and establishes their relationship to conservation as involuntary and based on force. This is the basis for most of the conflicts conservation faces and is likely to face in Central Africa.

From local perspectives, rich and powerful outsiders are denying poor people access to their basic needs. This is seen as a grave abuse of basic human rights by many. Local people may rarely protest in front of powerful white people, but the resentment they feel may (and does) lead to serious problems for conservationists. In this context it is very difficult for conservationists to convince local people that they are concerned with their best interests. Protected areas in the Congo basin have been imposed on local people by international organisations pressurising national governments. Many contemporary conservationists' narrow view of their task in Central Africa is resulting in the acceleration of the industrialisation of forest resources, the very process underlying the problems conservation seeks to remedy.

In Central Africa, rather than grasp what local conceptions can offer, conservationists constantly seek to transform how locals understand their environment. The very notion of 'endangered species' judges resources according to their scarcity. For people such as Mbendjele, this is contradicted by their experience. To understand current conservation discourse requires a dramatic reformulation of their thinking based on counter-intuitive claims that they have little reason to do.

The current dominance of the scarcity model precludes the idea of sharing, it even encourages voracious consumption. Conservation needs to get away from the paranoid thinking that informs the hoarding mentality underpinning industrial capitalism and much conservation activity, and cease to be enslaved to market economics. The economic considerations of multinational corporations and institutions presently dominate too much decision-making. Instead decisions should be based on the understanding that nature is indeed abundant and capable of sustaining all life, if it is shared properly.

### **Making the Yaka lifestyle scarce**

Yaka forest knowledge and practice have ensured that large areas of forest thrive and endure. Later-comers, such as conservationists, are benefiting hugely from this good custodianship of forest resources. While conservationists depend on Yaka forest knowledge and skills to identify, explore, and understand the environments they come to control, the exclusionary policies they impose on Yaka people threaten the very relationship with the forest that permitted the transmission and development of the forest skills and knowledge conservationists need.

When access to good forest is denied or made dangerous for Yaka, it becomes difficult to transmit forest knowledge adequately to succeeding generations. Over time forest knowledge will become rarer among young Yaka people as resources are impoverished or access denied. Eventually Yaka knowledge may only remain in the notebooks and publications of anthropologists, ecologists and other scientists. The ultimate disenfranchisement of the hunter-

gatherers will thus be complete. Their forest land and resources are denied them or destroyed, and they no longer have the knowledge necessary to return into the forest if ever their rights were to be recognised. This process is occurring to varying extents throughout the region. It is probably most advanced among the Twa Pygmies in the Great Lakes Region, most of who have become landless potters and beggars (Lewis 2000).

**F**orest knowledge, like forest resources, has been transformed from being abundant and widely available into a scarce and controlled expertise, only recorded in formats available to those with a northern-style education – a format that so far excludes access by Yaka forest people.

If current activities continue in the Central African forests, the hunter-gatherers' fate will be sealed by the continued imposition and dominance of an ideology of scarcity. Whether forest resources are over-exploited and depleted as a consequence of industrial capitalist extraction methods or sealed off from local people by zealous animal protectionists from rich countries, the result for local people is the same. There will be no space in the forest for forest people unless they become involved in the activities of the foresters or the animal protectionists. Their livelihood and resource base have been swept away from them and control over it given to multinational companies and Euro-American animal protection agencies.

While the forest was in local people's control it was considered abundant, and actually was so. Since Euro-Americans arrived and began to perceive of forest resources as scarce, desirable and valuable, so they have become. Now control over the future of the forest is vested in the hands of people with little or no genuine long-term or generational interest in preserving it beyond their limited engagement with it, often for just a fiscal year or two, or a project funding cycle.

This tradition of natural resource use that is based on what was done in rich countries, if widely applied through the process of globalisation to other parts of the world, will result in massive

areas of farmland, urban dwellings and industrial areas, surrounding the occasional token to the original appearance of the land in small and insignificant protected areas. This is not a viable model for the future of the tropical forests of the Congo Basin.

Nor is it a model for long-term environmental conservation more generally in non-industrialised areas. How long will small islands of protected resources be able to survive when surrounded by extensive urban sprawls with subsistence slash and burn agriculture supporting impoverished populations, or when surrounded by industrially exploited or otherwise transformed areas from which all valuable resources have been intensively removed, and most of the profits from their exploitation successfully exported to rich countries?

### Abundance as the basis for environmental management

Rather than attempt to change the conception of abundance common among local people, maybe the onus is on conservation to change its point of view from one that endlessly chases and protects scarce natural resources to one that sees natural resources as adequate, even abundant. Seeing that there is enough for everybody, but it just needs to be shared properly, is the lesson that we can learn from the Yaka and *ekila*.

The Yaka are offering conservation a model for the future. Rather than repressing them and disregarding their basic human rights, conservationists need to learn from them. Taking abundance as the starting point for a meaningful dialogue with local people conservationists could create the conditions necessary for effective long-term conservation of Congo Basin environments. For conservationists *ekila* is a metaphor for the need for political engagement in decisions about how resources are distributed and used.

This would result in conservation taking the maintenance of abundance as its goal, rather than the protection of scarcity. Following *ekila* logic, the key to abundance is equitable sharing. This translates in the language of modern environmentalism as assuring effective resource management and benefit sharing – a movement away from seeing conservation as a series of

protected areas surrounded by industrial zones, to a process of equitably managing resources for all. This is clearly not happening within the currently popular paradigm of scarcity.

However, there are indications that when the Forest Stewardship Council's Principles are applied rigorously the hunter-gatherers' model is being adopted. The Forest Stewardship Council approach, although expressed in very different language, has adopted similar principles to those of Yaka forest stewardship. When taken seriously, the FSC management model is based on maintaining the forest's abundance through socially just and ecologically sustainable harvesting of forest resources. This is a modern idiom for talking about the same issues that concern *ekila*.

Unfettered industrial capitalism is the real menace to the key world environments that we all depend upon, not Yaka hunters seeking food for their families. While happy to impose hunting bans on traditional hunter-gatherers such as Pygmies, conservationists are surprisingly reluctant to impose logging bans on international logging companies. Unless industrialists can show their methods to be both environmentally and socially sustainable they should be prevented from continuing to exploit the forests of the Congo Basin. The reluctance to apply the same standards to rich northerners as are applied to local people is the downfall of conservation efforts in the Congo Basin.

Environmentalists can only expect non-industrialised nations to stand up to the forces of capitalism if they do so themselves, and apply greater pressure to counter the imperatives of global capital in the places from where it originates – in Europe, Asia and America. There can be no effective conservation of our planet without committed political engagement and a willingness to question the assumptions that underpin dominant attitudes to our environment. As is self-evident to the Yaka, but seemingly not to many conservationists, humanity is part of nature, not something that it is possible to isolate from nature. We need to move away from seeing natural resources as scarce commodities to be controlled by the most powerful and

follow the Yaka lead to realise that nature can be an abundant provider and home for all creatures if we share whatever we take properly, and behave with consideration and respect to each other, and the planet that we all depend upon. This is the real challenge facing us all in the 21st century. ■

### References

For a full list of references, see [www.radicalanthropology.org/journal.htm](http://www.radicalanthropology.org/journal.htm)

### Notes

1. Field research was undertaken in the Northern Republic of Congo, in 1994-1997, with generous support from the Wenner-Gren Foundation for Anthropological Research, an Emslie Horniman Anthropological Scholarship and a Swan Fund Scholarship. I am grateful for an Alfred Gell Memorial Scholarship. Annual visits have been made since 2000.
2. Mbendjele claim shared ancestry with other forest hunter-gatherer groups in the region such as the Baka, Mikaya, Luma or Gyeli. All these groups are called Ba.Yaka (Ba'aka) people by the Mbendjele. The academic name for these diverse groups is 'Pygmies'. The term can be objectionable outside this context.
3. The Yaka term 'Bilo' refers to any non-Yaka, village-dwelling African people who live near Yaka people. Although growing urban populations are also called Bilo, typical Bilo are village dwelling, agriculturalists, and fishing or trapping peoples, who speak Bantu or Ubangian languages.
4. Woodburn 1998.
5. Lewis 2002 elaborates on this in Yaka society. Gender relations in immediate-return hunting and gathering societies are the most egalitarian anthropologists have observed (Endicott and Endicott 2006, Woodburn 1982).
6. The Yaka describe Bilo village people as recent arrivals to the forest who discriminate against them, attempt to exploit them, claim rights over their land and labour, and make aggressive claims to own farmland, rivers, forest and even other people. Yaka elders often emphasised that it is their transience that makes Bilo claims vacuous and therefore not to be taken too seriously. Rural migration to urban centres is the latest migratory movement of the Bilo. Currently 80% of Congo's population lives in two cities.
7. *Ekila* is a fascinating cultural category that I discuss in Lewis 2008 and 2002: 103-120.
8. Forest Stewardship Council certification is widely considered the least controversial criteria for establishing sustainable forestry practices.
9. Forest Monitor 2001 provides examples.
10. <http://www.greenpeace.org.uk/forests/forests.cfm?ucidparam=20041201143538>
11. In northern Congo in the mid-1990s members of the local elite were responsible for organising some of the most damaging environmental practices. These included large-scale elephant massacres using high powered military machine guns (the remains of over 300 corpses were found in one forest clearing in 1997), large-scale wood theft from logging companies and the extensive clearance of forest for commercial plantations and farms. Anecdotal evidence of extensive poaching being organised by the highest political powers continues to emerge.

## References

- Bann, Camille.  
2000 *An Economic Analysis of Tropical Forest Land Use Options, Ratanakiri Province, Cambodia*, International Development Research Centre, Ottawa, Canada.
- Bird-David, Nurit H.  
1990 'The Giving Environment: Another Perspective on the Economic System of Gatherer-Hunters'. *Current Anthropology* 31 (2): 189-196.
- 1992 'Beyond "The Original Affluent Society". A Culturalist Reformulation'. *Current Anthropology* 33 (1): 25-47.  
Barume, Kwokwo.
2000. *Heading Towards Extinction? Indigenous Rights in Africa: The case of the Twa of the Kahuzi-Biega National Park, Democratic Republic of Congo*. IWGIA Document No. 101, Copenhagen: IWGIA/ Forest Peoples Programme.
- Bayart, Jean-Francois.  
1993 *The State in Africa: the politics of the belly*. Longman: London.
- Chadwick, Douglas.  
1993 'Ndoki, Last Place on Earth.' In *National Geographic*, July 1995, 188, 1: 2-45.
- Endicott, Karen and Kirk Endicott.  
2006 *The Headman was a Woman*. Waveview Press.  
Forests Monitor.  
2001 *Sold Down the River. The need to control transnational forestry corporations: a European case study*. Cambridge: Forests Monitor.
- Ghazi, Polly.  
1992 'Congo's rainforest threatened by World Bank loans', *Observer*, 26.1.92.
- d'Huart, Jean-Pierre, Stalmans, Marc, and Tutin, Caroline.  
2002 *Central African World Heritage Forest Initiative (CAWHFI). A working draft project proposal for the CAWHFI partners consultation workshop (25 February – 1 March 2002)*. Paris: UNESCO.
- IUCN.  
1996 *The World Conservation Congress: resolutions and recommendations*. Gland: IUCN.
- Köhler, Axel and Jerome Lewis.  
2002 'Putting hunter-gatherer and farmer relations in perspective. A commentary from Central Africa'. In *Ethnicity, hunter-gatherers, and the "other": Association or Assimilation in Southern Africa?* Susan Kent (ed.). Washington: Smithsonian Institute.
- Lewis, Jerome.  
2000 *The Batwa of the Great Lakes Region*. London: Minority Rights Group.
- 2002 *Forest Hunter-Gatherers and Their World: A Study of the Mbendjele Yaka Pygmies of Congo-Brazzaville and Their Secular and Religious Activities and Representations*. PhD Thesis: University of London. 2002. Available at: [http://www.radicalanthropologygroup.org/pub\\_lewisthesisfull.pdf](http://www.radicalanthropologygroup.org/pub_lewisthesisfull.pdf).
- 2003 *The hunter's curse*. Annotated film.
- 2006 Logging in the Congo basin. What hope for indigenous peoples' resources, and their environments? *Indigenous Affairs* 4/06: 8-15.
- 2008 'Ekila: Blood, Bodies and Egalitarian Societies'. *Journal of the Royal Anthropological Institute*, Vol. 14, No. 2. pp 297-315.
- Nightingale, Neil.  
2000 *Congo. Spirit of the Forest*. (Written and produced by Brian Leith). Scorer Associates for the BBC and Discovery Channel.
- Vidal, John.  
2002 *Big Five seek to save Congo forests*. The Guardian 27.8.02: 4.
- Woodburn, James.  
1982 'Egalitarian Societies.' *Man, the Journal of the Royal Anthropological Institute*, 17, no. 3: 431-51.
- 1998 "Sharing is not a form of exchange": an analysis of property sharing in immediate-return hunter-gatherer societies, in C.M. Hann ed., *Property Relations: Renewing the Anthropological Tradition*, Cambridge: Cambridge University Press, pp. 48-63.
- World Bank Inspection Panel.  
2007 Investigation Report: Democratic Republic of Congo. <http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/FINALINVREPwhole.pdf>.
- World Wildlife Fund for Nature.  
2007 *Responsible forestry and trade in Africa* [http://www.panda.org/about\\_wwf/what\\_we\\_do/forests/our\\_solutions/responsible\\_forestry/gftn/about\\_gftn/africa/index.cfm](http://www.panda.org/about_wwf/what_we_do/forests/our_solutions/responsible_forestry/gftn/about_gftn/africa/index.cfm)

# Human nature and the origins of language

Noam Chomsky ranks among the leading intellectual figures of modern times and has changed the way we think about what it means to be human, revolutionising linguistics and establishing it as a modern science. He agreed to discuss just some of his ideas with *Radical Anthropology*.

**Radical Anthropology:** It's unusual on the left to work explicitly, as you do, with a concept of genetically determined human nature. Many suspect the idea must set limits on our ability to change the world and also change ourselves in the process. So, let's start by asking, what exactly do you mean by 'human nature'?

**Noam Chomsky:** It is considered unusual, but I think that is a mistake. Peter Kropotkin was surely on the left. He was one of the founders of what is now called 'sociobiology' or 'evolutionary psychology' with his book *Mutual Aid*, arguing that human nature had evolved in ways conducive to the communitarian anarchism that he espoused. Marx's early manuscripts, with their roots in the Enlightenment and Romanticism, derived fundamental concepts such as alienation from a conception of human nature – what we would call genetically determined. In fact, anyone who merits attention and who promotes any cause at all is doing so on the basis of a belief that it is somehow good for humans, because of their inherent nature.

To object that the facts about human nature set limits on our ability to change the world and ourselves makes about as much sense as the lament that our lack of wings sets limits on our ability to 'fly' as far as eagles under our own power. There is nothing more mysterious about the concept human nature than about the concept bee or chicken nature, at least for those who regard humans as creatures in the biological world. Like other organisms, humans have a certain genetic endowment (apparently varying little in the species, not a surprise considering its recent separation from other hominids). That determines what we call their nature.

**RA:** We agree! We would also insist on the importance of anthropology, in

order to be sure that the concept of 'human nature' we're working with captures the diversity of human experience. Your work on linguistics, on the other hand, deliberately set out in isolation from anthropology and the social sciences. Why? Do you still consider that separation necessary?

**Chomsky:** The idea of a 'separation' is an interesting myth. It might be worth investigating its origins. The facts are quite the opposite. Some of the earliest work in our programme at the Massachusetts Institute of Technology (MIT), back to the 1950s, was on native American languages (Hidatsa, Mohawk, Menomini). Later, with Ken Hale's appointment 40 years ago, the department became one of the world centres of research in Australian and native American languages, soon after others, worldwide. That engaged faculty and students in issues of land rights, endangered languages and cultures, cultural wealth, educational and cultural programmes in indigenous communities (run mainly by MIT graduates brought here from indigenous communities), the spectacular revival of Wampanoag as a spoken language after 100 years (mainly the work of Hale and Jesse Little Doe), stimulating cultural revival as well, and much else. And of course all of this interacting closely with theoretical work, contributing to it and drawing from it. Where is the separation?

**RA:** But you have always insisted, haven't you, on the difference between natural and social science? Is linguistics a social or natural science? Or has the progress of linguistics as a science blurred any meaningful boundary between the two?

**Chomsky:** I have never suggested any principled difference between the natural and social sciences. There are, of course, differences between physics and sociology. Physics deals with systems that are simple enough so that

it is possible, sometimes, to achieve deep results, though leaving many puzzles; I just happened to read an article posted on physicsworld.com on the basic unsolved problems about formation of snow crystals. It's roughly the case that if systems become too complex to study in sufficient depth, physics hands them over to chemistry, then to biology, then experimental psychology, and finally on to history. Roughly. These are tendencies, and they tend to distinguish roughly between hard and soft sciences.

**RA:** OK, let's consider your contribution to the science of linguistics. First it might be worth reminding our non-specialist readers where it all began. Your work on language started with a critique of the then-prevailing view that children had to learn their natal language. You insisted instead that it was an innate part of our brain. In other words, humans no more have to learn language than we have to teach our stomachs how to digest. How did you come to this conclusion? And how can we know whether it's true?

**Chomsky:** I cannot respond to the questions, because I do not understand them. Plainly, children learn their language. I don't speak Swahili. And it cannot be that my language is 'an innate property of our brain.' Otherwise I would have been genetically programmed to speak (some variety of) English. However, some innate capacity – some part of the human genetic endowment – enters into language acquisition. That much is uncontroversial among those who believe that humans are part of the natural world. If it were not true, it

**Noam Chomsky** is institute professor and professor of linguistics (emeritus) at the Massachusetts Institute of Technology.

would be a miracle that my granddaughter reflexively identified some elements of the blooming buzzing confusion as language-related and went on to acquire capacities of the kind that you and I are now exercising, while her pet kitten (chimp, songbird, bee...), presented with exactly the same data, could not take the first step, let alone the later ones. And correspondingly she could not acquire their capacities. There is also a question about whether my granddaughter's achievement falls under the technical concepts of learning developed in one or another branch of psychology, or whether they are more properly subsumed under general theories of growth and development. About these matters there are real questions and legitimate controversy: What is the nature of the genetic endowment? How does acquisition proceed? Etc. Scientists do routinely ask similar questions about the visual system, system of motor organisation, and others – including, in fact, the digestive system.

**RA:** Point taken! But aren't what you term 'external' languages such as Swahili of secondary interest from a scientific point of view, since language as you define it is basically for internal cognition, not social communication? It's surely central to your position that you don't need Swahili or any other external language just to think logically and clearly? A second point is that most of us take for granted that innate human capacities such as vision or digestion evolved gradually, through what Darwin termed 'descent with modification'. Your argument that language emerged in an ancestral individual in an instant – before any external language could have existed – suggests that we are talking about an entirely different kind of thing?

**Chomsky:** I would not say that Swahili is an 'E(xternal) language'. I don't even understand what that means. In fact, I know of no characterisation of E-language. I introduced the term, but didn't define it, except as a cover term for any conception of language other than I-language. Without an explanation of what you mean by Swahili (apparently, something other than the similar I-languages of individual speakers), I can't answer the question whether it is of secondary or

primary (or no) interest. I do not agree that I-language is "basically for internal cognition, not social communication." It is surely used for both, and it's not "for" anything, any more than hands are "for" typing on the computer, as I'm now doing.

It's a mistake to suppose that capacities must evolve gradually. There are many known examples of sharp changes – slight genetic modification that yields substantial phenotypic effects, and much else. By coincidence, I was just looking at an article in *Science* on the 'Avalon explosion', which appears to be one of many examples of an explosion of forms without gradual selection. But it really doesn't matter in the present context. The human digestive and visual systems did clearly evolve over a very long period. Language as far as we know did not. Anatomically modern humans are found up to 200,000 years ago; behaviourally modern humans appear very recently in evolutionary time, as far as evidence now exists, perhaps within a window of 50-100,000 years ago, a flick of an eye in evolutionary time. That's why palaeoanthropologist Ian Tattersall regards human intelligence generally as an "emergent quality", not "a product of Nature's patient and gradual engineering over the eons."

I did not say that language as a completed system emerged in an individual in an instant. But I cannot think of a coherent alternative to the idea that mutations take place in individuals, not communities, so that whatever rewiring of the brain yielded the apparently unique properties of language, specifically recursive generation of hierarchically structured expressions, would therefore have taken place in an individual, and only later been used among individuals who had inherited this capacity.

**RA:** Sure, evolution proceeds through the selection of chance mutations that arise in individuals. But is there nothing we can say about the terms of selection? Nothing about why a chance mutation for language might have increased in frequency in the population? Fingers surely evolved for something, after all – even if not for typing e-mails! To be sure we've understood you here: you say that

communication is a possible function of language but that it's just one among many possible functions, hence of no special relevance either to the nature of language or its origins?

**Chomsky:** At the Alice V. and David H. Morris Symposium on the Evolution of Language held at Stony Brook University in October 2005 (and elsewhere), I quoted evolutionary biologists Salvador Luria and Francois Jacob, both Nobel Laureates, as expressing the view that communicative needs would not have provided "any great selective pressure to produce a system such as language," with its crucial relation to "development of abstract or productive thinking"; "the role of language as a communication system between individuals would have come about only secondarily... The quality of language that makes it unique does not seem to be so much its role in communicating directives for action" or other common features of animal communication, but rather "its role in symbolizing, in evoking cognitive images," in "molding" our notion of reality and yielding our capacity for thought and planning, through its property of allowing infinite combinations of symbols" and therefore "mental creation of possible worlds."

There is good reason to believe that they are right, in part for reasons I mentioned in the passage to which you are referring. If the rewiring of the brain that yielded recursive generation of hierarchically structured expressions took place in an individual, not a group (and there seems to be no coherent alternative), then interaction must have been a later phenomenon. Language would have evolved first as an internal object, a kind of "language of thought" (LOT), with externalisation (hence communication) an ancillary process. I can't review here the strong and growing evidence to support this conclusion, but I have elsewhere. There are ample reasons why having a LOT would confer selectional advantage: the person so endowed could plan, interpret, reflect, etc., in ways denied to others. If that advantage is partially transmitted to descendants, at some later stage there would be opportunity for communication, and motivation to develop a means of externalising the internal LOT – a process that might

not involve evolution at all; perhaps it was a matter of problem solving using available cognitive mechanisms. This is, of course, speculation, like all talk about the evolution of language. But it is the minimal assumption, and I think enters in some way into all such speculations, even if tacitly. The conclusion, quite plausible I think, is that while language can surely be used for communication (as can much else), communication probably has no special role in its design or evolution.

As for organs, traits, etc., being “for” something, the notion may be a useful shorthand, but shouldn’t be taken too seriously, if only because of the ubiquitous phenomenon of exaptation. Suppose that insect wings developed primarily as thermoregulators and then were used for skimming and finally flying, evolving along the way. What would they be “for”? Or what is the skeleton “for”? For keeping one upright, protecting organs, storing calcium, making blood cells...? A property of an organism enters into its life (and survival) in many different ways, some more salient than others. But there is no simple notion of its being “for” some function.

**RA:** At the conference you mention, you also talked about ‘the great leap forward’ – the ‘human revolution’, as many have called it. It’s fair to say, we think, that most Darwinian theorists would regard the social dimensions of this major transition as having played a decisive role. We are thinking, for example, of the late John Maynard Smith, who linked the emergence of language with the earliest social contracts – an idea harking back to Rousseau. How does your origins scenario fit with approaches of this social and political kind? Darwinians don’t take cooperation for granted. Can you say anything about the sociopolitical conditions which might have driven our ancestors to start talking and listening to one another?

**Chomsky:** I should make it clear that the term ‘great leap forward,’ referring to the burst of creative activity, sudden in evolutionary time, was not mine. It’s Jared Diamond’s. It’s commonly assumed that the emergence of language was a key element of the great leap. We of course know very little about the sociopolitical

conditions that existed at the time, but there’s no scenario I can think of that suggests how a sudden change in these conditions could have led to the emergence of language. The only plausible assumption I have ever heard, and I suspect the only one that would be taken seriously by evolutionary biologists, is that some rewiring of the brain, perhaps the result of some slight modification in the functioning of regulatory circuits, provided the basis for this new capacity.

The simplest assumption – which appears to be implicit in all of the more complex ones that have been proposed – is that the rewriting yielded ‘Merge’, the simplest recursive function, which instantaneously made available an infinite array of structured expressions generated from whatever conceptual ‘atoms’ are available. That yields, in effect, an internal I-language, a ‘language of thought,’ providing obvious advantages to the person so endowed. If the mutation is partially transmitted to offspring, they too would have the advantage. And over time it might have come to dominate a small breeding group. At that stage there becomes a motivation to externalise the I-language, that is, to map the internal objects generated to the sensori-motor system, yielding what we think of as language – the external expressions we are exchanging now, for example. That mapping is quite non-trivial, and the problem of how to construct it can be solved in many different ways. It is in these ancillary processes that languages differ widely, and in which the mass of complexity of language resides. It’s not at all clear that this is, technically, a step in the evolution of language. It might have been just a matter of problem-solving, using existing cognitive capacities.

The secondary step of externalisation evidently took place under existing sociopolitical conditions, and probably profoundly changed them. Beyond that, evidence is thin. I do not see how notions of social contract might play more than a superficial role. Scientists generally, not just evolutionary biologists, don’t take much for granted. But there isn’t much doubt that like other animal societies, those of *Homo sapiens* involved plenty of cooperation, which might have been considerably enhanced, one would suppose, by the

emergence of the remarkable instrument of language.

**RA:** Would you agree that science involves restricting our speculative hypotheses to those that can be tested against empirical data? We are not clear in what sense the speculation you have just offered us is testable. Presumably we should expect to find recursion playing a central role in every known language – not just in the language of thought but in language as actually spoken. It seems that this isn’t the case. Some linguists have claimed that the language of the Piraha, for example, almost entirely lacks recursion and for that reason presents a challenge to your theory. Does it?

**Chomsky:** Don’t quite understand the first question. Which speculation do you have in mind?

As for the Piraha, there’s a common confusion between recursion and embedding. Everett claimed that Piraha lacks embedding. Others challenge that claim (since his examples of Piraha language appear to me to have examples of relative clauses embedded in phrases, I don’t know what Everett means by embedding). But I haven’t seen any claim that Piraha lacks recursion, that is, that there are a finite number of sentences or sentence frames. If that’s so, it would mean that the speakers of this language aren’t making use of a capacity that they surely have, a normal situation; plenty of people throughout history would drown if they fall into water. Nothing much follows except for a question as to why they haven’t made use of these capacities (a question independent of Everett’s assumptions about the culture). No one seriously doubts that if Piraha children are brought up in Boston they’ll be speaking Boston English, that is, that the capacities are present, unlike other animals, as far as is known. There’s no challenge to the theory – not mine, but everyone’s – that the human language faculty provides the means for generation of an infinite array of structured expressions.

**RA:** We had in mind your whole speculative origins scenario. How does it stand up to what we know about primate politics and cognition? The hypothesised behavioural ecology of our hominin ancestors? The laws of

evolution of animal signals? Does it say anything testable in the light of findings from these arguably relevant fields, or in the light of archaeological data? And so on...

**Chomsky:** You'll have to explain to me what you mean by my 'speculative origins scenario'. In particular, can you identify what I've written about this that is even controversial enough to require empirical test? Or is it not perfectly consistent with what is known about our ancestors? Or, for that matter, what is not accepted, tacitly, by everyone who has had a word to say on this topic?

**RA:** It is a refreshingly bold "just-so" story for the evolutionary emergence of language. It's certainly parsimonious and has a kind of logic on its side, but how could we discriminate between your story and any other? Modern Darwinism provides us with ways to turn a just-so story into a testable proposition – by modelling the costs and benefits of proposed adaptive behaviours, for example. To count as scientific, a hypothesis surely has to be testable. Can you specify just one or two experimental results or archaeological finds or anything else that might in principle pose a problem for your hypothesis of instantaneous language evolution?

**Chomsky:** I'm afraid I am still puzzled. The question I raised remains unanswered, and as long as this is so, I do not really understand what you are asking. If it is true that what I have suggested is not even controversial enough to require empirical test, is perfectly consistent with what is known about our ancestors, and is accepted, tacitly, by everyone who has a word to say on this topic, then I do not see how the question you are posing arises. So I cannot proceed until you indicate to me in what respects that judgment is incorrect.

I have not suggested that the emergence of language is instantaneous. Rather, that the rewiring of the brain enabling an infinite array of structured expressions was in effect instantaneous. I have never heard of an alternative to this suggestion. That leaves plenty of questions, among them, the question to what extent the internal computational

system that arises is a "perfect solution" to conditions imposed by the CI (conceptual-intentional) interface (hence in effect also instantaneous), and the question how the internal syntax-semantics is externalised, a later process virtually by definition, and one that might not even involve evolution in the sense of genomic change.

**RA:** Let's try to summarise your argument so the point we're driving at can be made clearer. Although language in a broad sense relies on various evolved structures and mechanisms, and although language can be used for communication, the crucial step that gave our species the language faculty was a chance rewiring of the brain. This genetic event instantly gave rise to a computational mechanism for recursion – something unique to humans, and perhaps originally nothing to do with language. Perhaps it evolved as an adaptation for, say, navigation, this mechanism subsequently being exapted for language. In your 2002 *Science* article co-authored with Marc Hauser and Tecumseh Fitch, you describe all this as a "tentative, testable hypothesis in need of further empirical investigation". Our previous questions were merely inviting you to clarify for our readers what some of these tests might look like. What kind of experimental or observational results might pose a problem for the theory?

We're taken aback by your claim that every serious scholar agrees with you on these points. Our own impression is that virtually every scholar vehemently disagrees! Ray Jackendoff and Steven Pinker come to mind. We are not interested, for the moment, in whether the truth lies more with you or more with Pinker and Jackendoff. If we are to have a Darwinian account of the emergence of language, we surely need to ask what might have been the selection pressures that gave rise to it in humans but in no other animal? Pinker argues that the explanation is social cooperation, explaining this in turn by invoking kin selection and reciprocal altruism. But these are widely applicable Darwinian principles, by no means restricted to *Homo sapiens*. So why didn't apes evolve language? Or something a bit like language? Were our hominin ancestors particularly co-operative? Which ones and when? Is

there any archaeological evidence, for example, that our ancestors of four or five millions of years ago were getting especially co-operative? What socio-ecological factors might have driven this? And so on. This has turned into a longer than usual question, but the reason we're interested in these kinds of issues – and why we're interested in the fact that you seem to ignore or downplay them – is that they have obvious political dimensions. What ecological and social conditions, for example, are conducive to communistic co-operation? Or is everything we need to know to be found in the computational mechanisms of individual human brains?

**Chomsky:** You say you're "taken aback by your claim that every serious scholar agrees with you on these points," namely the points I've actually made. As far as I am aware, that is true. Pinker and Jackendoff, for example, tacitly presuppose these points. Of course they disagree with views that they've attributed to me. But that was not my question: to repeat, what is controversial in what I've actually said and written?

There's no "hypothesis" in the paper I co-authored with Hauser and Fitch about recursion in language being an exaptation from deeper capacities, maybe used in navigation. Rather, that's proposed as a possibility that could be explored, and tested. It's easy to see how it could be explored: e.g., by studying these processes in different systems and looking for commonalities, differences, appearance at various times of evolution, the usual approaches of the comparative method; obviously premature in this case, because not enough is known. There are plenty of hypotheses discussed, and there are masses of empirical evidence testing them, but they are about the nature of the system that evolved – obviously a prerequisite to study of its evolution.

So I'm back to where I was. Unless you can identify some thesis that is controversial, and that isn't accepted, at least tacitly, in all speculations about language evolution that can be taken seriously, I can't respond to the queries.

**RA:** OK, we take your point, but we're trying to get you to talk about some interesting issues in evolutionary

science. The popular science writer Marek Kohn describes well what I mean in his chapter on trust in his book *As We Know It*. Kohn quotes anthropologist Chris Knight as saying that “Darwinian theory shows that cheating is likely to result in higher fitness than co-operating – and the greater the rewards of co-operation, the greater the unearned benefits to the freeloader. Any theory of how language, symbolism or culture originated has to show how a system based on cooperative agreement could have developed without being destabilised at any stage by the pursuit of individual interests.” What do you think of this?

**Chomsky:** I don’t see the force of the claim. For one thing, evolutionary theory has nothing to say, in general, as to whether cheating is more advantageous than cooperating. There are many circumstances in which the contrary would be true, and empirical evidence, though it exists, has little bearing on real situations. For another, there’s no need (or way) to establish what Knight demands. One might just as well argue that language differentiation results from pursuit of group interests, like other kinds of cultural variety. And individual interests are beside the point. Furthermore all such matters (even mapping of I-language to the sensorimotor system) may have nothing to do with evolution in the biological sense.

**RA:** The question is under what circumstances is the sharing of valuable information with non-kin using a cheap signalling system like language an evolutionarily stable strategy (ESS)? In all other species, a signal must be costly to be seen by the signal receiver as reliable in situations of conflict. But if you don’t accept that language is an adaptation or arose in a Darwinian, biological world, then you need not submit to the constraints posed by selfish-gene theory. Is that why you don’t see the force of these arguments?

**Chomsky:** Selfish-gene theory tells us nothing about the value of interacting through language. Human language is nothing like the signalling systems of other animals. Of course language arose in a Darwinian biological world, because that’s all there is, but that world relates only superficially to the pop-biology that circulates informally.

**RA:** OK, let’s move on. Our activist

readership will be interested to know what they can do with your ideas. Frederick Engels once wrote, “The more ruthlessly and disinterestedly science proceeds, the more it finds itself in harmony with the interests of the workers.” That’s quite an inspiring idea. Revolutionaries need no ideology, he is saying – only science, conducted dispassionately for its own sake. Are we right in saying that you don’t encourage socialists or anarchists to view science – or at any rate, your own linguistic science – as having potential in that political sense?

**Chomsky:** I don’t encourage socialists or anarchists to accept falsehoods, in particular, to see revolutionary potential where there is none. Anton Pannekoek didn’t encourage radical workers and other activists of the anti-Bolshevik left to see revolutionary potential in his work in astronomy, for the simple reason that he was honest, and knew there was none to speak of. The shred of truth that can be extracted from the remark of Engels that you cite (which I don’t recognise) is that those who wish to change the world should have the best possible understanding of the world, including what is revealed by the sciences, some of which they might be able to use for their purposes. That’s why workers education, including science and mathematics, has commonly been a concern of left intellectuals.

**RA:** But do you think the scientific community should get collectively self-organised and consciously activist? Let’s take the example of climate change. Is astronomy entirely unconnected with the task of familiarising ourselves with the big picture here? With the origins of life on earth, with the reasons why we have life on earth in the first place and with comprehending why capitalism might be ultimately inconsistent with Earth’s future as a habitable planet? Anton Pannekoek may, rightly or wrongly, not have seen the revolutionary potential of his astronomy, but he certainly linked his scientific outlook with his politics – in political pamphlets on Darwinism and human origins, for example. Might we yet see a pamphlet by Noam Chomsky, linking your scientific and your political thinking for a popular audience?

**Chomsky:** I am reasonably familiar

with Pannekoek’s writings, and do not recall his drawing conclusions about his political stands from his work on astronomy, nor do I see how one could do so. Nor why it should be a demand – no sane human being devotes 100% of his or her life to political activism.

If scientists and scholars were to become “collectively self-organised and consciously activist” today, they would probably devote themselves to service to state and private power. Those who have different goals should (and do) become organized and activist. All the questions you raise merit inquiry and attention, and if there are lessons to be drawn from the sciences, then that should be the concern of everyone, including scientists to the extent that they can make a contribution. One contribution they can and should make is to be clear and explicit about the limits of scientific understanding, a matter that is particularly important in societies where people are trained to defer to alleged experts. I have written occasionally on links between my scientific work and political thinking, but not much, because the links seem to me abstract and speculative. Others believe the links to be closer, and have written more about them (Carlos Otero, James McGilvray, Neil Smith, and others). If I can be convinced that the links are significant, I’ll be happy to write about them.

**RA:** We have mostly talked about the evolution of language, but you are perhaps most famous for your political stand. It is understandable that your political work should attract hostile criticism – material interests are at stake. What can seem more puzzling is why arcane academic debates, more fittingly subject to disinterested inquiry than political polemic, can provoke equally impassioned criticism. Why is this, do you think?

**Chomsky:** It should seem puzzling, to professionals as well. I have seen many illustrations over the years, and they go back quite far in history. Sometimes people are “defending their turf.” Sometimes it is personal jealousies. I know of cases that are really depraved. Academics are not necessarily nice people. And one might mention a remark attributed to Henry Kissinger: the reason academic disputes are so vicious is that so little is at stake. ■



# Stonehenge: monument of counter-revolution

Stonehenge has long been a fascination and a mystery. What were the monument builders doing? What was it all for? Recent archaeological digs raised hopes that we might finally get some answers. The diggers need to start looking up, not down, argues Lionel Sims

**Radical Anthropology:** How and why did you get interested in prehistoric monuments and Stonehenge?

**Lionel Sims:** I was not interested in prehistoric monuments or Stonehenge at all until around 1989/90, when I became involved in a debate within the British left defending Friedrich Engels' claim, outlined in his book *The Origin of the Family, Private Property and the State*, that humans are a revolutionary species, and that the oppression of women was a late development in history. This debate sparked such vitriol that I realised there must be big stuff behind it. The majority was against me in the debate, but I was not at all convinced by the confused and angry counter-arguments.

Rather than give up, I decided to pursue the matter in my personal research. My intention was to open up the debate in the light of recent research in anthropology and the natural sciences, and use whatever findings came up to strengthen the marxist case first set out by Engels. I knew this would be a long haul, but also knew that nobody else was doing it, and I felt that I was well placed. In particular, I was a member of the Radical Anthropology Group (RAG), which was a great support and sounding board. Secondly, I enrolled on a Masters course at University College London (UCL) in anthropology, and attended classes in

archaeology led by Chris Tilley. Thirdly, I started contributing to what was then the annual RAG day-trip to the Avebury monuments. The trip was hilarious: none of us had a clue what the monuments were, but just knew they had to be something to do with the collapse of hunting cultures and in some way were a memory of our ancient origins. So when anybody asked, 'What is Silbury Hill?', or Avebury circle, or Stonehenge, the repeated reply was – 'We don't know'. My research came out of both attempting to defend Engels and to lessen the embarrassment of always saying 'We don't know'.

**RA:** It seems that that is still the official answer when archaeologists are asked what Stonehenge is! Not only do we not know, we can't know, they say. To the layman, then, the choice is between official scepticism and an infinite array of mystical answers. How did you approach the question?

**LS:** The quick answer is: with science! The second answer is: the official archaeology response that we can't know is only for those outside their circles. They now say they *can* come up with an answer – Mike Parker-Pearson has come up with 'monuments for the living' (Durrington Walls monument) and 'monuments for the dead' (Stonehenge), and his theory recently reached a wider audience through *New Scientist* magazine. It is interesting that to make this argument Parker-Pearson has had to engage with archaeoastronomy. This is a big shift for British archaeology.

Returning to the main question – science can investigate what is not directly observable. In fact, all of science is about finding the indirect

unobserved 'reality' behind the directly observed 'reality'. Just because we have no written records from prehistory does not mean we can't test theories of prehistory and reject some of them. For example, John North showed in 1996 that Stonehenge cannot be aligned on summer solstice sunrise, but does have one main alignment on winter solstice sunset. That therefore excludes any theory which requires a ritual timed for the start of the longest, possibly brightest, day. Another theory suggests that Stonehenge is an astronomical 'computer' designed to predict eclipses (Gerald Hawkins). I was initially impressed with this claim since it seemed to be congenial to a culture that respects the lunar scheduling of ritual – the eclipse of full moon would be disastrous for a lunar-scheduled ritual system (Chinese priests in the past were executed if they failed to predict one!) and therefore it would be powerful knowledge to have. To test this theory I had to learn astronomy – about which I knew zero when I started. After two years of study I realised Stonehenge could not possibly be designed to predict eclipses, but was designed to predictably avoid them!

Therefore the method of science allows us to reject some theories and narrow the range of possible explanations for monuments like Stonehenge. Any interpretation that can't be tested, such as mystical answers, I have no time for. Or rather, they tell us something about the teller, but usually very little about the object of the telling. Further, if we can mobilise a range of different methodologies, in combination the number of theories they allow us to reject grows exponentially. Therefore, I started with a marxist method in anthropology, archaeology and archaeoastronomy. If I come up with a

**Lionel Sims** is an anthropologist at the University of East London, a member of the European Society for Astronomy in Culture (SEAC) and the Stonehenge Round Table Group.

hypothesis from any one of these disciplines, I then test it out with another. If it checks out, my hypothesis grows in confidence. In the last ten years this has been my finding – each time I move over to another methodology, the initial hypothesis is confirmed and therefore strengthened. A few years ago I was at a conference in Sardinia and a man I met there, Marco, convinced me to read Indo-European myths. I was astonished to find that a team of researchers at Chicago University have reconstructed the root myths that can be dated to about the time of Stonehenge, and they confirm in details I would never have imagined the findings of the previous methodologies I have used.

**RA:** We'll come back to those myths! But for now, let's stay with the monument itself. Contrary to Parker-Pearson, you call Stonehenge a 'monument of counter-revolution'. First, tell us what revolution and counter-revolution you are talking about. Stonehenge was built by settled Neolithic farmers, wasn't it?

**LS:** Like Engels I believe that we humans are a revolutionary species. Our hunter-gatherer ancestors overthrew primate jealousy and selfishness and established a mode of production through the revolutionary creation of matrilineal/matrilocal clans. The solidarity of classificatory brothers and sisters, what Morgan and Engels called 'the gens', was the organisational heart of the first communist society. Chris Knight, a professor of anthropology at the University of East London, and others, have made this claim scientifically respectable on the basis of modern scientific methods.

However, that theory, sex-strike theory, has a number of assumptions for it to work. The main one is a materialist assumption – that there are plenty of big game animals for launching a predictably successful, monthly big game hunt. Now, that assumption cannot be true by at least ten thousand years ago, if not much earlier. Many of the big game animals died out by then, and much of the grasslands of the world disappeared under forests – which have a much lower biomass than grasslands. All I asked is – what would we predict the hunters would

have done? All we do is test out the available alternatives – they could have been conservative, and carried on hunting, or they innovated. To carry on hunting in the old way meant dispersing into smaller, more scattered, more mobile groups and, perhaps, coming back together again once or twice a year. This is what happened over most of the world in a period we call in British archaeology the Mesolithic. If they innovated there were two main ways to do so – become complex hunters who 'farmed' salmon/cod from the sea and rivers (for example), or become 'farmers'.

Up until 20 years ago, it was the 'farming revolution' theory that held sway. Archaeologists assumed that the hunter-gatherer precursors of farmers were irrelevant since "nothing much happened" (as archaeologist Colin Renfrew put it) until the farming of the Neolithic. We now know that the first 'farmers' who built Stonehenge (and Avebury, and so on) weren't settled farmers at all, but cattle herders who still hunted, occasionally planted and were not living in settled villages but were still 'nomadic', ie, they preserved as much of their earlier hunter-gatherer lifestyle as possible. This has been established by the last two decades of research in archaeology, and is found to be true for much of the world. Intensive, sedentary farming was resisted as much as possible by all the people of the world. It was only under the most pressing circumstances that it was adopted.

The key to this, I am sure, was sexual/economic politics. In a hunting society, a man only earns sexual rights, marriage, in return for hunting services to his wife and in-laws. This is called bride-service. Once domestic cattle have been adopted, they are not used for food, but for purchasing wives. Then a man can approach another man who has a daughter, and instead of promising a life-time of hunting he now bargains to purchase a wife in perpetuity for a once-for-all payment of a number of cattle. This is called bride-price. Now look at this arrangement from the point of view of the bartered woman. What if she doesn't like her new husband? What if she complains to her brother(s) or her mother(s) that he is not a nice man? What will they say? Go back to him,

they will say. Do you think we are going to return his cattle? How will we get a wife/children if we return his cattle? Now brother/sister solidarity has broken down, patrilineal/patrilocal clans become the organisational heart of a society increasingly stratified by degrees of cattle wealth and warring cattle-raiders. One way to keep such groups from falling apart from internal competition is to build monuments.

I'm no stone-hugger. These monuments were labour-intensive structures to test the loyalty of groups with the need to atone for the crime of women's oppression. That's a counter-revolution.

**RA:** If the solution to the puzzle of Stonehenge can be found in such everyday, earthly matters as trade and marriage, why are so many people convinced that the builders were looking at the stars? Were they? And how do we know either way?

**LS:** Most archaeologists would still say that Stonehenge has no 'astronomy'. However, there is no other explanation for the accurate alignments on winter solstice sunset from the right hand side of the Heel Stone through the gap in the grand trilithon or on the southern minor standstill moonsets from the left hand side of the Heel Stone through the upper gap. (To make sense of this and of much that follows, we recommend you go to [www.stonehenge3d.co.uk](http://www.stonehenge3d.co.uk).) In my article in the *Cambridge Archaeological Journal* in 2006 (available at [www.radicalanthropologygroup.org](http://www.radicalanthropologygroup.org)), I identified 27 or so other properties that were consistent with this lunar-solar double alignment. My point to archaeology was: if you can come up with one simple explanation for 28 properties of the architecture which is better than mine, then do so!

The monument builders were not just 'looking at the stars'. As you imply, you can do that without getting a hernia by building Stonehenge. Obviously, Stonehenge is not just a sighting device. It is a cosmological centre, which creates the illusion when standing at the Heel Stone that the sun and the moon enter the underworld at that point. It becomes therefore a portal into the underworld. We would predict that sex-strike theory, when it collapses in the Neolithic, would require a device to simulate what

everybody would have done naturalistically in the Palaeolithic – that is, a lunar-scheduled, ritual life-cycle – but now found it very difficult to do because of the emerging divisions in society as cattle wealth undermined clan solidarity.

Farming revolution theory will only allow monument alignments on the solstice sun as primitive agricultural calendars. But it has now been shown that most of them have at least double alignments on both the sun's solstices and the moon's standstills. (A lunar standstill is the lunar equivalent of the sun's solstice in horizon astronomy – a place on the horizon which defines the moon's rising and setting range – with one difference: that those positions change between a major and a minor limit, each spanning the sun's solstice positions, according to an 18.61 year cycle.)

Another property of these two cycles – the sun's solstices and the moon's standstills – is that this knowledge allows you to predict the phase-locking of solstices with dark moons twice every 19 years. The sun's solstices occur twice a year for a period of a week around winter and summer solstice, but the moon's standstills occur over a period of a year twice in an 18.6-year cycle.

Look at the two pictures of Stonehenge (at the top of this page and the next), shown from the Heel Stone. You will see that Stonehenge, viewed from the Heel Stone, once appeared as a solid wall of stone with two windows. The lower gap within the grand trilithon traps a ray of light from the setting winter solstice sun; the upper gap traps the southern standstill moonsets over the course of a standstill year. Thirteen moons will have set in that upper window, culminating in dark moon coinciding with the winter solstice sunset. That is the start of the longest darkest night, and therefore predictably allows observing the greatest possible number of stars. This is a much more sophisticated 'astronomy' than farming revolution theory allows, displays complex knowledge of the moon's movements, and is consistent with a



The setting winter solstice sun from the Heel Stone at Stonehenge

culture that is confiscating monthly lunar cycles to a solar timescale. That is what we would predict for a culture moving from hunting to agriculture, but during a period of relative 'equipoise' between these two systems.

Every counter-revolution has to take account of the previous revolution. So a 'machine' that can lie, that can pretend it still is true to the old way, but now has adapted it to new conditions – that is a useful machine to an emerging warrior-priesthood which is displacing matrilineal solidarity with its own form of solidarity – monument building.

**RA:** You mentioned earlier that archaeology has long resisted archaeoastronomy, but that it is starting to come around. Why the resistance, do you think? Does the fact that it is coming round mean that it now has to take your theory seriously?

**LS:** We are now in the third stage of the history of archaeoastronomy (Norman Lockyer was the first at the beginning of the 20th century; then Gerald Hawkins and Alexander Thom in the 1960s and 1970s; now led by Clive Ruggles in Britain since the 1980s). Ruggles was research assistant to Richard Atkinson, the leader of British archaeology in the 1960s and 1970s. Ruggles has shown that the claims for scientific, precision astronomy of Hawkins and Thom are incorrect, and also established modern standards for testing for intentional (rather than accidental) alignments in ancient monuments. But most of this has passed archaeology by, and archaeologists know virtually nothing of the details. They let Clive Ruggles get on with it, and basically come up

with very cautious claims for astronomical alignments in prehistoric monuments. Previously they ridiculed such claims since their main theory of prehistory was of a slowly accumulating farming revolution emerging out of hunter-gatherer savagery. Atkinson called them 'howling barbarians'! Therefore the first claims of 'scientific astronomy' made no sense to archaeologists. But now

that the farming revolution theory is no longer accepted within archaeology, and since archaeoastronomers no longer claim a scientific, but a religious, role for horizon 'astronomy', there is the chance for convergence between the two disciplines.

All of this has nothing to do with my views becoming more acceptable. My articles are being met with a resounding silence! My work began with a detailed critique of the marvellous work done by John North. I have been the only researcher to take North's work seriously. Without his achievements there is no way I could have come up with the arguments I am now making. North's work is also met with a resounding silence!

**RA:** Could you tell us briefly what you think North's achievement was?

**LS:** John North's book – *Stonehenge: Neolithic Man and Cosmos* – was published in 1996. He proved that Stonehenge had a double main alignment from the Heel Stone on winter solstice sunset below another on the southern minor standstill moonsets. The first is an annual property, the second once every 19 years spread over the course of a year. He demonstrated this through 600 pages of careful argumentation, showing in a patient examination of hundreds of earlier and similar monuments the principles of NW European prehistoric monument design. Some of these principles are: how horizons were manipulated by digging ditches and banks around monuments to preferentially shift the trapping of the sun and moon's light rays between posts or stones; the use of standard gradients in earth mounds

which allowed doubled reverse viewing of certain stars or the sun and the moon; the construction of artificial and level horizons for establishing alignments accurate to one-third of one degree; and many more. Once he had demonstrated how these principles operated elsewhere, he could then test them out at Stonehenge. He therefore showed us the method we can use to decode monuments. Nothing in the archaeoastronomy or archaeology of NW European monuments can move forward until North's work is critically acknowledged.

**RA:** OK, and what about your contribution? Above you said that your theory explains 28 features of the architecture of Stonehenge and that no other theory comes close. Perhaps that would be the best way to approach your work. What architectural features are you talking about?

**LS:** They are not just mine, many are from North. I just put them together in a new way to show that the combined result was to build a monument that could predictably stage rituals when winter solstice sunset coincided with dark moon – therefore at the start of the longest, darkest night. Nobody had come up with this before. Some of the properties which all go together and are explained by this single motivation are:

- Approaching Stonehenge from the North East along the Avenue, Stonehenge paradoxically appears as a solid wall of stone except in two places, even though it is full of gaps when viewed, as archaeologists do on their site plans, from above.
- The two nearest trilithons point to a convergence on the Heel Stone.
- The lower gap is exactly aligned on winter solstice sunset; the upper gap on the southern minor standstill moonsets.
- Stonehenge is built on the side of a hill. As you walk to the centre of the monument from the Heel Stone at winter solstice sunset, the upward movement of the eye counter-balances the sinking of the sun, creating the illusion of suspending its sinking movement.



Stonehenge traps the southern standstill moon

- Stone 11 is half the height, half the width and half the breadth of the other 29 stones in the outer sarsen circle. There are therefore 29.5 stones in the outer circle. This is the average length of the (synodic) month.
- There are 19 bluestones in the inner arc. This is the length of the standstill cycle of the moon.
- The bluestones, which come from the Preselli Hills in Pembrokeshire, are dark blue with mica flecks. If the monument is designed for a ritual of the longest darkest night, then this selection of stone is a good rendition of the night sky in the middle of winter.
- The monument is binary – two circles (one of sarsen, one of bluestone) and two horseshoe arcs (one of sarsen, one of bluestone). This is consistent with the main double alignment on the sun and the moon.

I could go on. All of these points and others outlined in my article in the *Cambridge Archaeological Journal* are consistent with my argument, and no other theory can integrate them in this way.

**RA:** You mentioned above that a study of Indo-European myths confirms your findings. Could you tell us a little bit about this with reference to the features you have just described?

**LS:** It is a remarkable achievement of scholarship that not only has some of the proto-Indo-European language been reconstructed, but also some of their origin myths. This is the root language and origin myths of all the peoples from Iceland to Sri-Lanka. From both Indo-European study, and from the archaeology, a strong case can now be made that Indo-Europeans

were patrilineal cattle herders of the late Neolithic and early Bronze Age. Some components of their origin myths have been reconstructed by, in particular, Wendy Doniger, Bruce Lincoln and Calvert Watkins.

These myths are obsessed with heroes killing the cattle-stealing dragon, repairing the cosmos and forestalling its imminent collapse, and the original

patriarchal twins instituting human sacrifice as the pre-eminent means of keeping the cosmos stable and self-replenishing. If you start your understanding of human origins with sex-strike theory, of culture led by matrilineal/matrilocal coalitions of hunters which then started to break down when big game hunting collapsed, then these myths are exactly what you would predict as one of the outcomes of that collapse. In terms of monuments, double alignments of the sun and the moon, in which monthly lunar phases are being transplanted onto annual solar cycles, and in which dark moon rituals are now being ritually celebrated twice a year rather than 13 times a year, are also what you would predict. None of this is explicable or explainable by the standard model of culture-creating farmers out of hunter-gatherer savagery.

**RA:** Finally, can we return to your first answer, and consider why it was that the people you were debating on the British left were hostile to these ideas. Why were they? And what can our activist readers take from your work?

**LS:** In the winter of 1989/90, the views of the section of the British left I was debating with were no different to those common among the liberal left and 'intelligentsia'. There was a very ambiguous and weak endorsement of the claims of Engels (and Marx) that our species was born in a revolutionary break with primate 'politics'. A number of reasons lay behind this. First and most important was an inability to critically use the methods of the new Darwinism – selfish-gene theory. All the left and liberal intellectuals were (and still are)

biophobic. Any recourse to using the mathematics of selection processes was considered a collapse into a right-wing agenda. Second, the left had a weak response to the radical feminist attack of patriarchy theory and, in defence of their organisations, wanted to close off the debate rather than embrace a new and, to them, untested theory.

Third, much of academic anthropology was profoundly anti-marxist, and used methods that were uncongenial to marxists. Therefore, whereas anthropologists celebrated the thought systems of 'simple' societies, marxists, and in part including Engels, used ecological methods, which led them to claim that hunter-gatherers had an insubstantial hold on survival because they had to rely on hunting with a 'primitive technology' and so on. Therefore, before agriculture, the ecology of hunter-gatherers was predicted to be close to starvation. If you started talking about the high levels of solidarity between brothers and sisters in matrilineal clans as the basis for the first communist society, then it was heard as utopian. Instead, marxists celebrated agriculture as the first mode of production which afforded plenty. Yet Engels had always claimed this as the counter-revolution –

not the deliverance from hunter-gatherer poverty!

Fourth, during the 1970s feminism and marxism were involved in acrimonious debates over the roots of women's oppression and Engels' part in that debate. In their failure to resolve the issue both sides retreated, wounded in different ways, to leave the issue alone. Academic anthropology has consistently attacked (vulgar) marxism with the evidence from pre-state societies. Those of us in RAG who are marxists believe that if it seems that anthropology undermines marxism on the issue of the roots of oppression, then only anthropology can rescue it. That is why we call ourselves the Radical Anthropology Group.

The main messages I would want activists to take from all this are the following.

Firstly, in the last 40 years there has been a revolution in the life sciences and, I would claim, this revolution has provided the method and the data to confirm the truth of Engels' claim that we are a revolutionary species, and that we established the first human culture as communist.

Second, this communist society started breaking down as the big game animals of the Palaeolithic started to die out. By the Neolithic, when monument building began, wealthy cattle-owning men are establishing their power, partly through monument building, at the expense of the earlier brother-sister solidarity of the matrilineal/matrilocal clans. This event was, as Engels claimed, the world-historic defeat of women and the establishment of the first class societies.

Third, as the Neolithic counter-revolution was based on economics, not biology, and as we were present at our own making as communists, then the next revolution is a return to the first, but now on the basis of modern technology that can assure plenty for all.

These claims strengthen our resolve by arming us intellectually. Who would not want that? ■

*Lionel Sims gives guided tours and talks on Avebury and Stonehenge as part of the Radical Anthropology Group's lecture series and annual field trip to Stonehenge and Avebury. For more details, see [www.radicalanthropologygroup.org](http://www.radicalanthropologygroup.org).*

## The material origins of inequality

Rough equality among men in patrilineages sits upon systematic inequality between men and women. This is the first inequality out of which all later inequalities spring – this is Engels' basic argument. The imbalances that can occur within this relation of inequality are like a proto-class out of which all later classes evolve. The main imbalances suggested in the scholarly literature are:

- Cattle herders also hunt and garden, therefore there are three dimensions for 'chance' inequalities to arise.
- Political authority (chiefs, kings, etc) can grow as the reverse-dominance structures of matrilineal/matrilocal organisation weaken (see, for example, *Hierarchy in the Forest: The Evolution of Egalitarian Behaviour* by Christopher Boehm). This can have economic consequences, eg, monument building.
- Agricultural labour services, except plough agriculture which uses oxen, are the province of women, and variable opportunities for wealth inequalities exist with multiple wives (see, for example, *Guns, Germs and Steel* by Jared Diamond).
- Before cattle-herders there were the complex hunter-gatherers of the Mesolithic, something like the NW coast American Indians. Most of these were slave-owning misogynist warriors who vigorously defended territory. As there were at least 4,000 years of the Mesolithic which preceded NW European Neolithic monument building, we would expect some degree of gender inequality and ranking among men before cattle-herding.

- Brian Hayden of Columbia University has suggested an 'accumulator-feasting' complex to explain 'potlatch' type rituals. These involve the conspicuous display and destruction of wealth, and the profligate consumption of luxury foods. They are run competitively by 'big men' 'financed' by calling in debts. This increases ranking differences among men in the midst of plenty.
- 'Trade' in, for example, stone axes, flint cores and artefacts, and in the early bronze age in copper and bronze, had a restricted circulation linked to rank. Variable trading opportunities are therefore a source of inequality.
- Exotic luxury goods, such as types of stone, silver, gold, confer unequal power on those who control their circulation. For example, a Zulu bride can be purchased with a brass ring: see Eileen Krige, *The Social System of the Zulus*.
- Napoleon Chagnon's social circumscription theory suggests that, when there are fewer opportunities to flee from intra-group problems, this intensifies the emergence of rank inequalities.
- The spoils of raiding and war – from revenge to cattle raiding to territorial defence – create inequalities.
- Resource stress.
- Migration.
- Colonialism.

There is evidence for the first nine of these factors operating in the prehistory of the British Isles and north Europe.

# Trust: self-interest and the common good

Marek Kohn is a science writer whose previous books include *As We Know It: Coming To Terms With An Evolved Mind*, and *A Reason For Everything: Natural Selection and the English Imagination*. Here he talks to *Radical Anthropology* about his latest work on trust.

**Radical Anthropology:** In your new book, *Trust: Self-Interest and The Common Good*, you discuss the biological origins of trust. Is trust peculiarly human? Or does it have parallels in the animal world?

**Marek Kohn:** The primatologist Frans de Waal observes that, “We have no trouble recognising the difference between a trustful or distrustful dog, and we know how long it can take to turn the latter into the former.” If an animal can form expectations about how another will act with respect to itself, we can think of it as being able to trust. But the question gets more difficult and interesting if one understands trust as involving a sense of selves and others: that to trust, one needs to have a sense that others are individuals, with interests and motives of their own. Trusting them is expecting that they will incorporate one’s own interests into theirs. So this is a question about whether non-human animals have what’s known as ‘theory of mind’ – which will doubtless be the subject of heated debate among primatologists for years to come!

**RA:** If trust has parallels in the animal world, and if human life is so characterised by trust, why is it a problem in the first place?

**MK:** Sure, there’s a lot of trust about, but the particular problem these days is that it doesn’t go very deep. A constantly moving, accelerating world reduces the opportunities for trust to grow through experience, familiarity, habit, and the commitment involved in relationships – personal, intimate or occupational – that are intended to last a long time. This isn’t to say that trust is a peculiarly modern problem, though. It’s a problem in the first place because co-operation is fundamentally problematic between agents whose interests are not identical. To understand how to promote trust and how to place it well, we need to work

from first principles to see how interests may be combined into a common good.

**RA:** And what are those first principles? Are they Darwinian, would you say?

**MK:** They are; though they can be derived from other kinds of cost-benefit analysis. Differing genetic interests can cause problems of trust, particularly in ‘familial’ societies where families trust each other implicitly and everybody else very little. This often arises when the state is oppressive or dysfunctional, failing to implement laws fairly and inhibiting the development of civil society: under such conditions the family becomes a fortress.

**RA:** So traditional societies can be too parochial for widespread trust to develop; modern societies too chaotic. But why do you think widespread trust is desirable anyway? Could we not just get by, as Thatcher implied, with individuals and their families?

**MK:** Another politician, David Trimble, recently observed (in the context of his experience in Northern Ireland) that trust is “over-rated and frequently misplaced”. He has a point. Trust is not strictly necessary to achieve many forms of co-operation, and to focus on trust, as political commentators often do, can be to concentrate on the icing when what matters is the cake.

However, even in situations where co-operation can be achieved without trust, trust may be needed to sustain the co-operation. Reading accounts of informal truces on the Western Front in the First World War, I was struck by the extent to which trust seemed to arise between soldiers on opposing sides, and how such sentiments may have helped to maintain the truces in situations where violations would inevitably occur. In real life, signals are often noisy – in the trenches literally

so, the signals often actually being transmitted by gunfire – and so people need to interpret them according to their understanding of others’ intentions. No ceasefire would have lasted if any shot was interpreted as a deliberate breach. Trust makes co-operation resilient instead of brittle.

Well-placed trust makes relationships work better. It allows people to take advantage of opportunities they would otherwise miss, and makes the colours of social interaction more intense.

**RA:** In your book you say “capitalism has won the global game of how to make a living”. Marx and others pointed out that capitalism is parasitic on trust. Workers in the factory, in the home and in society generally operate on communist principles – if my colleague asks me to pass the spanner, I don’t charge him for my time; my mum doesn’t put a padlock on the fridge. Yet the profits that accrue from this social trust go into the pockets of a small minority of individuals. Isn’t the global consensus on capitalism more an example of misplaced trust than of deserved success?

**MK:** It depends on where you think value comes from. By locating the source of value in labour, Marxism proposes that capital is inherently exploitative and implies that workers are wrong to trust in it. Orthodox economics, on the other hand, welcomes capital as a source of value. In Britain, the old labour movement was deeply mistrustful of capital and management, whereas on the Continent, notably in West Germany, relations between capital and labour were structured around an idea of social partnership which implied trust. Indeed I believe they still largely are, to the workers’ benefit.

**RA:** Trust is not only good for our pocket, you say in your book, but good for our health too. How so?

**MK:** One specific way that it works is through the National Blood Service. People trust that they would receive a transfusion if they needed it, because they trust unknown others to donate blood, and this public trust encourages people to make the donations. It's a virtuous circle, providing public goods at a reduced cost – the medical good, of the blood itself, and the social good of solidarity.

More generally, trust can be seen as a source of health through its close relationship to equality. The work of Richard Wilkinson, Michael Marmot and others has shown that equality promotes health, while inequality damages it. This effect seems to work through the reduction of stress in social relationships: being a subordinate can mean a life lived in an unhealthily prolonged emergency mode, and shortened by it. Relative equality makes for a healthier social environment. Pleasant, co-operative social relations make for longer, healthier lives: trust, forming a basis for relaxed co-operation, should therefore be good for health.

**RA:** You quote some studies in your book that seem to show trust is less likely to be spontaneously extended to people of different race. Are multiculturalism and liberal immigration policies therefore doomed to fail?

**MK:** Not at all. It's hardly surprising to find that ethnic differences may be an obstacle to trust. After all, trust involves confidence in one's ability to predict how others will behave. It is easier to predict how others will act if you share a set of rules and customs with them: you can ask yourself, "What would I do if I were them?" People will build relationships across cultural divides if they are persuaded it is in their interests to do so, and as they learn to co-operate, they will come to trust. On the other hand, if they see their interests as best served by maintaining group divisions, they will reinforce their prejudices and their mistrust. That can happen where civil society is weak and people have little faith in the state as an arbitrator or guarantor of fairness. It may also happen where political strategies promote identity politics. But that doesn't mean that multiculturalism is necessarily divisive. It means that

people have to see the benefits of building relationships with others of different cultures, have to find shared interests, and build on the elements in their cultures that they share - which may mean building a new shared culture. People have to want to make it happen, and, as with any relationship, they have to work at it.

**RA:** What about religion? You put a much more positive spin on the subject than we are used to hearing from science writers. What would you say to 'militant atheists' such as Richard Dawkins? Can we expect trust and moral behaviour from the human animal in the absence of religion?

**MK:** I'd say, "To an evolutionary psychologist, the universal extravagance of religious rituals, with their costs in time, resources, pain and privation, should suggest as vividly as a mandrill's bottom that religion may be adaptive." In fact, I did say that in my review of Daniel Dennett's book *Breaking the Spell*. Richard Dawkins used it as the epigraph to a chapter of *The God Delusion*, but it didn't seem to make a huge amount of difference to his argument! They just can't seem to bring themselves to accept the possibility that there might be anything of value in religion.

As for morality, rather than adaptation, I've become increasingly confident that people can manage fine without religion. I used to be in awe of the word of God as the basis of right and wrong, but now I don't worry that people need such an absolute foundation for deciding how they should behave. Good strong relationships between people – implying a profound role for trust – can be just as powerful. This confidence is almost entirely based on my experience of parenthood.

**RA:** You say that, in modern societies, the "attenuation of traditional authority has created a vacuum in social relations that is being filled by bureaucratic regulation". Where once there were customs in common, now there are contracts between individuals. Is this development largely good or bad? Is it reversible? What kind of political strategies and real-world projects give us grounds for hope that the future could be more trustful?

**MK:** You often see signs on buses along the lines of "Please give up this seat for someone who is less able to stand than you". It's welcome that public transport providers are concerned to redistribute seats from those with standing ability to those with a need to sit down, but regrettable that passengers should need to be asked. And the further an organisation goes in its efforts to bring about fairness by regulation, the weaker the relations between people become. When they are required to obey rules, individuals are relieved of the responsibility to make their ethical decisions for themselves, and to think about how they should engage with others. French public transport has a tradition of chapter and verse on this – priority in descending order to 'mutilés de guerre', blind civilians, industrially disabled people, and so on – which replaces individual judgement, and public spirit, with a bureaucratic code. Doing the right thing becomes doing what is prescribed – and if it's not prescribed, it probably won't be done. People's relationships are with authority rather than with each other.

The question is, though, how would they behave if they weren't told how to behave? We should bear in mind that a lot of behavioural prescriptions in organisations have been introduced because people couldn't be trusted not to discriminate against women, ethnic minorities or other groups. Such prejudice has become much less socially acceptable, so by and large people will have become more trustworthy in these respects. At the moment, organisations remain obsessed with achieving standards through detailed bureaucratic prescription, so that will probably continue for the time being. But I can imagine things changing as the costs of such strategies become too tiresome, and as institutions become more confident that their people could be trusted to treat others without prejudice. Trust lowers costs – of lost opportunities as well as of policing behaviour – so organisations should be able to appreciate the value of rediscovering it. ■

*Trust: Self-Interest and the Common Good* is published by Oxford University Press, £10.99.

## Moving testament to an extraordinary life

*Review of Pilgrim State by Jacqueline Walker, Sceptre 2008, pp352.*

Jacqueline Walker's novel *Pilgrim State* is a fictionalised memoir. She takes the life of her mother, Dorothy, and tells it through a variety of sources, official documents and narratives. The result is a moving testament to a woman who, despite much hardship, instilled in her daughter a strong sense of family.

Dorothy was born in Jamaica in 1915. A conscientious student, she earned a scholarship to study medicine in the US. It was there that she met and married her husband, Clifford Brown. What begins as a passionate and loving relationship soon changes once Dorothy becomes pregnant with their first child, Pearl. *Pilgrim State* is named after the psychiatric facility into which Dorothy is sectioned, after being drugged by her husband while suffering from what may now be thought of as post-natal depression. Her treatment was electric shock therapy. After being forced into giving over her savings, her husband allows for her temporary release. But now that she has been admitted

once, it only takes a phone call from him to have her returned there once she becomes pregnant with Teddy, their second child. She is eventually released, the years of (mis)treatment having taken their toll. Deportation back to Jamaica, with Teddy and her third child Jackie, follows. Clifford retains custody of Pearl in the US. Thus begins a life-long struggle to find a safe place and be reunited with all her children. It is a journey that takes them through several separations, and a move to south London, where they lived, until Dorothy's premature death (in 1965), when Jackie was 11 years old.

Despite these tragic events the story is an uplifting one. Each page is filled with optimism, as we get to know the Dorothy that Jackie knew, with her intellect and love of dressing up and music. It holds out an example of how the bonds between mother and daughter can remain unbroken. This is, at root, an inspiring love story.

But *Pilgrim State* isn't just a novel. It is a challenge to our understanding of what good parenting means. The overwhelming message is that social services failed this funny and

courageous woman, and many others like her. What Dorothy needed (and asked for) was support. She didn't get it, but fortunately, this may change. *Pilgrim State* is now on the reading list for all trainee social workers at Brunel University.

The use of myth gives the book an added resonance. The myth of Demeter and Persephone frames the narrative; in the same way that we hear Dorothy speak through Jacqueline's words, Demeter too calls out to us in her distress. There is the separation of mother and daughter, echoing when Persephone is stolen away into the Underworld by Hades, and the subsequent 'madness' experienced by Demeter as she searches for her daughter.

This myth is one of universal importance. It symbolises the necessary periodic separation between mothers and daughters, as a girl matures and marriage takes place. But with each new spring Persephone and Demeter are brought together again. In this, it also speaks of an ancient time when the bonds between husband and wife were not permanent, allowing for a solidarity between female kin, which

would have created a new way of living and with it the beginnings of culture.

Myth has long been used as a tool to make sense of our own lives. Separation can, and does, occur. But this need not be the end. Throughout the novel, like the voice of Demeter, we hear Dorothy calling to her daughter, her love never-ending.—**Eleanor Leone**

### Books received

● *Possibilities: Essays on Hierarchy, Rebellion, and Desire* by David Graeber. AK Press 2007, pp400.

Inspiring collection of essays from anarchist David Graeber.

● *What Gives Work Its Value? The Human Worth of a Physical Project* by David Wilson. Edwin Mellon Press 2006, pp212.

A reinterpretation of Karl Marx's value theory.

● *Expedition Naga – Diaries from the Hills in Northeast India* by Peter van Ham and Jamie Saul. ACC Editions 2008, pp300.

Accounts of a trip to the Burmese border to meet the Naga – notorious for their head-hunting activities. Includes 140-min film on DVD.

## Letters

### Radical Anthropology Network

● *Dear Radical Anthropology*, Acting as a representative of two Cuban collectives of activists and intellectuals committed to social and cultural research as well as to exploring new emancipation paradigms for our country, Latin America and the planet, I'd like to suggest the creation of a Radical Anthropology Network. The membership of the Cuban groups includes some of the more interesting social researchers of this country. Due mainly to historical reasons, Cuban social science still largely follows European ethnocentric patterns, a fact which seems bizarre to many foreigners because it contrasts with the revolutionary, third-worldist and latin-americanist history for which our country is famous. The need for new approaches is strongly felt. As a result of our debates, my Cuban comrades share many of the goals of the Radical Anthropology Group. I have sent them a copy of the first issue of your journal and

all the feedback I received was positive and encouraging. We evidently have many aims in common. We think that co-operation could prove fruitful, and we would like to contribute to your journal, publish a Spanish version of it, organise events, and support community initiatives. We are open for discussion and eager to hear from you.

*Dmitri Prieto-Samsonov, Cuba*

**Editors reply:** At the RAG AGM in June 2008, Dmitri's proposal to set up a Radical Anthropology Network was unanimously agreed. Anyone interested in contributing should e-mail [stuartrag@yahoo.co.uk](mailto:stuartrag@yahoo.co.uk).

● *Dear Radical Anthropology*, Congratulations on a fascinating, enjoyable, and inspiring first issue. I particularly liked David Graeber's article. His work epitomises for me what contemporary libertarian socialist theory should be all about: finding new forms of resistance appropriate to the times we live in. Such openness to ideas is essential to

the construction of a praxis that is both ethical and capable of achieving our increasingly urgent goals.

*John Green, County Meath, Ireland*

● *Dear Radical Anthropology*, I did a table at the Montreal anarchist bookfair in May and another in Hamilton in June, and *Radical Anthropology* was easily the most thumbed publication on my table. The idea of a radical anthropology was for many people a novelty: "What could be radical about anthropology?" Yet the necessity of such a project is only made more urgent by current attempts to introduce the renamed version of Creationism, Intelligent Design, into the Grade 10 science curriculum. In this context a radical anthropology truly is a revolutionary practice. Congratulations on a great journal. It's my current favourite along with *Aufheben*, *Communicating Vessels* and *Internationalist Perspective*.

*Fischer, Toronto, Canada*



# Has the key social science lost its way?

Both Karl Popper and Mario Bunge described anthropology as the key social science. For despite its diversity, anthropology has a certain unity of purpose and vision. It is unique among the human sciences both in putting an emphasis and value on cultural difference, thus offering a cultural critique of western capitalism, and in emphasising people's shared humanity, thus enlarging our sense of moral community and placing humans squarely "within nature". Anthropology has therefore always placed itself – as a comparative social science – at the "interface" between the natural sciences and the humanities.

Sadly this 'dual heritage' of anthropology, which combined both humanism and naturalism, interpretive understanding and scientific explanation of social phenomena, has come under attack from two types of extremists. On the one hand, hermeneutic scholars, literary anthropologists and the so-called postmodernists, have repudiated the Enlightenment tradition of anthropology. They have thus attempted to reduce anthropology to semiotics – or even to autobiography! – rejected history and social science, embraced a dubious moral and epistemic relativism, and have become increasingly obsessed with the study of symbolism and ritual. On the other hand some anthropologists have gone to the other extreme. Influenced by sociobiology and its offshoot evolutionary psychology, they have advocated a reductive form of naturalism. This has involved the attempt to explain complex social institutions, particularly religion, in terms purely of cognitive mechanisms. They thus suggest that an explanation for religious beliefs and practices is to be found solely in the way the "human mind works". With great aplomb they inform us that religion is a "natural phenomenon", as if this was some new idea. In fact, ever since Ludwig Feuerbach, social scientists have emphasised that god (along with beliefs about deities, spirits, angels and witches) have no ontological basis, but are essentially the products of human consciousness and imagination.

**Brian Morris** is emeritus professor of anthropology at Goldsmiths College, University of London, and author of *Religion and Anthropology: A Critical Introduction* (Cambridge University Press 2006).

There have been many books and articles that have attempted to define religion. For like reason, culture and economy, the concept of religion has an historical trajectory, and in different contexts diverse meanings. Anthropologist Melford Spiro defined religion as a social institution consisting of patterned interactions with "culturally postulated superhuman beings". This is a useful working definition and emphasises that religion is a social institution – not merely a "symbolic system" (Geertz), or "awareness of the transcendent" (Tambiah), or a "feeling of the numinous" (Otto). Functional definitions of religion, in contrast, tend to be rather vague, like that of J. Milton Yinger, who defined religion as a system of beliefs and practices that dealt with the "ultimate problems of human life". By this criterion Marxism, evolutionary naturalism and secular humanism are "religions". Indeed, in the US, both John Dewey's empirical naturalism and secular humanism have been declared a "religion".

Long ago, in my *Anthropological Studies of Religion* (1987), I outlined the many and varied ways in which philosophers and social scientists have attempted to understand and explain religion – as a natural phenomenon. I thus critically discussed in detail the many approaches to the study of religion: intellectualist, psychological, structuralist, interpretive, phenomenological, and, especially, the sociological approach derived from Marx, Weber and Durkheim.

In recent decades anthropologists such as Pascal Boyer and Harvey Whitehouse, and the philosopher Daniel Dennett, have enthusiastically embraced sociobiology, and its offshoot evolutionary psychology, as a

strategy by which to advance a truly "scientific" study of religion. The basic idea is that religious systems can be explained in terms of pan-human "psychological characteristics", or more specifically, the emphasis is on innate "cognitive mechanisms" or psychological "modules", that have been adaptive in a biological sense, namely, in fostering the survival or reproductive success of humans in the past. Religious beliefs, duly fragmented into atomistic "memes" (which seemingly have a life of their own), are described as "counter-intuitive", that is, contrary to commonsense assumptions and experience. Hardly news to social scientists! Dismissive of other approaches to religion, and ignoring social factors in the understanding of religion, advocates of the cognitive approach make some rather grandiose claims for this mode of understanding. Mario Bunge and the essays in Hilary and Steven Rose's edited volume *Alas, Poor Darwin* (2000) have provided us with some important criticisms of this approach.

As religion is a complex and multifaceted social phenomenon it can be fully understood only by adopting an integral approach, in which all approaches to religion must be taken into account. But historically, anthropology, given its "dual heritage" (embracing both humanism and naturalism) has always combined hermeneutics – the interpretive understanding of religious beliefs and practices – with a social-scientific perspective that seeks to situate religion in its wider socio-historical context. And this dual approach has always been expressed within specific ethnographic contexts. There is thus a need to avoid the extremes of both a narrow hermeneutics, embraced by literary anthropologists and phenomenologists, and the equally narrow scientific approach of the evolutionary psychologists, who would interpret religion purely in terms of pan-human instincts – cognitive mechanisms. The "dual heritage" of anthropology is surely worth sustaining in order to develop a more integral approach to religion. ■