
*Critical Development Theory: Contributions
to a New Paradigm*

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CHAPTER 4

*Critical Holism and the Tao
of Development*

Jan Nederveen Pieterse¹

Remedying remedies

Development processes take place across dimensions – physical, ecological, social, emotional, mental, political, historical, moral and semantics. Given the partial nature of development theories – reflecting disciplinary territories, policy interventions and political and institutional interests – the development field is carved up in many ways. How then can we arrive at a comprehensive approach? One could identify development as ‘a totality of fragments’, and capitalism as ‘difference within a structured totality’ (Pred and Watts 1992: 11). But that does not tell us very much since the notion of ‘fragments’ implies some kind of pre-existing wholeness. Responding to this dilemma is the context of this chapter.

This treatment is inspired by Vincent Tucker’s work on critical holism, which combines the sociology of health with critical development studies. In criticizing the role of transnational pharmaceutical industries and their commercialization of health, he arrives at a new combination of concerns: holism and critical thinking, or ‘holism with attitude’. This derives from an anthropological sensitivity to cultural dimensions of development (Tucker 1996b), a personal engagement with healing (which included following a holistic health course and taking a degree in holistic massage), and interests ranging from music to psychotherapy.

Tucker’s starting point is modern medicine, or the biomedical approach – ‘a pill for every ill’, a magical fix for all ailments, and the idea that ‘health = doctors + drugs’ (Tucker 1996a: 37, 30, 17) – a hegemonic system sustained and propagated by medical professionals and pharmaceutical industries. His interest is not just the politics of dependence in the South and in Ireland, but the possibilities for dependency reversal (Tucker 1996c) and, likewise, alternatives to conventional

medicine. In this respect, his approach differs from treatments of modern medicine that are primarily critical (for example, Nandy 1995; Kothari and Mehta 1988). He contrasts modern medicine with an emerging 'new holistic health paradigm' (Tucker 1997: 32) at several levels. 'The emergence of the holistic paradigm will require not only a change in the practice of medicine and health care, but also in the knowledge system and the model of science on which it is based. It will also require changes in the institutional fabric of health care' (Tucker 1997: 32). At the same time he is concerned with addressing 'weaknesses in holistic thinking and practice by incorporating into the model perspectives from more critical traditions of public health' (Tucker 1996a: 1). For instance, Fritjof Capra's work, 'like most approaches to holism, is less well developed when it comes to incorporating social, economic and cultural systems into the model' (Tucker 1997: 42). Hence, Tucker distinguishes between

two versions or tendencies in holistic thinking. One focuses primarily on the individual organism. Most holistic health practice belongs to this tendency. It differs from biomedicine in that in its diagnostic techniques and therapies it takes into account a broader range of systems, which include the biological, the energetic, the psychic, the interpersonal and the spiritual. While it is more cognisant of the social and environmental factors which impact on the health of the individual, and takes these into account in its diagnosis, it does not provide ways of analysing or intervening in these macro systems. The second version of holism derives from the more sociological approach of Engels and Virchow. ... It also derives from the public health tradition. It encompasses economic and political systems as well as biological and environmental systems and is based on the notion that health and illness are not simply biological phenomena but are socially produced. This more sociologically informed holism has been further developed by Marxist political economy and radical development theory. (Tucker 1997: 42)

He then initiates a further move. While the sociological tradition 'adds a critical edge often missing in holistic health practice', 'it has little to contribute to our understanding of the personal and interpersonal dimensions of illness and wellbeing'. Finally, 'The critical combination of these two perspectives, which forms the basis of an expanded and more critical notion of holism, can provide a comprehensive alternative to the biomedical model' (Tucker 1997: 43).

Vincent Tucker's synthesis involves multiple movements: from biomedical reductionism to holism, from individual holism to sociological holism, from sociology and political economy to holism in personal, interpersonal and spiritual dimensions. The components of critical holism are spelled out in several places: 'a critical synthesis of holistic

medicine, political economy, development theory, environmentalism and feminism', 'a theoretical synthesis of holistic theory, Marxist political economy and culture critique' (1996b: 3); 'critical holism encompasses social, economic, political and environmental systems including world systems' (1996b: 41). In health practice what this implies is:

A holistic perspective on health promotion, while not excluding biomedical interventions, may include public health practices, environmental campaigns, political action, educational activities and complementary forms of medicine. It will include not only changes in personal life style, but also collective action to challenge organisations and institutions ... which act in ways detrimental to public health. (Tucker 1997: 45)

This is a high-wire synthesis. While it is developed in relation to health, it addresses gaps in our knowledge that are of general relevance. Its triple movement, providing remedies and remedying not only the original deficiencies but the shortcomings of the remedies as well, is welcome in development studies and social sciences generally. It involves a developed sense of balance. Thus, we all know the limitations of modern medicine. We may acknowledge the merits of holism, while its weakness is also evident: no critical edge, no political economy. The reverse applies to political economy: materialist savvy and sociological finesse, but no emotional or spiritual depth. If in a combined movement all these are brought together, balancing the limitations of each with the strengths of others, we have a bridge of uncommon strength and sophistication. This has been Vincent Tucker's contribution. In passing, Tucker notes that his critical holism paradigm 'also provides a basis for elaborating a general theory of human development' (Tucker 1996a: 1), so it is worth probing what would be the general ramifications of this synthesis.

Critical holism is an uncommon synthesis. Criticism and holism refer to different modes of cognition. This makes it a welcome synthesis: without a critical edge, holism easily becomes totalizing, romantic, soggy. Without holism, criticism easily turns flat, sour. If we recode these sensibilities, perhaps the synthesis becomes easier. 'Criticism' has several strands: the exercise of analytical faculties; a repudiation, in the Enlightenment tradition, of 'faith' and dogmatism; and a commitment to class struggle in Marxism, to emancipatory knowledge in critical theory, to equity and social justice in dependency theory. Key elements of criticism, then, are analysis, anti-dogmatism, and social justice. How does this tally with holism as a concern for the whole, the totality? If we take criticism in its affirmative sense it means acknowledging dimensions that have been *left out*. Through criticism an *inclusive* knowledge is to be

achieved, representing elements that are outside or not acknowledged in the status quo. Accordingly, criticism is also an attempt at healing in the sense of restoring wholeness by acknowledging and rendering visible that which has been left out. In a broad sense, then, both criticism and holism refer to modes of healing: from the point of view of completeness in a societal sense by way of emancipation and justice, and from the point of view of wholeness in a multidimensional sense.

Conventional therapies implicitly refer to 'wholeness' by responding to deficiencies: through 'additives' or supplements, food or vitamin deficiencies can be remedied, only here wholeness is confined to the physical sphere, which permits medicalization and 'fixing'. Modern medicine recognizes psychological dimensions of health, as in psychosomatic illness, only these are compartmentalized away in domains such as psychology, psychiatry, neurology. The difference between holistic and conventional therapies is that the former acknowledge emotional, psychological, spiritual (at times also moral and social) levels of being as dimensions of health and well-being, and seek to integrate them into the healing process.

Wholeness, holism

Once the whole is divided, the parts need new names.

(Lao Tsu 1973: 29)

According to the *Bloomsbury Dictionary of Word Origins*, 'Whole is at the centre of a tightly knit family of English words descended from prehistoric Germanic *khailaz* "undamaged".' In Germanic languages, there is a connection between health, healing, holiness and wholeness. A similar connection exists in other language groups, as in Latin *salvus* 'healthy', *salus* 'bliss, health', Irish *slan* 'healthy, whole', Greek *holos* 'whole', old Indian *sarva* 'undamaged, whole'. 'Saviour' (Dutch *heiland*) means 'healer' and connects to the Greek *soter* (de Vries 1963: 257, 96). The Dutch *genezen* (healing, healed) refers to Gothic *ganisan* 'saved, healthy, holy', which may be connected to Greek *neomai* 'I come back, come home', giving the meaning of 'coming home safely'.

Health, then, refers to a state of wholeness, and healing restores a person to wholeness. Viewed in this light, 'holistic healing' is a tautology since health already basically means wholeness and healing means 'making whole'. This tautology makes sense only in distinction to conventional medicine. Holism, in this light, is an attempt at *recovery* of interconnections lost in the course of analysis.

The *Random House Dictionary* defines 'holism' as 'the theory that

whole entities, as fundamental and determining components of reality, have an existence other than as the mere sum of their parts'. According to Craig (1992: 4–5), Jan Christiaan Smuts popularized the word in his 1926 book *Holism and Evolution*, in which he 'advocated the exploration of matter, life, and mind in relation to each other, rather than as isolable realms of existence'. Since then, *holistic* has been used in the humanities, social sciences and the sciences to refer to approaches that privilege the study of a whole system over analysis of its parts. Smuts uses wholeness and holism interchangeably in his book, which was influenced by the Cambridge Platonists, Bergson's vitalism and ideas of evolution from Darwin to de Vries (van Meurs 1997). For him, holism is 'the ultimate activity which prompts and pulsates through all other activities in the universe' (Smuts, quoted in van Meurs 1997: 115).

Apparently, however, there is slippage between wholeness and holism. While wholeness is evocative and descriptive, holism has a programmatic element. Holism involves systems thinking, which is part of the analysis recovery syndrome. Once the analytical mode has generated distinctions and separations, systems thinking is an attempt to piece together again what has been taken apart. The attributes of *system*, however, are unlike the properties of *wholeness*. Holism is a step forward in relation to the Enlightenment habit of taking everything apart, but it is short of wholeness. Humpty Dumpty put together again is not the same Humpty Dumpty. *Esprit de système* is not the spirit of wholeness. More precisely, there are different notions of *system*. It derives from the Greek *synhistanai*, 'to place together', so to understand things systematically means to put them in a context and to establish the nature of their relationship. This relationship may be thought of as calculable and machinelike, as in mechanistic notions of system; or as approximate network relations, as in general systems theory (Capra 1996: 27f.). In social science the notion of system ranges from structural functionalism à la Parsons, to world-systems theory, and to the complex multidimensional systems approach of Niklas Luhmann.

One problem of systems approaches is that they imply a closure of the field; they achieve understanding (and manipulability) by enframing the field, and even reflexivity may not remedy this. It makes sense then to distinguish between *wholeness* and *holism* as perspectives with related but separate lineages. Wholeness refers to an original comprehensive field; holism is the systemic or scientific recombination of fragments in a new totality. From a historical point of view, wholeness resonates with Neolithic and older sensibilities while holism brings to mind the technology and mind-set of the industrial era. While there are continuities between wholeness and holism, 'the differences between modern holistic

thinkers and earlier ones are [not] easily reconcilable' (Dunn 1986: 3). Both are relevant angles, each with their range of applicability.

As a theme, wholeness functions like a kaleidoscope of sensibilities. Among lineages of holism Vincent Tucker mentions ecological thinking in biology which spread to social science, and related currents of Gestalt psychology, psychotherapy and Buddhist thought (Tucker 1997: 41). Wholeness is thematized in several ways in social sciences. Marxism represents a commitment to the 'whole' within a materialist ontology. Harrod's plea for 'a re-search for a lost completeness' refers to a return to critical political economy, in other words to the Marxian whole (Harrod 1997: 108). Gestalt psychology led Ruth Benedict (1935) to a view on cultures as wholes or 'configurations' organized around core meanings. Parsons's social systems approach has been mentioned already. In the social sphere, wholeness is often associated with romanticism and nostalgia, as in the idealization of 'tradition', communitarianism and the idealization of 'community'. In politics, it can involve homogenizing projects of 'totality', as in some types of utopian politics, or nostalgia for a lost political 'unity'. In this light, a dose of difference can be quite a relief. A different and concrete angle on wholeness is the social exclusion approach (for example, Bhalla and Lapeyre 1997). This sensibility matches the 'preferential option for the poor' in liberation theology. For the architect Robert Venturi, part of postmodern sensibilities is 'the obligation toward the difficult whole' (quoted in McHale 1992: 3).

Modernity and its contradictions

The question of modern medicine is a subset of the larger problem of modernity and its contradictions – in particular, the contradiction between the 'two cultures' of science and art. The core of scientific culture is often traced back to Descartes and his project of 'certain knowledge' on the basis of mathematics as a universal scientific method. The mathematical mind abstracts, generalizes, dichotomizes and is given to formalism (Davis and Hersh 1986; compare Passmore 1978).² Critiques of Cartesianism go back a long way, among others to the Neapolitan philosopher Giambattista Vico: 'Mathematics is created in the self-alienation of the human spirit. The spirit cannot discover itself in mathematics. The human spirit lives in human institutions' (quoted in Davis and Hersh 1986: x). This general current of dissent is as old as 'the other West of William Blake and Paracelsus' (Nandy 1995: 60). A different twist to this kind of dispute is the argument between Habermas and Lyotard on the virtues of the Enlightenment and the debate on postmodernism.

There is something jarring about the way the tension within modernity is usually conceptualized and represented on either side. Viewing the relationship between scientific and humanistic cultures in terms of a dichotomy itself follows a Cartesian paradigm that is clearly a superficial representation from the outset. In addition it involves a one-sided representation of the Enlightenment, which is a much more complex historical field than is granted in conventional views.³ Viewing this relationship as a continuum of views which meet and diverge on multiple levels is more adequate. This is worth keeping in mind when considering the long-standing attempts to bridge these worlds and reintegrate the sciences and humanities.

In 1957, Siu attempted such a reintegration in his *The Tao of Science*, long before Capra's *The Tao of Physics*. Generally elements of this fusion include:

- Ecology. Ecological knowledge as part of a general systems approach (Bateson 1973) and deep ecology (as in Arne Naess).
- History of science. Joseph Needham's work on the history of Chinese science and technology and its influence on Western science is part of a wider body of work documenting the historical connections between 'Western knowledge and Eastern wisdom'. The Enlightenment includes figures such as Leibniz and Goethe who bridged Western and Eastern sensibilities. On a conceptual level, Kuhn's work on scientific revolutions (Kuhn 1962) debunked the self-representation of progress in science, and through the notion of paradigm shifts introduced a meta level of critical analysis of scientific procedures and gatekeeping.
- Physics. Subatomic physics has generated a stream of findings that upset Descartes's certain knowledge, including Heisenberg's uncertainty principle. In the 1920s Alfred North Whitehead developed an inclusive notion of reality beyond dualisms such as those of mind and matter: 'In a certain sense, everything is everywhere at all times. For every location involves an aspect of itself in every other location' (quoted in Siu 1957: 157). In quantum physics this has been taken further in David Bohm's work on the implicate order (1980). Several of these reorientations have been grouped together under the heading of the 'holographic paradigm' (Wilber 1982a), building on Dennis Gabor's work on holography.
- New science. This includes developments such as catastrophe theory, chaos theory, complexity theory, fuzzy logic, the theory of emergence, self-organizing systems (Prigogine), and new trends in biology and mind-brain research (Karl Pribram).

Some of these reorientations turn on the fusion of 'Western knowledge and Eastern wisdom'. But what is the status of this fusion? The new science is not such a marginal concern if we think of developments such as chaos theory (Gleick 1988), which has found wide application in business (Peters 1988) and social science (Eve *et al.* 1997; Anderla *et al.* 1997). Several accounts suggest that on the other side of science are findings that intimate an interconnectedness of being similar to what has been intuited in mysticism – a complementarity between 'moonshine physics' and ground-floor mysticism.⁴ In this view, the splitting process carried all the way through, to the subatomic quanta and quarks, arrives at the ultimate unity of all being, or the universe as a 'sea of quarks' (Adachi 1995). At these deeper strata, contradictions such as those between the sciences and the humanities unravel. They turn out to be 'regional contradictions', dualisms that make sense within a certain limited context, but do not hold in the larger field. It is true, of course, that the world of everyday action is not a world of quanta or quarks; yet on the level of the foundational claims of science and epistemology it does matter that the Cartesian and Newtonian premises pertain within a narrow range only. This argument cuts two ways. By this wide-angle logic, while all human faculties and expressions may contain a 'territorial drive' and an urge towards functional autonomy, all are part of the whole and none can be denied their potential to contribute to wholeness. In other words, 'both reductionism and holism are necessary' (Capra in Weber 1982: 241). New science does not replace but supplements Newtonian science.

Typically, the new paradigm demonstrates that knowledge gained under the old paradigm is true *under specific boundary conditions*. Thus, the rules of motion put forth by Newton are not demolished by Einsteinian physics, but are shown to be a special case of a larger, more inclusive physics. ... Chaos and complexity do not 'overthrow' former conceptions and scientific knowledge, but merely supplement them. (Eve 1997: 275)

Development and high modernism

The contradictions of modernity are of profound relevance to development studies. Considering that development is applied modernity, all the contradictions of modernity are reproduced within development as dramatically unresolved tensions. Development theory is torn between paradigms – mainstream, alternative and post-development (Nederveen Pieterse 1998) – between internal and external critiques. What, then, is the relevance of these disputes over modernity for attempts to reconceptualize development studies? The most funda-

mental question is the meaning of development, which in turn boils down to the question 'What is evolution?'

Development thinking goes back to nineteenth-century political economy but modern development thinking is no more than fifty years old. In relation to the complexities of social life, development as applied social science has been an arena of ideological posturing or pragmatic reformism, either way involving brutal simplifications and crude interventions. At times, in relation to the collective body, development interventions seem like performing surgery with a chainsaw. Still, in some conditions surgery with heavy equipment beats no surgery at all.

Development knowledge is fragmented by discipline-centrism. Each discipline compartmentalizes development 'to suit its own areas of specialization, research methods, and theoretical frameworks' (Brohman 1995: 303). Within this division of labour there has been a definite hierarchy.

Development in its halcyon days was mainly economic development. Other disciplines entered the area apologetically or stealthily – as the supplementary knowledge of social structures facilitating or hindering economic growth, as insights into the psychological factors motivating or discouraging economic growth, as information about the political factors influencing economic decisions. (Nandy 1995: 146)

Meanwhile divergent theories are often applied in different policy spheres and economic sectors at the same time, making really-existing development a patchwork of zigzag premises and policies.

Neoclassical development economics, steeped in mathematics, is a formidable instance of applied Cartesianism. Partly, this is a rendezvous with intellectual and managerial power to classify, administer and change the world. The theoretical and methodological characteristics of neoclassical economics – assumptions of universal applicability, measurability, objectivity, formal modelling – make it a powerful instrument. Reductionism and disciplinary fragmentation have made expert regimes and technocratic interventions possible, and generously contributed to development policy failures. According to a former president of the American Economic Association:

When you dig deep down, economists are scared of death of being sociologists. The one great thing [they] have going for [them] is the premise that individuals act rationally in trying to satisfy their preferences. This is an incredibly powerful tool because you can model it. (Charles Schultze in Brohman 1995: 302)

Conventional development is a politics of measurement, a matter of

'fixing' within limited spheres, achieving desired change by manipulating indicators and modifying numerical relationships, such as the ratio of external debt to GDP, or debt to exports. The gap between economic development and social and cultural development, or the hard and soft dimensions of development, is reproduced in the institutional division between the Bretton Woods institutions and UN agencies, in which the former hold the purse strings. Indeed, this mathematical universe is inhabited in many different ways for the sake of macroeconomic and financial management, by the International Monetary Fund (IMF) and Bank of International Settlements; for economic growth in combination with sustainable development and poverty alleviation, by the World Bank; for 'human development' aspects like schooling, health and housing, by the UN Development Programme and other UN agencies. They all share a commitment to social engineering.

The American psychotherapist Thomas Moore proposes to add another ailment to psychology's list of disorders:

I would want to include the diagnosis 'psychological modernism', an uncritical acceptance of the values of the modern world. It includes blind faith in technology, inordinate attachment to the material gadgets and conveniences, uncritical acceptance of the march of scientific progress, devotion to the electronic media, and a life-style dictated by advertising. This orientation towards life also tends toward a mechanistic and rationalistic understanding of matters of the heart. (Moore 1992: 206)

Modern development has suffered from a severe case of 'psychological modernism', placing technological progress over human development. In Latin America, the work of the *cientificos* is not yet complete. In Asia, 'laboratory states' have used science as an instrument of power and reason of state (Visvanathan 1988). Even critical Marxist development thinking has been 'scientist' in temperament. As 'science became the integrating myth of industrial society' (Berman 1984: 187), so it became the guiding light of development policy. Rationalization was the key to modernization, so it became the master key to development. We now turn to the countermoves.

Shortcuts and other remedies

Do you think you can take over the universe and improve it?
(Lao Tsu 1973: 29)

Rather than another round of diagnosis, the situation calls for a scrutiny of remedies. Often presentations of the way ahead are no more than shortcuts – the ailment may be diagnosed correctly but the

remedy is not examined. Some medicine turns a headache into a migraine, or provides only temporary or local relief. So in considering remedies for the culture of high modernism we may apply Vincent Tucker's recipe of remedying remedies. Among the problems are: the reproduction of dichotomous thinking, shortcuts and skipping levels, and framing contemporary dilemmas in anachronistic terms.

Positions and counterpositions in the development field often appear as simplistic dichotomies: modernity versus tradition, science versus indigenous knowledge, the impersonal versus the personal, the global versus the local. Critiques of development modernism also often take the form of dualisms which in effect replicate the thinking of modernism. Does it make sense to subject modernity to the same simplistic treatment to which the project of modernity has subjected social life? We need to distinguish between the *project* of modernity and *really-existing modernities* (or the sociology of modernity), which are far more complex than blueprint modernity. Opposition to modernization has been *part* of modern experience, and the dialectics of modernity include modernism (as a cultural politics which at times runs contrary to modernity), critical theory and reflexive modernity.

The world of postdevelopment ranges from militant development rejectionism to the New Age development thinking of the Schumacher College, which offers courses on 'Systems thinking and learning for change' and 'Buddhist economics'. At either end of the spectrum, adherents of postdevelopment use statistics to make their case. 'A single edition of the *New York Times* eats up 150 acres of forest land' (Rahnema 1997: 379). 'If all countries "successfully" followed the industrial example, five or six planets would be needed to serve as mines and waste dumps' (Esteva 1992: 2). Thus, postdevelopment also inhabits a mathematical universe. Opponents of abstraction, generalization, dichotomization and formalism often apply these techniques in order to make their own case. Some points of reference of postdevelopment, such as opposition to reductionist science and modernity (Nandy 1988; Alvares 1992), exhibit a polarized and dualistic thinking similar to that in modernization theory (which dichotomizes 'tradition' and 'modernity') and thus fall into the trap of *modernization in reverse*. The problem, however, is to *overcome* dichotomies, and not merely to change the direction of the current.

Majid Rahnema criticizes 'compulsory actomania' and the 'mask of love' in development aid. In his view, behind solidarity or 'charity' is 'the great fear we have of becoming fully aware of our powerlessness in situations when nothing can be done' (Rahnema 1997: 392, 393). Who are we to intervene in other people's lives? He recalls the Chinese

notion *wu-wei*, which is variously translated as 'non-intervention' or 'action through non-action' (Rahnema 1997: 397). What is odd in Rahnema's treatment is that he proceeds to explain this Taoist notion by setting forth the Confucian 'arts of governance' and 'aesthetic order', as if unaware of the tensions between Taoism and Confucianism (which run as deep as those between mysticism and official religion) and of Confucianism's comeback as an ideological crutch for authoritarian regimes. It may be argued that 'non-intervention' is a superficial translation of *wu-wei*. A relevant passage in the *Tao te Ching* is:

Tao abides in non-action,
Yet nothing is left undone. (Lao Tsu 1973: 37)

Again, what Rahnema offers as a road ahead is merely a shortcut. A synthesis that is too fast, too easy, that does not do justice to the multiple dimensions of existence each of which involves tensions which require engagement in their own right and appropriate to the level at which they are experienced, is holism *without* a critical edge.

A similar polemical polarization relates to globalization. Some critics of globalization opt, in reaction, for localization. In reaction to free trade, they opt for 'new protectionism'. In their 1966 volume *The Case Against the Global Economy and for a Turn Toward the Local*, Mander and Goldsmith reduce globalization to economic globalization, confuse opposition to neoliberalism with opposition to globalization, and thus mix up the current *form* of globalization with the underlying *trend* of globalization. They set up a false dichotomy between the global and the local. Yet the global and the local require and sustain one another in many ways. Examples of 'interpenetration' of the global and the local are the thesis that transnational corporations can enter foreign markets effectively only if they become insiders ('insiderism'); the argument that flexible specialization leads towards the relocalization of operations so as to be close to consumers, suppliers, competitors and high-skilled labour ('glocalization'); the dialectics of globalization which show, for instance, that transnational corporations may well end up as active promoters of localism (Miller 1997); and a host of cultural studies that show that the global and the local are embedded in one another. A further argument is that 'the local' is itself a construction which owes its meaning and dynamics to its relationship to wider units, including the global (Boon 1990). On several counts, the contrast between the global and the local does not work as a clear-cut distinction or as a dichotomy because either requires the other to function.

'Identifying with the whole' is a formidable challenge, and taking shortcuts is tempting. Part of the remedy for modernism is to recover

lost sensibilities or, 'rediscovering traditional knowledge' (Fals-Borda 1985). This may involve reconnecting with spiritual sources bulldozed by the incursions of colonialism and modernization, such as reinvoicing the shaman (Nandy 1989). A recourse to cults is another option, with obvious limitations: 'cults can have either a tranquilizing or a liberating effect on people, depending, among others, on the leadership's inspiration and the social context' (Huizer and Lava 1989: 15). Morris Berman's point about the 'flip side of Cartesianism', even if overstated, is still valid:

Why not abandon Cartesianism and embrace an outlook that is avowedly mystical and quasi-religious, that preserves the superior monistic insight that Cartesianism lacks? Why not deliberately return to alchemy, or animism, or number mysticism? ... The problem with these mystical or occult philosophies is that they share ... the key problem of all nondiscursive thought systems: they wind up dispensing with thought altogether. To say this is not, however, to deny their wisdom. ... My point is that once the insight is obtained, then what? These systems are, like dreams, a royal road to the unconscious, and that is fine; but what of nature, and our relation to it? What of society, and our relationship to each other? ... In fact, it is but the flip side of Cartesianism; whereas the latter ignores value, the former dispenses with fact. (Berman 1984: 188)

'The commitment toward the difficult whole' is ill-served by binarisms. It requires a combination of wholeness and difference, as in Vincent Tucker's synthesis. Shortcut holism may just produce Neolithic nostalgia – revisiting Arcadias that yield only temporary comfort, island paradises that provide only local relief, politics of ecstasy that produce hangovers. Recovering the wisdom of ages is needed, but not as a shortcut. Rather, what is needed is a new sense of balance, between science and art, fact and value, analysis and meaning. This means bridging the development gap and crossing sensibilities ranging from Neolithic to postindustrial settings. It involves recognizing multiple levels of existence and, accordingly, multiple modes of cognition which should coexist rather than compete. The assumption that only a single mode of cognition should prevail implies skipping levels.

Towards the Tao of development

Vincent Tucker's critical holism cannot be readily translated into a general theory of development because, unlike in health, there is no holistic practice in development. Alternative development practices tend to be local and short of a holistic approach. While there is a mysticism of the body, both a theory and a practice (holistic medicine), there is

no equivalent holism of the social body. There are, so to speak, 'a thousand points of light', but they are scattered about like 'ten thousand things' – local alternatives, cultural and spiritual alternatives, rival theories, counterpoints and countercurrents.⁵ There is no unifying, overarching paradigm. The appeal of critical holism is that it places holistic theorizing and practice about collective existence on the agenda, thus rendering it imaginable so that steps may be taken in its general direction.

Since social science in its epistemology has followed natural sciences, would it not be logical for it also to follow *new* developments in science? One problem with this is that specialization has narrowed the nexus between the two. The present situation in social sciences and development studies is an uneven combination of trends – towards polemical antagonisms, partial recombinations, and occasional syntheses.

Critiques of Cartesian science have deep roots in the South. Both science and critique-of-science movements have played a role in development activism and popular movements (Zachariah and Sooryamoorthy 1994). One trend is to view science as a religion⁶ and as power. Suspicion of Enlightenment science is also a leitmotiv in ecological thinking (Shiva 1988). Science here stands for Cartesianism, Newtonian mechanics, positivism, an instrument to achieve mastery over nature. At times this critique presents a caricature of science which ignores ongoing developments in science and new science. Why should developing a critique of science and of science-as-power mean being anti-science? At times such 'anti-development' comes across as twentieth-century Luddism. Meanwhile science, of course, is a major instrument of ecological monitoring. Statements on the 'limits to growth' take the form of a mathematical argument. 'Green accounting' uses scientific measures to arrive at a realistic costing and pricing. The critique of science is part of reflexive modernity. What this means is there is a need to integrate multiple knowledges within a larger framework.⁷

Positivism is no longer the dominant temperament in social science except in economics. In social science, the lead paradigm is constructivism. In development, one-sided disciplinary perspectives are gradually in retreat and are being relegated to the status of partial knowledge. A development economist can no longer afford to ignore politics, sociology, gender, ecology, culture. Nor can a political scientist or sociologist afford to ignore economics. Most *problems* now faced in development – structural adjustment, currency instability, corruption, the environment, gender, poverty, conflict prevention, complex emergencies, postconflict reconstruction – require a combined approach. Many *policies* that are now initiated involve partnerships of government agencies, social

organizations and firms. Many new *concepts* in development imply a combination of disciplines: good governance, accountability, human development, institutional development. New theoretical perspectives, such as new institutional economics, are likewise interdisciplinary. We witness both a return to and renewal of political economy, and new combinations such as ecological economics (which is more than simply resource economics) and economic sociology. The latter shows that markets are socially embedded and politically constituted and vary culturally, and yields such novel notions as social systems of production (Hollingsworth and Boyer 1997).

At the same time these reorientations tend to be *ad hoc* and only dimly reflected in general theoretical reorientation or in everyday research, which remains empiricist. Disciplinary knowledge still ranks as foundational knowledge. Interdisciplinary research is more widely applauded than practised. A multidisciplinary approach refers to a combination and an interdisciplinary approach to an interaction of disciplines; a holistic approach is a step further. Holistic means integrated from the outset, which implies revising each discipline and not just an adding up.

Considering that one of the problems of conventional development thinking is linearity, a relevant option is the application of chaos theory to development. In social science, chaos theory is used as the basis of a nonmodern social theory (Lee 1997) and with a view to public policy (Elliott and Kiel 1997; Anderla, Dunning and Forge 1997). A preliminary point is that there is no ready translation of chaos theory from natural to social systems (Elliott and Kiel 1997: 72). Also chaos does not mean randomness or the absence of order; it refers to the unpredictability of the outcome of processes on account of small differences in conditions (Gleick 1988: 23). Chaos theory suggests a need to distinguish between different spheres of collective existence: those in which Newtonian dynamics prevail, and where robust policy interventions may be effective; and those in which nonlinear dynamics predominate and where 'gentle action' is appropriate. In addition, chaos theory suggests an ecological perspective: 'If chaos theory is right, a myriad of interactions in the nonhuman world is required to support and sustain the human world. Perhaps the Gaia hypothesis is undergirded by the mathematics of chaos to a degree even its originator might be surprised to learn of' (Eve 1997: 279–80).

Thus, some social spheres lend themselves to intervention: 'In those cases where a stable and predictable response is known, related policy is eminently sensible. In areas such as tax expenditures where consumers and corporations do behave as Newtonian machines in response to

interest rates or tax abatements, public policy is quite effective in altering behavior' (Elliott and Kiel 1997: 77). Whether this would apply in countries in the South with 'soft states' is an open question. Yet neoclassical economics, with its assumption of atomistic individuals exercising rational choice, proceeds as if this rational sphere is the only sphere. In reality this sphere is quite circumscribed and complexity is by far the more common condition, North and South. In the North this has led to an awareness of the limited effectiveness of social engineering (Elliott and Kiel 1997: 76), yet this insight has barely penetrated development thinking. Efforts at modernization remain surgery with a chainsaw, poverty alleviation remains a matter of advanced arithmetic. Chaos theory confirms what anthropologists have known all along: that 'Complex adaptive systems often exist on the edge of chaos' (Eve 1997: 280; an example given is the irrigation system in Bali). Many so-called traditional ways of life involve a sophisticated, time-tested social and ecological balance, and the harvest of several development decades confirms that outside interventions can do more harm than good.

Where nonlinear dynamics prevail, the counsel for policy is 'gentle action'. This might be a more faithful approximation of *wu-wei* than 'non-intervention'. Thus, chaos theory yields a complex range of action orientations. Consideration for the ramifications of small differences can be translated in different ways: as sensitivity to local conditions and cultural differences, or as an antidote to abstract models that gloss over local conditions and the actual implementation of development interventions. This is the point of the 'cultural turn' in development, the return of anthropology to development. It also suggests regard for the organizational and managerial dimensions of development on the ground and points to institutional analysis.

A related consideration concerns the *reflexivity* of development as a form of applied cybernetics. Reflexivity here involves the self-referential character of development thinking, which in effect represents layer upon layer of reflexive moves, each a reaction to and negotiation of previous development interventions, as an ongoing trial-and-error motion. It also involves the importance of subjectivities in the development process, of the reactions of people on the ground to development plans, projects, or outcomes, which should be built into the development process. Steps in this direction include popular development (Brohman 1996) and public action theory (Wuyts *et al.* 1992).

The contributions of chaos theory to social science are preliminary and schematic. The distinction between linear and nonlinear dynamics is too sketchy to be of much use. Already at times development processes are regarded as curvilinear, rather than linear.⁸ Development

refers both to a *process* (as in 'a society develops') and an *intervention* (as in 'developing a society'). For Cowen and Shenton, this produces an intrinsic tension in development: 'Development defies definition ... because of the difficulty of making the intent to develop consistent with immanent development' (Cowen and Shenton 1996: 438).

Considering this kind of difficulty, would it make sense to think of the *Tao of development*? While 'the Tao of physics' refers to a combination of physics and mysticism, the Tao of development is a more difficult combination because development is not merely a science or analytics (development theory) but also a politics. Taoism evokes an association of inaction, quietism. It is not clear whether this really applies to Tao, but there is no historical example of really-existing Taoism that disputes this, and historically there is a dialectic between Taoism and Confucianism.⁹ Still this does not close the issue. For instance, by analogy, even if really-existing socialism has not met expectations, Marxism remains a relevant method.

One of the core problems of development is its pretentiousness, the insurmountable arrogance of intervening in other people's lives. This may be balanced by an equal but entirely different kind of pretension – the Tao of development. Setting a high goal for development may be better than setting no goal at all or, worse still, declaring development over and done with while in the meantime development business goes on as usual. Setting an elusive goal for development may be better than carrying on with development as a positivist politics of measurement. The Tao of development means acknowledging paradox as part of development realities: such as the antinomies between measurement and meaning, between intervention and autonomy, or the field of tension between the local and the global. These antinomies are part of the perplexities of the human condition. Development participates in these perplexities and is not in some fashion outside or beyond them. The Tao of development may be asymptotic, never entirely approachable, like an ever-receding horizon. It would involve a subtle and sophisticated sense of balance across different dimensions of collective existence.

'Balanced development' in a conventional sense refers to a balance between economic growth and redistribution, and between growth across different sectors. Critical holism involves balance in a wider and more fundamental sense, across dimensions of collective existence, from the epistemological to the practical, which may take several forms.

- A *multidimensional* approach, or a balance between the horizontal and vertical dimensions of collective existence. The horizontal refers

to the worldly and social spheres; the vertical refers to the inner dimension of subjectivities and meanings, to the depth of the social field, its layered character, which Anouar Abdel-Malek (1981) referred to as the 'depth of the historical field'.

- A *multifaceted* approach or a 'diamond' social science, which reflects or shines light upon relations and dynamics across sectors (economy, politics, the social, cultural) and levels (local, microregional, national, macroregional, global) and achieves a balance between them.¹⁰ This might be termed a Gestalt sociology.
- A *chiaroscuro* social science which abandons the assumption that society is fully transparent. The assumption of transparency is what lent the Enlightenment its totalitarian bent, as in Foucault's pan-opticism and also in socialist state ideology (Laclau 1990). This is a matter of modesty, a sense of the contingency of knowledge, or self-limiting rationality (Kaviraj 1992).¹¹ It is a sense of balance between what is known and unknown, conscious and unconscious, light and dark – between the day and night sides of life.
- A distinction between and combination of objective and subjective dimensions of development. Development thinking is now increasingly anchored in people's subjectivities rather than in overarching institutions – the state or international institutions. Development thinking has become more participatory and insider-oriented, as in the actor-oriented approach to development (Long 1994). On the other hand, development practice, particularly when it comes to macroeconomic management, has not been democratized, so there is a growing friction between development thinking and practice.
- A trend in local (and increasingly also in large-scale) development towards social partnerships across sectors, or *synergies* between different development actors – government, civic associations and firms. This may be referred to as a holistic approach.¹² This is a marked departure from times when development was seen as either state-led, or market-led, or civil-society-led (discussed in Nederveen Pieterse 1998).
- A more complex awareness of time in development, what is needed is combining *multiple time frames* and a balance between 'slow knowledge' and the 'fast knowledge' of instant problem-solving. 'Slow knowledge is knowledge shaped and calibrated to fit a particular ecological context' (Orr 1996: 31). Since development is concerned with the measurement of desirable change over time, it is chronocentric. The conventional time horizon of development policy – the mid-term time span of a generation (or five years or so in the case of planning, development projects and project-based lending) – has

changed with sustainable development and the implied notion of intergenerational equity, and 'coevolutionary development'. It is changing also as a consequence of the duration of the development era and the failures of 'development decades', which gradually brings to the foreground the *longue durée* of development. Evolution, a silent partner of development, is coming to the foreground.

On the whole, this sense of balance is in some respects better achieved in social science than in development studies. It is comparatively more developed in relation to situations that are geographically and socially near than in relation to those that are distant (as a function of insider knowledge). And it is more developed in relation to the past (where hindsight makes it easier to acknowledge complexity of motive, action and result) than in relation to the present or the future. In forecasting and future projects, one-dimensional treatments are almost the norm, except in science fiction.

There is an affinity between spatially wide and temporally long approaches, or between globalization and evolution. Both are forms of holism, spatial and temporal. With evolution making a comeback, older ideas are also coming back. Terhal has translated Teilhard de Chardin's ideas of 'evolutionary convergence', the noosphere and the dawn of collective reflection into perspectives on world development and compared them with those of Kuznets and Wallerstein.¹³ He finds that Teilhard de Chardin underestimates social stratification and inequality in human evolution (1987: 228) and that there are elements of Eurocentrism to his work (Terhal 1987: 266–7), which makes it another instance of shortcut holism. Goonatilake (Terhal 1987: 1991), on the other hand, introduces the notion of 'merged evolution' to characterize the situation in which cultural evolution, which hitherto has run a separate course, merges with and impacts on biological evolution through biogenetic engineering. The advantage of this perspective is that it distinguishes *and* combines: rather than positing a shortcut 'evolutionary convergence' it confronts the dilemmas of really-existing convergence.

As to globalization, critical holism calls for a perspective on world history and globalization beyond conventional disciplinary methodologies (for example, Mazlish and Buultjens 1993). There is no doubt that the future lies with visions of cooperative globalization (as in Arruda 1996), in contrast to competitive globalization. Only shortcut holism, a holism that ignores or underrates inequality and difference, falls short as a remedy.

This sense of balance means treating development as a high-wire

tightrope act. The source of critical holism is the field of health and healing, a field in which individual and collective concerns typically come together. Another field in which personal and social concerns are combined is feminism, by rethinking the boundaries between the private and the public, and by merging the personal and the political. Such combinations, along with the idea of Gestalt sociology, raise a further option: viewing social science not merely as explanation or as critique (the standard assignments of social science) but as *healing*, as socio-therapy. As there is therapy in relation to the individual body and psyche, can there not be healing of the collective body? In popular culture the idea is not uncommon, as in Sinéad O'Connor's song 'Famine': 'And if there ever is going to be healing, there must be remembering, and then grieving, so that then there can be forgiving.' In development work this idea is not so uncommon. After all, what else is postconflict rehabilitation or conflict prevention, both of which have emerged in relation to complex emergencies and ethnic conflict? And yet the notion of development as healing sounds novel, presumably because it makes explicit that which has been implicit, and in doing so combines sensibilities that are usually kept neatly apart in separate boxes.

These, then, are elements of the Tao of development: a sense of balance across dimensions, a holistic approach, a notion of collective healing. Critical holism, in combining holism and difference, combines these sensibilities in a balancing act. Thus, critical wholeness in development should not be expected from a shortcut towards an undivided whole in a divided world, but should be sought in a new balance. The counsel for development studies and social science is to distinguish between multiple spheres and levels, all of which require engagement in their own terms, and not merely to contrast but to combine knowledges. This involves implications for action and policy. It involves a case-by-case, contextual assessment of whether linear or nonlinear dynamics prevail, and whether robust or gentle action is appropriate. It also exceeds local alternatives. Critical holistic development should include macroeconomic management. Holistic politics should encompass global democratization. Holistic politics means planetary ethics. Identifying with the whole means that development can no longer be geared simply to material aims and achievements but should include nonmaterial dimensions, as in cultural development. It means that development can no longer be anthropocentric but must encompass the planetary ecology. Accordingly, stretching the meaning of development to its fullest extent, it may be summed up as a collective learning process and humanity's self-management according to the most comprehensive conceivable standards.

Notes

1. This is a shortened version of the Inaugural Vincent Tucker Memorial Lecture given at the University College of Cork, Ireland, in February 1998. For references I would like to thank Stuart Todd and for comments on an earlier version Ranjit Dwivedi, Lily Ling and other participants at an Institute of Social Studies seminar.

2. 'The computerization of the world represents an advanced stage of Cartesianism. Within that stage, programs become autonomous. We have even been given intimations of automated concept formulation and of action instigated as a consequence of such automation' (Davis and Hersh 1986: 303). Current developments in global currency trading are an example of such automated action: triggers built into trading programmes set in motion series of financial operations whose ripple effects can upset financial systems. For a more developed argument see Yurick 1985.

3. A standard omission in representations of the Enlightenment is that it was an epoch not only of rationalism but also of romanticism and, besides, that these also occurred in combination. Without this understanding, what is one to make, for instance, of these statements of Diderot: 'what makes me angry is that the passions are never regarded from any but the critical angle. People think they do reason an injury if they say a word in favor of its rivals. Yet it is only the passions, and the great passions, that can raise the soul to great things' and 'The language of the heart is a thousand times more varied than that of the mind, and it is impossible to lay down the rules of its dialectics' (Diderot, quoted in Gay 1977: 188, 189).

4. The complementarity between new physics and mysticism is disputed among others by Wilber, who deems it a false complementarity and at most concedes that new physics *accords* with mysticism (Wilber, 1982b: 166-79). While mysticism addresses all levels – physical, biological, mental, subtle, causal and ultimate – physics only pertains to a single level (Wilber 1982b: 159).

5. Besides alternative development literature (Nederveen Pieterse 1998) see for example Henderson 1996, Whitmyer 1995, Roszak 1976.

6. 'Positivism is just a crank religion' (Chris Mann in Dunn 1986: 2).

7. Capra gives another example of this integration of multiple knowledges: 'From the very beginning it was clear to me that there was no reason to abandon the biomedical model. It could still play a useful role for a limited range of health problems within a large, holistic framework, as Newtonian mechanics was never abandoned but remains useful for a limited range of phenomena within the larger framework of quantum-relativistic physics' (Capra 1988: 171).

8. For example, the view of Cowen and Shenton on Hegel's views on development: 'Unlike the linear image that the idea of progress evoked, the course of development was curvilinear or spiral-like, always impeded or arrested within its own logical structure' (Cowen and Shenton 1996: 130).

9. As to Taoism: 'It is inconceivable to a Taoist that Tao should be actualized in this world by human efforts because the core of Taoist doctrine is to

teach its followers to transcend merely human affairs and psychologically dwell in "nothingness" (*wu*) so as to be in line with the "nonaction" (*wu-wei*) of the great *Tao*' (Wei-ming 1979: 10–11). More generally, while there have been episodes of a working balance between mysticism and official or state religion – between Buddhism and governance, Qabbala and Judaism, Sufism and Islam, Christian mysticism and Christendom, etcetera – none is readily accessible that has a sustainable example function.

10. Several of the significant books in social science achieve this in different ways. It applies to the oeuvre of Max Weber, Gramsci and Braudel and to books such as Wertheim's *Evolution and Revolution*, Stavrianos's *Global Rift*, Worsley's *The Three Worlds*, David Harvey's *The Condition of Postmodernity*, or *Reworking Modernity* by Pred and Watts.

11. 'I plead not for the suppression of reason, but an appreciation of its inherent limits' (Gandhi in Parekh 1997: 68).

12. This is the theme of a report in the *Irish Times* on social partnerships particularly in disadvantaged areas. The partnerships include 'business, trade unions, farming organisations, schools, health boards, state agencies ... and representatives from the local community' (Catherine Foley, 'The holistic way of solving problems', *Education and Living* supplement, *Irish Times*, 17 February 1998, pp. 2–3).

13. For instance, according to Teilhard, 'Although mounting demographic pressure causes quite a number of evils at one level of human interaction', in principle it leads to 'social unification and a higher level of collective consciousness' (in Terhal 1987: 176).

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PART TWO

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Political Economy