Many writers and commentators are suggesting that the current worldview or paradigm of Western civilization is reaching the end of its useful life. It is suggested that there is a fundamental shift occurring in our understanding of the universe and our place in it, that new patterns of thought and belief are emerging that will transform our experience, our thinking and our action. We have, since the Reformation, the beginning of the era of modern science, and the Industrial Revolution made enormous strides in our material welfare and our control of our lives. Yet at the same time we can see the costs of this progress in ecological devastation, human and social fragmentation, and spiritual impoverishment. So if we fail to make a transition to new ways of thinking, the argument goes, our civilization will decline and decay. Gregory Bateson, one of the great original thinkers of our time, argued that the most important task facing us is to learn to think in new ways: he was deeply concerned with what he called the epistemological errors of our time, the errors built into our ways of thinking. So it seems to me that the challenge of changing our worldview is central to our times.

The notion of a paradigm or worldview as an overarching framework which organizes our whole approach to being in the world has become commonplace since Thomas Kuhn published *The Structure of Scientific Revolutions* (University of Chicago Press, 1962). Kuhn showed that normal scientific research takes place within a taken-for-granted framework which organizes all perception and thinking, which he called a paradigm. However, from time to time the paradigm itself shifts in a revolutionary fashion as a new perspective is deemed to make better sense of the available knowledge. This idea of a paradigm in science can be transferred to the worldview of a whole culture, and the notion that the Western worldview may be in revolutionary transition has been part of intellectual currency for quite a while.

This emergent worldview is multifaceted: it has been particularly described as systemic, holistic, more feminine. These are all important notions. However, more recently it seems to me that a defining characteristic of the emerging worldview is that it is participatory. It is this notion of a participatory worldview that I want to explore in this article.

**Worldviews in the history of the West**

Henryk Skolimowski, in his book *The Participatory Mind* (Arkana, 1994), sketches out what he describes as the four great cycles of Western mind, each of which provided us with experience of a different world. If we go back to ancient Greece the experience of people was defined by a worldview we can call Mythos: people saw in the stories of their lives the visible presence of the gods, intervening from Mount Olympus. Around C6 BCE there was a radical transformation as classical Greek Logos emerged: the search for the coherent and harmonious order of the Universe. The fusion of Greek Logos with Roman power provided the hegemony of the Roman Empire. However, it seems that no worldview can persist, the seeds of decay set in,
leading to the Dark Ages. Out of this came Theos, the Medieval worldview in which all thought and action was inspired by and dedicated to the glory of a transcendent divinity, which emphasised the transient nature of physical reality and earthly existence. Theos led to the glories of Chartres, but disintegrated with the rise of a mercantile middle class and the increasingly corrupt power of the Church. Skolimowski argues that the Renaissance which followed the disintegration of Theos was an exuberant outburst and period of liberation that did not lead to a complete and lasting new worldview, and we had to wait for Bacon, Galileo, Descartes and Newton to define the new and powerful worldview that is Mechanos.

Mechanos has been the worldview of modern times: it is based on the frighteningly simple yet powerful metaphor of the clockwork universe. In this perspective, there is a real world made up of real things we can identify, operating according to natural causal laws which govern their behaviour—laws which we can deduce by analysing the operation of the component parts. Mind and reality are separate: the rational human, drawing on analytical thought and experimental methods, can come to know the objective world. So the objective world spawns the objective mind, which becomes detached, analytical and thus in the end uncaring and cold. Human progress is dependent on the processes of science, the purpose of which is the pursuit of knowledge for its own sake.

In the late twentieth century Mechanos is no longer a guide to wise action. The ecological, political, social, and personal crises we confront at this time need no rehearsing here. Fundamental to all these crises is the way we think and how the way we think separates us from our experience, from each other, and from the rhythms and patterns of the natural world. For example, since James Lovelock put forward the Gaia hypothesis in *Gaia: A New Look at Life on Earth* (Oxford University Press, 1979) it has not been possible to see the world as an assembly of separate parts, we have been pushed to see the planet as a living whole, a complex system of separate but interrelated entities—of which we are a part.

Despite all the challenges, some form of mechanical worldview remains the “official” view of knowledge, to which we resort publicly when challenged by BSE, AIDS or other crises. It may not be how our understanding is created, but it remains a central myth of our time. And the funny thing is that this notion of knowledge is not what we draw on in everyday life, from putting on our trousers to driving a car to sex: there we draw on knowing that is much more intuitive and embodied—and increasingly it is clear that this is true even of professionals such as doctors, who are supposed to practice a scientific profession. As Skolimowski and others have pointed out, this puts us in a strange situation, with our consciousness split, schizoid, almost in a classic double-bind, because we know, deep down, that the official knowledge is breaking down, doesn't represent everyday life, yet we don't know how to comment on it.

**The challenge of relativism**

The main challenge to what Charlene Spretnak, in *States of Grace* (HarperCollins, 1991), calls "the failed certainties of objectivist modernism" have been various forms of relativism. The argument here is that what we take for reality is nothing more than a construction of the human mind, supported by various cultural and political forms to
create a reality which favours those who hold power. Reality is a human creation embedded in language. All is relative. The extreme relativist position is deconstructive postmodernism which is suspicious of all overarching theories and “grand narratives”, and asserts that there is no reality behind the “text”, the immediate expression of human understanding we have in front of us. While these perspectives help us immensely in seeing through the myth that is Mechanos, they don’t help us move beyond the problems it has produced. If we were alienated from our experience by the separation of mind and matter introduced by Descartes, we are even more alienated if all we can do is circle round various forms of relativist construction: any sense of a world in which we are grounded disappears.

One result of all this abstraction is a loss of the concrete, and specifically a dishonouring of the body and the separation of humanity from the natural world. Morris Berman drew attention to this in his book Coming to our senses (Simon and Schuster, 1989), arguing that in a quite literal sense we need to honour again the wisdom of the body, locating knowing in the experience of sensation instead of in intellectually elaborated paradigms of thought. The body is the lodge of spirit in this life, yet we have immensely ambivalent relationship to it, often very concerned with the presentation of a "face", powerful or beautiful, to the outside world, yet being quite out of touch with our physical inner processes. The body and the natural world are deeply connected: our body is that piece of wilderness that we carry around with us all the time, a living ecology which provides a home to many creatures and life events, which may be in balance or out of balance.

A basic problem of the objective mind of Mechanos is that it cannot acknowledge the framing paradigm it has created. It cannot see that the ground on which it stands to frame its world is itself its own creation. It confuses the mysterious presence of the given cosmos with the mechanical worldview it has generated to shape that given. In consequence, its outlook tends to be immodest, intolerant and imperialist. A basic problem with the relativist mind, in its postmodern extreme, is that it dismisses any ground as valid simply because there is another ground or context beyond it. It confuses relative truth with nihilistic scepticism: it thinks that because no ground is final, no ground has any claim to truth. In consequence, it exacerbates the modern experience of rootlessness and meaninglessness.

Of course the systemic worldview, originated by Gregory Bateson and others and championed in particular by Fritjof Capra in The Web of Life (HarperCollins, 1996) does offer an important counterpoint to both the mechanical and relativist worldviews. However, systemic thought can remain quite abstract, and miss the important point that we are embodied participants in the co-creation of our world. The human mind makes its world by meeting the given and participating in its being. Our theories and models of the world are grounded in our experiential participation in what is present, in what there is. The notion of participation must be central to the emerging worldview.

Toward a participatory worldview

Worldviews may be viewed as sets of basic beliefs about the nature of reality and how it may be known; these beliefs are thrown into relief by three fundamental and interrelated questions. There is the ontological question, ‘What is the form and nature
of reality and, therefore, what is there than can be known about it?'; the epistemological question, 'What is the relationship between the knower or would-be knower and what can be known'; and the methodological question, 'How can the an inquiring person go about finding out whatever she or he believes can be known about?'. In addition, there is the important axiological question which asks 'What is intrinsically valuable in human life; in particular what sort of knowledge, if any, is intrinsically valuable?' Let us look at these three questions a little more closely.

Ontology: what is there to know? While the mechanical worldview sees a world of things independent of human thought, and the relativist worldview asserts there is nothing but the constructions of the human mind, a participative worldview accepts that there is a given cosmos, a primordial reality, and that human presence actively participates with it. Mind and the given cosmos are engaged in a co-creative dance, so that what emerges as reality is the fruit of an interaction of the given cosmos and the way mind engages with it. Mind actively participates in the cosmos, and it is through this active participation that we meet what is Other: we call these trees, rocks, persons, spirits, and so on. As John Heron puts it in Co-operative Inquiry: research into the human condition (Sage, 1996), "Worlds and people are what we meet, but the meeting is shaped by our own terms of reference". This shaping brings about a subjectively articulated world, whose objectivity is relative to the perspective of the knower. Reality is subjective-objective, always called into being and shaped by the participation of the knower in what is known.

Epistemology: what is the nature of knowledge? While in Mechanos knowledge is based on a dualism between mind and reality, and in relativism all that can be known are the constructions of the human mind, a participative worldview rests on at least four different kinds of ways of knowing. We can call this an "extended epistemology"—epistemology meaning a theory of how you know, and extended because it reaches beyond the primarily theoretical knowledge of academia.

- **Experiential knowing** is through direct face-to-face encounter with person, place or thing; it is knowing through empathy and resonance, and is almost impossible to put into words.
- **Presentational knowing** emerges from experiential knowing, and provides its first expression through forms of imagery such as poetry and story, drawing, sculpture, movement, dance and so on.
- **Propositional knowing** "about" something, is knowing through ideas and theories, and is expressed in abstract language or mathematics.
- **Practical knowing** is knowing "how to" do something and is expressed in a skill, knack or competence.

Knowing will be more valid—richer, deeper, more true to life and more useful—if these four ways of knowing are congruent with each other: if our knowing is grounded in our experience, expressed through our stories and images, understood through theories which make sense to us, and expressed in worthwhile action in our lives.

The relationship between the four ways of knowing is shown in the Figure 1.
Methodology: how do we go about finding out? While within a traditional scientific view of the world, the creation of knowledge belongs to specialist researchers, within a participative worldview research is something people do together to solve problems of concern to them. Hence a collaborative form of inquiry, in which all involved engage together in democratic dialogue as co-researchers and as co-subjects. In co-operative inquiry people work together using the four ways of knowing:

- they define the questions they wish to explore and the methods they will use for that exploration (propositional knowing);
- they apply this methodology, together or separately, in the world of their practice (practical knowing);
- this leads to new forms of encounter with their world (experiential knowing);
- they find ways to represent and share this experience in significant patterns (presentational knowing);
- which feeds into a revised understanding of the originating questions (propositional knowing again).

Thus co-researchers engage together in cycling several times through the four forms of knowing in order to enrich their congruence and to deepen the complementary way they are grounded in each other. This is most fully described in John Heron's new book *Co-operative Inquiry: research into the human condition* (Sage, 1996). There are several other forms of participatory research which have grown up in different contexts. One of the most significant is called participatory action research, and is used throughout the world to work with people who are disadvantaged or oppressed as a way both to help them solve practical problems and also to reclaim their capacity to create their own knowledge.

Axiology: what is of value, what is worthwhile? The first three questions—the ontological, the epistemological and the methodological—are all about matters to do with truth. What is really, truly, there? What is the nature of truthful knowledge of it? By what method can the truth be reached? The fourth, axiological, question is about values of being, about what human states are to be valued simply by virtue of what they are. This is a necessary complement to balance the concern with truth addressed by the first three questions. And the first value question to be raised is about the valuing of knowledge itself. For while in the mechanical worldview truth in propositional forms is seen as an end in itself, in a participative worldview the purpose of knowledge is practical: human flourishing, in its widest sense. This means the flourishing of human communities, and it also must mean reconnecting the human persons and communities to the ecological networks of which we are a part.

For while it is possible to divorce thought from action, you cannot divorce intelligent action in the world from thought. So we learn more profoundly about our worlds when we are more interested in enhancing them with excellence of action than in simply learning about them. So the purpose of learning, of knowledge, of inquiry is to change the world! Our action in the world is based in our values and in our knowing; valid action must be grounded in our experiential, presentational and propositional knowing.
The Spiritual Dimension of Knowing

I think there is another important aspect of exploring an emergent participatory worldview in these times at the end of the modern era: this is not so much about the search for truth and knowledge as about healing, and above all healing the alienation, the split that characterises modern experience. For as R.D.Laing put it in *The Politics of Experience* (Ballantine Books, 1967), “... the ordinary person is a shrivelled, desiccated fragment of what a person can be...," alienated at least in part by the abstracted and disembodied qualities of modern life.

To heal means to make whole: we can only understand our world as a whole if we are part of it; as soon as we attempt to stand outside, we divide and separate. In contrast, making whole necessarily implies participation: one characteristic of a participative worldview is that the individual person is restored to the circle of community and the human community to the context of the wider natural world. To make whole also means to make holy: another characteristic of a participatory worldview is that meaning and mystery are restored to human experience, so that the world is once again experienced as a sacred place.

For while paradigms can be sketched out in simple cognitive terms, their nature is far richer. Lewis Mumford wrote of changes in worldview in *The Transformations of Man*. (Allen and Unwin, 1957):

> Every transformation of [the human species]... has rested on new a metaphysical and ideological base; or rather, upon deeper stirrings and intuitions whose rationalised expression takes the form of a new picture of the cosmos and the nature of humanity.

I believe that the development of a worldview which will respond to the challenge of our times requires an imaginative recognition of humanity's fundamental participation in the natural world, a recognition of the way the human person, mind and body, is engaged in a co-creative dance with the primeval givenness of the cosmos. In this vision humanity is nature rendered self-conscious, one part of the cosmos capable of reflecting on itself, which has evolved so it stands on the threshold of conscious participation in the unfolding of the whole.

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Figure 1. After John Heron *Co-operative Inquiry: research into the human condition* (Sage, 1996).
A worldview or world-view is the fundamental cognitive orientation of an individual or society encompassing the whole of the individual's or society's knowledge and point of view. A worldview can include natural philosophy; fundamental, existential, and normative postulates; or themes, values, emotions, and ethics. Worldviews are often taken to operate at a conscious level, directly accessible to articulation and discussion, as opposed to existing at a deeper, pre-conscious level, such as the idea of Toward a Participatory Rhetoric: Teaching Swift's Modest Proposal CHARLES KAY SMITH Abstract Some of Swift's more conventional classical figures of speech have already been noted, though more or less in isolation to one another as well as to larger designs and aesthetic aims. Swift's genius in A Modest Proposal is to create a speaker whose monologue keeps two distinct styles operational at all times. The style of which the speaker is aware is constantly opposed by covert and innovative verbal and grammatical techniques which the proposer sets in motion but of which he remains unaware, which sl The meaning of the term worldview (also world-view, world view, and German Weltanschauung) seems self-evident: an intellectual perspective on the world or universe. Indeed, the 1989 edition of the Oxford English Dictionary defines world-view as a "contemplation of the world, [a] view of life ..." The OED defines Weltanschauung (literally, a perception of the world) as "[a] particular philosophy of life; a concept of the world held by an individual or a group ..." In Types and Problems of Philosophy, Hunter Mead defines Weltanschauung as. [a]n all-inclusive world-view or outlook. A some