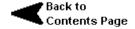
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INTRODUCING "SPEAKING WITH A BONELESS TONGUE" BY DAVID W. JARDINE



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In the words of the ancient curse, we live in interesting times. As become accustomed to living in the Third Millennium of the Christian Era, a number of aspects of our environment, physical and cultural, seem to be changing at an exponentially accelerating rate. Some say we have undergone a millennium rupture, a qualitative change in our cultural and material lives. I will not dwell on the pessimistic signs, although there are many. But neither will I shut my eyes to them. One of the strengths of this book by David Jardine is that reading it reminds you who you are, where you are, and what obligations you have to the Earth and to humankind.

In the cultural and intellectual sphere, optimistic developments are in train. In the past half century we have seen a tremendous growth in education in most countries of the world, both North and South. Education is no longer reserved solely for the future elite. Public education is now an almost universal social good. Of course during its massification in some places it has become mechanised and dehumanised. This book represents an important antidote to such tendencies. For it describes an essentially moral journey "through the alimentary canal with gun and camera". Its mission is to reconnect the earthy bowels and the feeling heart with the thinking head in education and beyond.

The book sits in a growing current of ideas. In that realm, some of the traditionally rigid barriers between fields of enquiry are dissolving, and an increasing number of interdisciplinary studies and projects are underway. Modern philosophy in Anglophone countries was been under the sway of logical empiricism and linguistic analysis, but is increasingly making contact with the French and German traditions, and those of other non-Anglo cultures. These newer traditions insist that knowledge is historically and culturally situated, and not free-floating in some Platonic realm of pure ideals. Part of this move is the recognition that knowledge, money and power do not circulate in discrete, non-intersecting realms. There is a growing recognition that all are materially embodied and all an interconnected part of the human world we inhabit. This is a central message of this book too.

The philosophy of mathematics, that ethereal realm of academic speculation, has for most of the past century chased foundational dreams of certainty. But some corners of this field are admitting historical, social, pragmatic and even educational considerations as legitimate. This can be seen in the works of Imre Lakatos, Ludwig Wittgenstein, Philip J. Davis and Reuben Hersh, Philip Kitcher, and others. They embody a move away from a rationalist and modernist view, in which a grand scheme establishes certainty and truth. Instead many authors now recognise that mathematics is a social construction, and needs to be theorised as such. With the coming of computers this alternative vision has become a reality. Mathematics is for many makers of mathematics more concrete, more practical, as they explore fractals, chaos, and other graphical and theoretical realms empirically.

What this signifies is the closing of an era, the age of modernism when one giant master-plan guaranteed certainty and security. That guarantee was never honoured, and is now being recalled. Modernism represented a move away from a god-centred, traditionally ordered and fixed hierarchical universe. Reason swept away the idols of religion and Authority. But reason became its own god. Now post-modernism represents a break with the certainty-culture of the near past. So the millennium rupture, if we allow that it has

occurred, represents a move to uncertainty, away from the dreams of reason, which fantasise about controlling all. It is a move away from the security of that ordered universe, and it entails the severing of an umbilical cord, the one which bound us to rationality, authority, and security. Ironically, this umbilical cord suspended us in a separate and unique private world, a monadic bubbles of existence. Instead we are stepping forth into a dark and disordered universe, with all of the uncertainties, self doubts and self-responsibility that the coming of age and a thirst for adventure and independence bring.

David W. Jardine has begun this journey. He speaks of another severing and of another connection that needs to be remembered. This is our human, animal and earth(1)y nature. His book goes beyond merely critiquing modernist conceptions, and offers a post-modern philosophy of knowledge, education and life. Many contributors to this nascent tradition give pyrotechnic displays of brilliance in their wit and language that wink knowingly at us from the page. David Jardine is brilliant too, but his gifts are turned in another direction. That is to fashion a more effective instrument for communicating himself, his philosophy, and his deeply felt sense of responsibility to the children and teachers we teach, and who we in turn learn from, and to the earth we own and that owns us. David is himself a teacher educator, that most responsible of professions. The book speaks well of the seriousness and openness with which he undertakes that trust.

I first came across David Jardine's work when I read his paper on the humility of mathematical language. I was immediately taken by it, and filled with wonder at his bold combination of poetic and philosophic theorising about teaching, leaning, mathematics and language. Somehow he managed to communicate his presence through his words more powerfully, more imminently, by overstepping the traditional boundaries of academic style. So I wrote to him praising his piece and asking for more. Gradually we came to involve each other in our personal projects.

I think this is a marvellous book. It is unique and difficult to describe because it is original both in style and content. The style combines philosophical and pedagogical reflection with elements of poetry and mystical thought in a way that is not obscure, but an authentic, self-consistent and integrated account. David's aim is to write in "small interlacing 'bits' or 'chunks' which relate laterally and generatively to all the other bits" (page vi). A central organising metaphor or image of his is "The Jewelled Net of Indra" according to which "the Earth is envisaged as a net, not a two dimensional one, but a system of countless nets interwoven in all directions in a multidimensional space. In each criss-cross of the net is a Jewel which, in each of its infinite facets, reflects all of the other Jewels and all of their faceted relations." (page xiv). What a marvellous generative and rich image! The text, with its numerous asides, footnotes and cross-references, draws on this image. But the theme also is about an ecological awareness of the connection of all things: ourselves, our knowing, our being in the world, and our relations with students. So the book embodies, at least in part, what it says. One of the outcomes of the style is therefore that the book has a wholeness, an integrity, an authenticity which vividly and unusually creates the presence of the author and his thought.

I found reading this book to be at times a very intense and moving personal experience. I read it during a family holiday in a beautiful part of Cornwall. Each morning as is my practice I got up before my family and read the book for an hour or sometimes two with my morning tea, before they emerged. This was a special time for me, and the book added a layer of joy to it. With the leisure of a holiday, I was able to read, and then drift off into personal reflections, and then return to the book, weaving it into my own being. Of course the unique blend of subject matter suits me well. It combines post-modernism, philosophy, reflections on pedagogy, mathematics, language, and understanding, with poetry, Eastern mysticism; all subjects that I have a sympathy with. It builds on the metaphors of conversation and body or embodiment, which have also occupied much of my thought. Another reader might not be so well disposed towards the it. But my praise is not just a matter of personal preference. The book has something very important to say, and says it in a uniquely apposite way. As David Jardine is aware, the style is risky; but it is a risk which paid off handsomely. More authors should take risks like this!

The book offers a powerful critique of rationalist modernism (and in part, of Husserl's phenomenology, for its loss of nerve). The critique of the Cartesian cognising subject and the cogito, offers insights and links between this and patriarchy and monovocity or monologic (as opposed to dialogue). Piaget is also criticised, for falling into this tradition. So many big ideas are treated in the book, and I cannot hope to mention them all. They include the notions of age vs. youth, analogy & metaphor, attunement with the Earth, the Cartesian identity A=A, children's conceptions, colonialisation, conversation, a critique of constructivism, Descartes vs. Kant, dis/connectedness, dualism, ecological knowing, feminism, grief, Hermeneutics, the incompleteness of knowledge, language, local & particular knowledge, the mathematical subject, mathematics itself, mathematics education, our multiple selves, players & games, power, purity, semiosis, the social responsibility of science, teacher education, the unconscious & dreams, and univocity/monologicality. To give a list like this is to risk boring the reader; yet I can think of no better way to hint at the scope, ambition and excitement of the book.

Overall, I think this is an important, powerful and brave book. Not only does the author give much more of himself to the reader than is common in academic books, but there are important theoretical insights and syntheses for educators and philosophers alike, including much more than I have indicated. In particular, the cross-disciplinary combination of ecological and feminist philosophy with some of the better known themes of post-modernist epistemology and pedagogy provides a powerful and, unusually, responsible overall perspective on knowledge, pedagogy and being. Reading the book reminded me of who I am, where I live, and how much the construction of my self, my life and my environment are privileged by my belonging to the 'winners' in the division of wealth and property in the world. Such privilege brings with it a responsibility to represent the less advantaged. Taking responsibility for our selves, our charges and our world; seeking to integrate our minds and being; and above all allowing ourselves to feel and care; is an optimistic and healthy way to walk into the future. A book like this helps us to face the new millennium that we have entered with courage.