

Out of Our Depth and Treading Water: Reflections on Consciousness, Culture and New Learning Technologies.

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ABSTRACT We are in a state of profound cultural change, of which the information revolution is only one aspect. The paper looks at this state of change from four perspectives: postmodern social analysis, constructivist developmental psychology, evolutionary theory and archetypal theory. It concludes with some reflections on how we might need to revise our notions of schooling if it is to be appropriate for the kind of consciousness which appears to be emerging.

Consciousness and Culture

Robert Kegan's book *In Over Our Heads* (1994) is subtitled *The Mental Demands of Modern Life*. Kegan looks at the kind of thinking the contemporary world expects of us and argues that many of us, much of the time, are not up to it. The metaphor with which he announces his thesis is frequently employed by commentators on the explosion of new information and communication technologies. We find ourselves "swept up in the current" (supposedly a good thing), "drowning in a sea of information" (not so good), "surfing the net" (lots of fun) or "swimming in the big pond" (commercially advantageous).

It requires no great insight to suggest that things are not what they used to be, and that some of these marine metaphors catch the sense of how we, as educators, experience the difference between the "that was then" and the "this is now". New learning technologies represent only one aspect of this difference. We have experienced a substantial cultural change in our lifetimes. We have found ourselves seeing things very differently and thinking very differently from our grandparents and parents. We challenge much of what they took for granted. Now we find our children and students thinking differently from us and challenging our own assumptions.

Should we go with the flow or swim against the current?

In this paper I start with the premise that at the turn of this century we are in the midst of profound cultural and psychological change. During the past half-century we have had some of our species' sharpest minds trying to get to grips with the evidence that something significant is going on in the evolution of human consciousness and culture. I want to rehearse something of what they have said, before reflecting on what this might mean for our work as teachers in an information-rich society. Specifically I want to look at our age from four different perspectives: postmodern social analysis, the history of consciousness, constructivist developmental psychology and archetypal psychology. Each of these perspectives is represented in the work of a group of thinkers. While the thinkers in each group share ideas, there is no indication that they are influenced by people from the other groups, or even that they are aware of their existence. Yet, as you will see, their conclusions about the kind of consciousness which is emerging in what we now conventionally call the information age have a great deal in common.

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Postmodern Social Analysis: the end of enclosure

Jacques Lyotard, in *The Postmodern Condition* (1978), suggested that European culture has undergone a momentous transformation in the latter part of this century, a transformation which is an inevitable consequence of the information revolution. According to his analysis, the transmission of information has become a matter of far greater significance than the content of that information. Our society is now characterised by a constant flow of information, which has become essential to the maintenance of that society, regardless of what the information is actually about. The boundary between important information and trivial information has largely disappeared. This frenetic exchange of information is carried on the back of a runaway information technology, which appears to be headed towards a total exteriorisation of knowledge. We are abandoning the notion that it is necessary for anyone to "know" anything, that education should involve learning and remembering useful information, and that the acquisition of such information somehow trains the mind. Our students increasingly learn that human memory is a very inefficient faculty, and that the storage of information can be done much more accurately and efficiently by machines. All they need to know is how to access it.

The information society is guided by a fantasy of the marketplace, in which exchange is an end in itself - a fantasy of deregulation, free interchange, commodification. Knowledge, like wisdom, health, pleasure, law, spirituality and relationship, is now a commodity whose only value is its market value. Economic rationalism is only one manifestation of this kind of thinking. The consciousness of the marketplace permeates all areas of life.

A further characteristic of the postmodern condition, which Lyotard sees as another consequence of the information revolution, is the decline of orthodoxy. The "grand narratives" of the modern, industrial era - Marxism, Rationalism, Christianity - have been set aside in favour of an increasing relativisation of values, ethics and beliefs. Even conventionally religious people are no longer inclined to make claims to absolute truth.

Postmodern thinking is characterised also by the abandonment of the heroic fantasy of controlling and possessing nature. Our grandparents assumed that we would live in a world which was more peaceful, healthier and more prosperous than theirs. Science had shown its capacity to wipe out disease, starvation and war. It was only a matter of time. However, we don't share the same fantasy about the world our own grandchildren will inhabit. Meanwhile modern science, having failed to construct a paradise, is being supplanted by a postmodern science characterised by incomplete information, catastrophe and chaos, indeterminacy, paradox, discontinuity, and a tendency to uncover new questions rather than new answers, a tendency to complexify rather than to simplify.

In a postmodern consciousness the significance of the image is magnified to a point where we are floating in a sea of images which are no longer expected to represent any reality or truth. The notion of common or shared meanings seems to be in the process of disappearing, and the pastiche of postmodern art and architecture reflects a world in which anything goes. There remain no meanings, only interpretations. There seems to be nothing fixed and enduring. Our understandings of the world have been destabilised and deconstructed. The ground has disappeared, and reality has become very slippery.

One image which is reiterated by analysts of postmodernity is that of play. Nothing can be considered significant or important either in itself or because of its place in some cosmic plan. All we can do is play.

Another image to which they return is the collapse of boundaries. Not just the boundaries between real and unreal, right and wrong, matter and spirit, but the boundaries between

people, individually and collectively. In this regard Deleuze refers to “the end of enclosure”. The fences which we once constructed around our community, our profession, our gender, our economy, our culture, our nation, our humanity, are in the process of disappearing, and this disappearance is a source of anxiety and grief. We might suggest that the “Pauline Hanson” phenomenon has its roots in this grief. The people to whom her message appeals are grieving at the loss of the enclosures which once defined who they were and what was their purpose in life. A globalised, multicultural society threatens their reason for being. It is not surprising that it is in rural communities that the loss is felt most keenly and that Ms Hanson’s support is strongest.¹

Some postmodern philosophers lead us into a world without substance or meaning or hope or value. And some postmodern novelists and film-makers would take us in the same direction. However, most of us refuse to go there. We keep on acting as though people have worth and actions have meaning, even in this new sort of world. Some of us hope that these ideas represent a passing aberration and the world will go back to being the way it was. I doubt it.

Some gung ho infotechnologists point to a future where we will play in a paradise without boundaries, with no inhibitions to the flow of information and no regulation of ideas. They anticipate a future where distance has disappeared, where communication between people is instantaneous and accurate and where imagination enables us to transcend the limits of concrete reality. Some of us are reluctant to rush into this future and would rather like the stampede to slow down while we adjust our thoughts. Not likely.

If teachers have a sense that there is a gap between the way they sense the world and the way their students sense it, and that tried and true methods of teaching do not seem to work so well any more, they may be right.

Constructivist developmental psychology: fifth order thinking

Piaget and Freud, who started us reflecting on how our capacity to think about our experience goes through a series of transformations as we grow older, decided that our cognitive development is essentially completed in adolescence. There have been a number of challenges to this notion since then. Robert Kegan’s (1989; 1994) is the most recent and most coherent attempt to extend developmental theory into a consideration of adult experience. His theory is of particular interest because he is concerned not only with individual cognitive development but with the interaction between individual and culture.

Kegan defines the stages of cognitive development in terms of increasingly complex subject-object differentiations. In infancy there is no differentiation between subject and object, that is to say, the infant does not distinguish between herself and her environment. At age two or thereabouts, the child begins to recognise that objects and persons exist independently of her own sensing of them. She identifies with her sensation, able for the first time to act on the world as a collection of distinct objects. Kegan calls this *first order thinking*.

In later childhood (Piaget’s *concrete operations* and Kegan’s *second order thinking*), there is a further differentiation. Objects are understood to possess qualities of their own,

¹ The One Nation Party, founded by Pauline Hanson represents the emergence within the Australian political system of an ultra-conservative resistance to globalisation and multiculturalism. While it is easy enough to label One Nation supporters as narrowly conservative, ignorant, racist, homophobic etc, the point which needs to be made is that the party’s leadership has tapped into a genuine fear and grief among rural voters, who see their values and way of life threatened by the policies of both major political parties.

regardless of our perceptions of them. The immediate perception has moved from being the subject of experiencing to the object of experiencing. The child can differentiate between her sensations and herself as the experiencer of these sensations. She cannot yet reason abstractly, but she can create categories and tell stories.

Early adolescence marks the stage when schools and the broader culture demand of us that undergo another transformation in our consciousness. We are expected to become capable of the cognitive complexity which Kegan calls *third order thinking*. The adolescent becomes capable of thinking across categories. She reaches this level of complexity by making a subject-object distinction not possible previously. In early adolescence cross-categorical meaning-making becomes the subject which acts on the objects of experiencing. The adolescent identifies self with the contents of her mind and her experience now becomes the object of her knowing. She can reason abstractly but cannot disidentify from her own reasoning. She lives within a set of truths and the narratives which embody them. She is capable of holding a coherent set of assumptions about life, a coherent disposition towards ultimate reality, but she is not capable of standing outside of it. Her thinking may be abstract, but it is not self-reflective or critical, and it is essentially collective and traditional. Third order thinking rationalises a particular consensus view of reality, a particular way of imagining the world which is common to the family, tribe or culture. There is a taken-for-grantedness about the way the world is. To stand outside this narrative, the adolescent must "leave home", and experience the isolation and exhilaration of *fourth order thinking*.

Kegan argues that the shift from the third order consciousness characteristic of traditional cultures to the fourth order consciousness demanded by the modern world requires a further qualitative transformation of mind. Transformation, once again, is defined in terms of subject-object differentiation. Where the third order thinking of the early adolescent has her identifying herself with the contents of her mind and reflecting on the objects of her experiencing, a transformation to fourth order consciousness in later adolescence has her reflecting critically on the contents of her mind. The contents of her mind become the object of her knowledge, and she identifies with her capacity to reflect on them. Her thoughts become something she *has*, not something she *is*. She detaches herself from the taken-for-grantedness of the knowledge she has inherited and absorbed from family, school and mass media, and she looks critically at this knowledge and other knowledges with a view to determining the truth about the world. Her thoughts become the thoughts of an autonomous individual who does not depend on the authoritative voices of her culture to give them legitimacy, but can rather look at the evidence, whatever its source, and make successive approximations to the truth.

Not all of us manage to achieve this transformation, or if we do achieve it we tend to slip back into second order or third order consciousness for a good deal of the time. Our demand that students demonstrate this capacity for detached critical reflection may be a source of stress for adolescents on the threshold of fourth order thinking. Others simply will not know what we are talking about.

Kegan's model is a developmental one, not an evolutionary one. Nevertheless, he suggests that the phenomenon he is writing about does not apply purely to individuals. He surmises, for instance, that the fourth order thinking demanded by the modern world is more common now than it was some generations ago. Yet while we are still trying to meet the modern scientific technological culture's demand that we attain fourth order consciousness, we are confronted with a new demand.

Kegan argues that just as a modern, scientific society demands of its members that they be capable of fourth order thinking, a postmodern society demands *fifth order thinking*. Yet few of us appear to be capable of the complex subject-object differentiation this requires. Whereas in fourth order thinking we identify with our capacity for critical reflection, in fifth order thinking this very capacity becomes the object of our knowing. Our way of thinking, our way of determining the truth, is relativised as only one out of many ways of constructing reality. We cease to see ourselves and our truths as complete. Our truths are only complete in dialectic with other truths and our selves only exist in our interaction with others.

As a third order thinker I accept without question the truth as I have absorbed it. As a third order thinker you believe in your truth in the same uncritical way. I am right and you are wrong, and at best we tolerate each other.

As fourth order thinkers we each maintain a critical stance towards our truths, and our concern is to look critically at these truths and all other versions of the truth and decide which one best accords with the evidence.

As fifth order thinkers we regard all truths as partial, and if we find ourselves in dispute we are capable of constructing a truth which resides not only in both your partial truth and my partial truth but also in the tensions and contradictions between them.

Kegan argues that the shift from third to fourth to fifth order thinking is not simply a matter of individual cognitive development. We are dealing here not only with personal development but with cultural change. In pre-scientific societies third order thinking was perfectly adequate to meet the demands of the environment. Fourth order thinking both enabled and was demanded by the Age of Science. The culture in which we find ourselves at the end of the twentieth century demands that we be capable of dialectical, post-ideological, transpersonal, fifth order thinking. When we were at school we may not have been taught to think like this, and we may use this skill rather clumsily. It may, indeed, be beyond many of us much of the time. But our children and students may be more capable of it than our parents and teachers ever could be, and if we ignore this we will not make much contact with them.

The evolution of consciousness: emerging integrality

The observations on culture and consciousness which Lyotard was making in the seventies and Kegan has been making in the nineties had already been made by Jean Gebser (1949) in the forties.

As a student of European language and literature Gebser became convinced that language was being used in quite new ways in this century, and that this new use of language represented a change in the way the world was being experienced. His original insight came through his discovery in the poetry of Rilke of a mode of experiencing which is no longer perspectival, dualistic and time-bound. He sought and found the same phenomenon in other European poets (notably Eliot and Valéry). His reflections on this led him to look across a wide range of arts and sciences for clues to the nature of this change. They also led him to years of research into archaeology and history, in an attempt to determine whether there was a trajectory in the evolution of human consciousness and culture which might explain the transformation which he thought he could discern in his own time. Out of these researches he developed a theory of what he called *structures of consciousness*.

In Gebser's model of structures of consciousness he distinguished between four discrete mutations of consciousness: the *archaic consciousness* of primal human beings, the

magical consciousness of the stone age, the *mythical consciousness* which developed after the ice ages, and the *mental consciousness* which emerged with the great classical civilisations and which has dominated European culture since the middle ages. These evolutionary mutations are fundamentally different ways of experiencing reality. The central premise of his work, however, was that a new structure of consciousness was beginning to emerge in the twentieth century, a structure which he called *integral consciousness*.

While Gebser's major work, *The Ever Present Origin* (1949), sets out these structures in evolutionary sequence, he did not wish to imply that they are historical developments leading to integral consciousness as the ultimate human achievement. He maintained rather that they are intertwined and ever-present, and that it is the dynamic interplay between them which constitutes culture. While he presents his theory as a theory of the evolution of consciousness, he is adamant that he is not doing so within a fantasy of historical "development" or "progress". Our tendency to think in such terms is an artefact of our dominant mental consciousness, in which our experience of time is linear and quantified. Rather, reality is unfolding process, and the archaic, magic, mythical, mental and emerging integral structures are all valid ways of apprehending it. In Gebser's understanding we are shaped and determined not only by the present and the past but by the future. Most significantly, all of the structures have both "efficient" and "deficient" forms and we have no basis for being romantic about either past or future. We have no assurance that we will experience the emerging integral structure only in its "efficient" form.

For Gebser the rational consciousness which has dominated European civilisation since the enlightenment was not the supreme achievement in human development but rather the deficient form of the mental structure which emerged about three thousand years ago. He saw the deficiency in the rational consciousness of the past four centuries as deriving from its arrogant devaluation and suppression of the earlier structures. In the thirties and forties it was clear to him that the rational structure was collapsing and that European civilisation was slipping back into a deficient magical-mythical structure. At the same time he found indications that a new structure was emerging. He suggested that this new structure involved the integration of the four older structures

In Gebser's model, our contemporary consciousness is multi-structured or, to change the metaphor, multi-layered. We may be inclined to equate consciousness with the sense of self we experience at the mental level, yet we constantly shift between this mental-rational consciousness and the less complex structures on which it is built. Even when we are acting "rationally", our magical and mythical consciousness is hard at work. The complexity of human behaviour comes out of the interplay of these several "layers" or "levels" of consciousness in whatever we do. From the point of view of rational-scientific culture, magical and mythical thinking are primitive and inferior forms of thinking which have limited value in the contemporary world. However, we can argue that it is our capacity for mythical, and even magical, thinking that enables us to find meaning in our lives and gives us a grounding in the concrete world. Magical and mythical consciousness are neither better nor worse than mental-rational consciousness. They are simply older and different. Re-owning and re-valuing them is a necessary step towards their integration in a new structure. The integral structure is not just the aggregation of the earlier structures, but their integration into something entirely new. And because it is new, we have to transcend our conventionally rational thinking to experience and describe it. People in a mythical culture will struggle to understand rationality. People in a rational culture will struggle to understand integrality.

Gebser observed that not only were the magic and mythical modes of perceiving the world being once again being accepted as legitimate by the intellectual culture (Lyotard makes a

similar observation), but that the magical and mythical structures of consciousness were being integrated with rational consciousness to produce a totally new way of perceiving and thinking, a way of perceiving and thinking which enables us to apprehend not just the parts but the whole.

In observing the trajectory in human consciousness which points to an emerging integrality, Gebser focuses in particular on the changing experience of time, space and self.

Archaic and magical humanity seem to have no sense of time at all. Archaic proto-humans seem to have had a very dim experience of a continuous present, as we still do in deep trance. Magic humanity experienced a sense of duration, in which “things happen”, as they still happen for us in dreams. For mythical humanity, time was rhythmical, constantly returning to its beginning, as we still start the story again in each New Year celebration. For mental-rational humanity, time is continuous, sequential and measured by clocks. Integral consciousness is time-free. The integration of pre-rational, magic, timelessness and irrational, mythical, temporicity with mental, quantifiable time makes possible the leap into time-freedom. Time-freedom is not timelessness. What Gebser observed was a new way of experiencing time, not as quantity but as intensity and quality.

Archaic and magical humanity lack all spatial consciousness, because it lacks a defined sense of a self as separate from the world and able to observe it. Mythical humanity has emerged from this enmeshment in nature, aware of an external world, but self-consciousness is still too weak to experience objective space. It is only through our mental consciousness that human beings are able to locate events in objective, quantifiable space. It is only in mental consciousness that space is measured. Central to this experience is perspective, which demands a point from which the world is viewed and an individual to view it. In integral consciousness, it becomes possible to view the world “aperspectivally”, without locating the viewer in a particular position in space. We are no longer constrained to see only the parts, but have access to the whole.

Archaic humans appear to have had no sense of self, and could make no distinction between themselves and their environment, between internal and external experience. Magical humans identified with the clan, and had no sense of individual identity. Mythical consciousness holds only a vague sense of personal self. Identity still derives from one’s enmeshment in the tribal or cultural identity. Mental-rational consciousness is dominated by ego. I am I and you are you and we communicate by passing messages between us. The emerging integral consciousness is, in Gebser’s language, “ego-free”. It transcends ego to experience an identification with the community, the species, the planet and the cosmos without losing the sense of personal experience, personal choice and personal action.

Gebser is adamant that the emerging structure does not represent a *higher* consciousness but rather an *intensification* of consciousness.

It is nearly seventy years since Gebser set about his massive accumulation of evidence from the arts and sciences which persuaded him that a specific cultural pattern was emerging. At century’s end we find both in the postmodern arts and sciences and in popular culture abundant evidence that this pattern has intensified. And we find a readiness in both arts and sciences to conclude that the rational, logical, sense-based thinking which made modern, scientific, industrial culture possible no longer seems to work in the universe in which we now find ourselves. Time and space can be no longer be objectively quantified, except within the narrow range of our conventional concrete experience. Our sense of self has become conditional, situational and transitory. The old, dualistic distinctions between truth and error, male and female, human and non-human, subject and object, matter and spirit, image and reality, good and evil no longer provide the essential scaffolding for our

thinking. We are prepared to make a distinction between the irrational (mythical) and the arational (integral).

Kegan's theory of cognitive development is a psychological theory and only secondarily concerns itself with culture. Gebser's is a theory of culture which barely touches on the psychological development of the individual. Yet the convergence of the models is striking. The mythical structure appears to be manifested in third order thinking, the mental in fourth order, and the integral in fifth order.

Which leads us reflect again on the possibility that our students will be more at home in the integral structure of consciousness and fifth order thinking than our teachers were. For better or for worse.

Archetypal psychology: the Age of Hermes

Archetypal psychology as a contemporary way of thinking about culture and behaviour is largely based on the work of Carl Jung. Jung devoted himself to documenting the patterns he found in human behaviour, both individual and collective. When it came to explaining these patterns, he fell back on Plato's notion of archetype. Following Plato, he was inclined to understand archetypes as pre-existent forms which are replicated again and again in nature and in our experience. He wrote of archetypes as "instinctual patterns of behaviour" which are genetically inherited, as "structures of the collective unconscious" and as "modes of apprehension" which shape our encounter with reality. For Jung, all behaviour is patterned by archetypal images and energies which human beings used to call gods. We can learn something of the nature of these patterns in the "old stories" or myths of ancient cultures.

James Hillman is a contemporary interpreter of Jung who argues that these archetypal images structure all our experience and behaviour. For Hillman (1976), the proper work of psychology is *seeing through* our personal and collective experience to the archetypal image behind it. In Hillman's understanding, all consciousness depends on fantasy images. All we know about the world comes through images and is organised by fantasies into one pattern or another. In our ways of imagining the world we are always in one or another archetypal fantasy. Our behaviour is always framed by one or another "old story".

So what fantasy are we in now? What "old story" are we collectively living? (We are dealing here with Gebser's mythical structure. We do not have the story; the story has us.)

With or without assistance from the analysts of postmodernity we can find in our literature, science, cinema and the daily news a dominant narrative of complexity and chaos, of the vanishing of boundaries, of deceit, denial and delusion among our leaders, of the preference for image over substance, of the loss of familial and tribal bonds, of the disappearance of our conventional grounds for moral judgments, of an unwillingness to confront reality, of the abandonment of rationality, of the proliferation of information, of the slipperiness of ideas and ideals which once seemed solid and graspable, of a marketplace so ubiquitous and noisy that we cannot escape it.

So what is the "old story" in this?

In *The Political Psyche* (1993) Andrew Samuels has explored the myth of the Greek god Hermes as an approach to understanding contemporary economic and political culture and to dealing with our splits and confusions about capitalism and the market economy. I have argued elsewhere (Neville, 1992) that "the postmodern condition" may be construed as an inflation of late twentieth century European consciousness (wherever it is found) by the

image and energy of Hermes. Taking seriously Hillman's dictum that we are always in one archetypal fantasy or another, I have argued that post-industrial society is caught in a Hermes fantasy.

The Homeric *Hymn to Hermes* (Hesiod, trans. Athanassakis, 1976) tells us how, to avoid the gods, Maia, the nymph who was Zeus' lover, hid in a deep cave, where she bore a son

who was a shrewd and coaxing schemer,
a cattle - rustling robber, and a bringer of dreams,
a watcher by night and a gate-keeper, soon destined
to show forth glorious deeds among the immortal gods.

The hymn shows Hermes as a most precocious infant who, as he leaves the cave on the day he was born, comes across a tortoise. First he plays with it as any child might, then he kills it and makes a lyre out of its shell. Accompanying himself on this instrument, he sings the very first song, which is about his parents' love-making.

Having joyfully and ironically sung of his parents, he moves on to other things. He feels a craving for meat, so he leaves his lyre in his cradle and sets out to find some. For a rogue like Hermes, there is one utterly obvious way to obtain the meat he craves. He steals it. When twilight falls he seeks out the cattle of Apollo where they are grazing, and cuts fifty of them out of the herd.

To fool Apollo, he drives the cows backwards so they look as though they are walking the other way, and uses foliage to make the first pair of sandals, in order to disguise his own footprints.

Having invented stringed instruments and sandals, he now invents the fire-stick, and builds a fire. Next, he invents both cookery and religious sacrifice. He takes two of the cows he has stolen, slaughters and roasts them. By this time he has obviously forgotten about his hunger, for instead of making a banquet for himself, he takes the meat (which he stole from the gods in the first place) and offers it to the gods, making sure that he packages the carcasses in twelve equal pieces. Having performed the sacrifice, Hermes returns to his cradle, and lies gurgling and playing like any other baby. His mother scolds him for his thieving, at which Hermes vigorously declares his intention of becoming the Prince of Robbers, so he can support the two of them in the manner they are entitled to.

The next day, Apollo arrives at the cave, having tracked the cows there, and angrily confronts his baby brother Hermes. Hermes lies shamelessly. He declares that he was only born yesterday, which is true enough, and then goes on to swear by the head of Zeus that he has never seen a cow in his life. Apollo won't accept this and picks up the baby Hermes to carry him to their father Zeus for judgement. Hermes' belly rumbles so loudly that Apollo drops him in disgust. Before the throne of Zeus, Hermes continues to lie, well knowing that nobody believes him, and eventually charms his way out of punishment by getting Zeus to laugh. Nevertheless, Zeus exacts from Hermes a promise not to lie again (though he need not necessarily tell the truth!) and sends his sons off together to find the cattle. Realising Hermes' great strength, Apollo tries to bind his hands together, but Hermes the illusionist is far too slippery a character to be bound. Hermes then charms Apollo completely by taking his lyre and playing .

So Apollo gladly exchanges his cattle for the lyre. Apollo takes responsibility for music while Hermes becomes the god of herdsmen and shepherds (as well as cattle-rustlers), and of barter and negotiation (as well as stealing and deception). They become the best of

friends. Hermes promises never to steal from Apollo again. He receives from Apollo his staff, or magic wand, for it is fitting that he should be a god of magic and illusion. Finally, he is designated messenger to Hades, the one who guides souls to the underworld.

Little is the profit he brings, and he beguiles endlessly
the tribes of mortal men throughout the night.

Hermes is ubiquitous in Greek mythology. He is the shape-shifter with many names and many forms: the god of travellers, the god of boundaries and boundary-crossing, the god of cowboys, the god of merchants and markets, the god of persuasiveness, the trickster, the god of lies and deceit, the god of gamblers, the god of thieves, the god of illusions, the god of shamanic medicine, the god of the crossroads, the god of connections, of quicksilver, of fast footwork and smooth talking, the god of boundary-crossing. He is slippery and seductive, the divine entrepreneur, a con man without ethics and without malice. He has no values of his own, no concern for substance. He is the complete opportunist. He slips into situations where he is not expected, "like smoke under the door". He avoids confrontation; he has no interest in being a hero. He believes that everything is negotiable. He enjoys doing deals, being clever, playing the game. He is the herald of the gods, the connector, the carrier of information. He is constantly on the move. He loves paradox and process, trickery and risk. He is ambiguous and many-faced. He is everybody's mate. We might point to various politicians and ex-politicians, in Australia and elsewhere, who fit this description very well.

In psychological inflation, as Jung developed the idea, the individual is "blown up" by a particular archetypal pattern. A person's perceptions, values and behaviour are driven by an image which has its source outside the individual, in the collective or psyche. Personal identity is engulfed by the archetype. One's perceptions of the world, one's thoughts about it, one's values, are shaped by a single image. This process is often driven not only by the energy of the archetype as experienced by the individual, but also by the archetypal image projected on to the individual by others. Ancient cultures explained it as coming under the power of a god. Where we see someone as having a "power complex" or a "mother complex" or just as "falling in love", the classical Greeks would have seen an individual driven by Zeus, Demeter or Eros.

Analogously we can talk about cultural inflation, in which a nation or society, or at least a substantial part of the population, is taken over by an archetypal image and energy, so that the group's perceptions, self-image and behaviour are formed by a single instinctual pattern and driven by a single instinctual energy. Jung understood German Nazism as a national inflation by what he called the "Wotan" archetype.

Archetypal psychology suggests that we can find the images of the Hermes myth dominating our culture in the recent past and the present time. We can argue that the complexity of our planetary situation and the unwillingness of political leaders to admit their inability to manage it belong to this pattern, as does the pervasive tendency to deal with crises through "image control" rather than effective action, the dominance of the stock market and the collapse of consensus ethics. I suggest that eco-feminism, in its challenge to the anthropocentricity and hero-pathology of the modern age, belongs to the same pattern as postmodern science, the information superhighway, the multicultural society, the "end of enclosure" and the worship of the unregulated market, for Hermes is very much Mummy's boy.

If our culture is possessed by one god rather than another, we have to point to Hermes, the god of information and communication, the friendly god who constantly deceives us.

The Greeks did not distinguish between “good gods” and “bad gods”. The nasty or pathological aspects of behaviour were shared out among all the gods. Hermes has his good side and his bad side. However, Hermes himself makes no distinction between good and bad. We might not like some characteristics of the Age of Hermes: the deceit, delusion, irresponsibility and amorality; the collapse of boundaries, the substitution of image for substance, the attack on rationality, the groundlessness, the destabilisation, the commodification; the restlessness of the god of travellers who never stays in one place. However, they go hand in hand with other Hermetic qualities which characterise our age: the pluralism, the flexibility, the capacity for transformation, the inventiveness, the relativism, the playfulness, the magic, the tolerance, the invitation to escape from psychological and cultural prisons, the acceptance of paradox, the acknowledgment of process, the concern for Mother Earth.

Hermes is not the only god dominant in our culture. There are other more oppressive gods demanding our worship. But I suggest that it is Hermes’ story, rather than any other, which currently says who we are.

Schooling for the Information Age

Supposing that we accept the argument that in our era there is something distinctly new emerging in human consciousness and culture, that the proliferation of computers is but one aspect of a much larger phenomenon, and supposing that the kind of thinking I have outlined above points roughly in the right direction, what are the implications for education and schooling?

If we conflate the psychological and cultural models of Kegan and Gebser, we can construct a picture of the kind of schooling which was appropriate for a pre-scientific society and which still persists where psychological development is fixed at third order thinking and the mythical structure dominates in the culture. (I am beginning with Kegan’s third level because I don’t wish to complicate this argument any further by discussing the early years of schooling.)

Teachers in such a context (third order, mythical structure) assume that schooling should be aimed at engendering dependence and conformity in students. Teaching focuses on transmitting to students what is already known in the community. Learning need not be passive, but it is essentially receptive rather than creative. The function of the school (or university) is to enculturate the next generation into the values, ethics, knowledge and customs of the family, tribe, church or nation. The child needs to learn and accept what is acknowledged as truth by the community and to learn also how to behave in a manner which the community approves. The school exists within a narrative where certain values and purposes and truths are taken for entirely for granted.

Education in such a society is essentialist. The curriculum is content-centred. Those in authority know exactly what should be taught and learned.

On the other hand, if schooling is constructed by the mental consciousness of a modern-scientific society, it assumes a capacity for fourth order thinking. Such a schooling aims to produce students who are autonomous individuals, who take responsibility for their own behaviour, who take nothing for granted but critically examine their own society and the truths it presents to them. Teachers believe that the best learning is self-directed and active, rather than receptive and conformist. There is an underlying assumption that human beings are able to discover the truth about the universe if they observe it carefully enough and think about it hard enough.

Such an education looks critically at the principles which guide its own and other societies, in a search for universal principles for human behaviour. It is non-essentialist because we cannot yet confidently state the truth. It is student-centred because the individual student is the best judge of what he or she needs to learn right now in order to deal with the world as he or she finds it.

I suggest that in Australia there are schools which can be categorised one way or the other, that in most schools and universities there are both “third order” classrooms and “fourth order” classrooms, and that in any classroom there may be “third order” teachers and “fourth order” teachers. I acknowledge that teachers may even shift from one mode to another according to the culture of the school and the maturity of their students. Kegan argues that many of us have difficulty in achieving and maintaining fourth order consciousness. Gebser warns us against privileging mental consciousness over mythical consciousness. Our consciousness is multi-layered, and it is the taken-for-grantedness of our deepest assumptions and culturally embedded narratives which give our lives meaning and direction, even though our mental consciousness may take a critical stance towards them and even though others may find them simply wrong.

However, the point of this paper is to address the question of what sort of schooling is demanded by fifth order thinking, integral consciousness, the postmodern condition, the information society and the Age of Hermes.

May I suggest the following.

Where third order schooling aims at dependence and fourth order thinking aims at independence, fifth order thinking aims at interdependence.

Where third order schooling focuses on transmitted knowledge and fourth order education focuses on discovering the truth, fifth order schooling seeks a plurality of understandings. Where third order learning is passive and receptive and fourth order thinking is critical and active, fifth order learning is creative and constructive. Where third order curriculum emphasises received truth and fourth order curriculum seeks to discover universal principles, fifth order curriculum celebrates a diversity of incomplete (and even contradictory) truths.

Where third order education is founded on historically based assumptions about race, gender, class and cultural difference, and fourth order education maintains a socially critical perspective, fifth order education seeks to be aperspectival, or at least multi-perspectival. Even the socially critical perspective is relativised as one perspective among many.

Where third order education is grounded in a way of imagining the world and fourth order education is grounded in thinking about it, fifth order education integrates first order body, second order emotion, third order image and fourth order thought in an holistic experience and expression of what it means to be human in this world.

Where third order schooling is community-centric and fourth order schooling is ego-centric, fifth order schooling is eco-centric and transpersonal. It is sustained by an emerging ability to perceive not only “my truth and “your truth” as each incomplete without the other, but even “me” and “you” as each incomplete without the other.

The role of information technology is central to this. It both enables and demands the dissolution of boundaries, the development of transegoic consciousness, the transcendence of rational, linear, dualistic thinking and the constraints of quantified space and time. It both enables and demands the emergence of an holistic, eco-centric, process-oriented,

constructivist curriculum. It both enables and demands a new way of thinking both from students and their teachers.

Each of the above assertions demands a paper to itself, but for the time being the assertions will have to stand as they are - as self-evident truths, as objects of your critical reflection or as a perspective which becomes valid only in balance with other perspectives. Or, most likely, all three, for if we follow Gebser in this, we will understand our awareness to be grounded in the dynamic interplay of the several structures, the several orders of thinking.

In conclusion I would like to make two further points.

The first is the rather postmodern, value-neutral point that there is no assertion of a moral evolution here. The later, more complex structures of consciousness are not better, or superior or "higher" than the earlier, simpler ones. They are simply later (in evolutionary and developmental terms) and more complex. It is perfectly appropriate for the child's cognitive activity to be restricted to concrete operations (Piaget) or second order thinking (Kegan) and for this mode of functioning to persist in us through adolescence and adulthood. As we grow to maturity and beyond, more complex ways of functioning emerge alongside it. It has a limited range of use in the world we currently live in, but we could not live without it and the more complex structures are built on it. A capacity for fifth order thinking or integral functioning does not make us better people. It may actually make us more dangerous. However, as Gebser points out, rational thinking has got us into a planetary crisis which it now seems unable to deal with. Integral thinking may give us a means to survive it.

The second is the fairly pragmatic point that new learning technologies are too often wasted. Curriculum materials for electronic delivery are usually based on assumptions about learning which we would have to locate at Kegan's second, third or fourth level. On the other hand, the designers of the internet and the creators of the more complex computer games make quite different assumptions about how people think. They invite young people to engage in non-linear thinking, follow hunches, seek multiple solutions, make imaginative leaps, play with paradox, ignore the constraints of linear time and space, think interdependently with others. So should we.

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