Commentary on Michael Winkelman, 'Shamanism and cognitive evolution'

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'The shamanic context of cave art is attested by a number of features', Michael Winkelman writes (p.6); and, scarcely pausing for breath, he proceeds to reel off as if they were matters of established fact a list of conjectures about the authorship and meaning of ice-age cave paintings. We are to conclude, without question apparently, that 'cave art images represent shamanic activities and altered states of consciousness, and the subterranean rock art sites were used for shamanic vision questing' (p. 7). Well, may be. The shaman hypothesis is certainly an intriguing one; and David Lewis-Williams, in particular, has made a plausible case for it. Yet my own first reaction is: not so fast. For one thing, I myself, in the pages of this Journal a few years ago, presented evidence which – to begin with, anyway – suggests that any such interpretation has to be completely mistaken.

In 'Cave art, autism and the evolution of the human mind' (Humphrey 1998), I compared the style and content of ice-age art (in particular the paintings at Chauvet) with the drawings of a four year old autistic savant, Nadia – a severely retarded girl who had virtually no language and no ability to think conceptually. I pointed to remarkable resemblances in style and content between the cave paintings and Nadia's. I noted the surprising fact that drawings of this quality are never produced by untrained artists today *unless* they are autistic, and indeed that the precondition for the 'release' of this artistic ability in modern human beings seems to be the lack of interference from 'higher-level' cognitive elaboration. And on this basis I tentatively suggested that the ice-age artists themselves may have been operating at a pre-linguistic non-conceptual level.

Now, at first sight, there might seem to be little room for negotiation here, between Winkelman's grandiose view of the significance of cave art as the work of shamans and my deflationary view of it as the work of individuals who, at least compared to modern-day humans, were cognitively backward. If the cave artists were shamans then presumably they had the capacity for quite sophisticated conceptual thought.

Yet, even before reading Winkelman's paper, I had begun to wonder whether this way of putting things, as a simple either-or antithesis, might be obscuring a more complex and interesting truth. What if shamans resembled autistic savants *some of the time*? What if the very activity of shamanising rendered these people in some respects *functionally autistic*,

so that at the time they made the drawings they were *temporarily* in a non-conceptualising state of mind? Given new ideas about the origins of savant skills, I think there is reason to take this possibility seriously.

The key work is that of psychologist Alan Snyder (Snyder 1997, 1999; see also Birbaumer 1999, Humphrey 2002). Snyder has pointed out (as indeed have others before him) that the human brain normally acts like a filter, passing into conscious awareness only a highly edited and constructed picture of the world. In order to arrive at this picture the brain must take account of a mass of raw sensory information, store the details at least transiently, and apply a set of basic computational algorithms to make sense of them. But, in the normal course of events these details and the algorithms are lost to sight, being overshadowed – or even actively suppressed – by the larger picture which supercedes them.

In the case of autistic savants, however, Snyder suggests that the details are *not* overshadowed, for the simple reason that these savants are not capable of constructing the larger picture. Thus the raw information is left, as it were, on open display. 'We believe that artistic savants have direct access to "lower" levels of neural information prior to it being integrated into the holistic picture, the ultimate label. All of us possess this same lower-level information, but we cannot normally access it.' (Snyder 1999, p. 588). So, for example, 'the autistic savant Nadia can directly tap the way in which our brain derives perspective, whereas normal individuals cannot'.

But, if this right, it raises immediately a tantalising possibility. If normal people do store low level information at least transiently, then maybe *by somehow mimicking the non-conceptualising state* they too could keep this information open to view. As Snyder asks at the end of a recent paper: 'Although we do not normally have access to lower levels of information as do savants, is there nonetheless some artificial means to promote this access, *say via induced altered states of consciousness*?' [my italics] (Snyder 1999, p. 592).

The relevance to the Winkelman / Lewis Williams thesis will be apparent. Suppose it is true, as I would still maintain, that only someone with a savant-like mind could possibly have produced cave paintings such as exist at Chauvet. But suppose now it is also true that an otherwise normal person *by entering an altered state of consciousness which suppresses conceptualisation* could acquire savant-like skills. Then shamans might indeed have been cave artists.

But this argument depends, of course, on there being independent evidence that altered states really can have the effect that Snyder suggests. I think there is in fact already highly suggestive evidence for it in some of the older literature on psychotropic drugs – and perhaps most tellingly in Aldous Huxley's classic account of his experiments with mescalin, *The Doors of Perception* (Huxley 1954).

As Huxley describes it, one of the effects of mescalin is precisely to remove the 'tyranny' of higher order concepts. 'Visual impressions are greatly intensified and the eye recovers some of the perceptual innocence of childhood, when the sensum was not immediately and automatically subordinated to the concept. . . These effects of mescalin are the sort of effects you could expect to follow the administration of a drug having the power to impair the efficiency of the cerebral reducing valve' (p. 25-6). What is revealed is 'the infinite value and meaningfulness of naked existence, of the given, unconceptualised event' (p. 26).

And Huxley places his mescalin-induced experiences within a context that closely prefigures Snyder's. 'Reflecting on my experience, I find myself agreeing with the eminent Cambridge philosopher, Dr. C. D. Broad, "that we should do well to consider much more seriously than we have hitherto been inclined to do the type of theory which Bergson put forward in connection with memory and sense perception. The suggestion is that the function of the brain and nervous system and sense organs is in the main *eliminative* and not productive. Each person is at each moment capable of remembering all that has ever happened to him and of perceiving everything that is happening everywhere in the universe. The function of the brain and nervous system is to protect us from being overwhelmed and confused by this mass of largely useless and irrelevant knowledge, by shutting out most of what we should otherwise perceive or remember at any moment, and leaving only that very small and special selection which is likely to be practically useful." According to such a theory, each of one of us is potentially Mind at Large. But ... Mind at Large has to be funnelled through the reducing valve of the brain and nervous system' (p. 22-3).

Now, if mescalin can indeed have the effect of temporarily by-passing the reducing valve and thus opening the door to a savant-like level of raw cognition, then surely other consciousness altering techniques can do the same. As Huxley suggests, 'Temporary by-passes may be acquired either spontaneously, or as the result of deliberate "spiritual exercises", or through hypnosis, or by means of drugs' (p. 24). In which case, we may well imagine that some of these techniques were in fact available to those ice-age shamans.

This is of course no more than speculation. Nonetheless I think we can now guess at a scenario that would reconcile Winkelman's views and my own – although only by showing each of us to have been partly wrong in our assumptions. Yes, the cave art was made by human beings with savant-like minds; but not, as my earlier thesis implied, by human beings who were savant-like by nature. Yes, the cave art was made by shamans; but not, as Winkelman believes, by shamans giving expression to high level symbolic thought. Instead, let's imagine those artists, deep within the caves, suffused with music and dance, inspired by whatever constituted their ice-age soma, their memories primed, their senses sharpened,

regressing to the state of 'innocent perception' of which Huxley speaks. Perhaps it was in *that* state that they were able to recall in quasi-photographic detail the sightings of wild animals; in *that* state that they were able to trace the outlines of these images as if projected by a lantern onto the cave wall .

Huxley does not write in *The Doors of Perception* about ice-age art. But he does compare his mescalin experience to the work of painters. '"The nearest approach to this," I said, "would be a Vermeer." Yes, a Vermeer' (p. 38). Remarkably enough, it has now been established that Vermeer , in all his later and most famous paintings, used a lens to project an optical image on to a canvas on the wall of his studio and then traced the image (Steadman 2001). Although he used a camera rather than savant imagination, Vermeer himself may have been returning to the visionary roots of human art.

References

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