## 2 The Archaeology of Synaesthesia

## Jasmine Woods (mailto: JAWoods1@sheffield.ac.uk)

I should probably start off this article by telling you exactly what synaesthesia is, because the rest of the article will not make much sense without knowing a bit about the condition. Besides which, I am guessing a good proportion of the people reading this will not have the foggiest clue what it is; without wishing to patronise my readership of course, but then I did not know what it was for years, and I have the blinking thing!

Synaesthesia is a condition whereby the senses are mixed up. This completely alters one's perception of the world. It can work in a variety of different ways; some people can taste shapes, others see colours when they experience different emotions, some, like myself, can perceive colours, smells and tastes when they hear different sounds. This can be a tricky concept to get your head around. As a child I remember a number of parents/guardians/teachers/total strangers having absolutely no idea what I was on about when I said I could feel fluffy pink clouds when I heard the number two, for my part I just assumed that everyone experienced numbers in the same way I did. It was not until several years later when I read a book on the subject that I realised I was in a minority, and that not even people with the condition perceive the world in the same way as others with it. It is not known quite how many people have the condition; there are theories that all babies are born with it, but lose it within the first few years of their lives, whilst LSD has been known to induce a brief state of synaesthesia. One of the more unusual aspects of it is that people with more extreme forms of the condition have parts of their brain which are completely smooth. Although to be honest if I am in a state to see parts of my brain, I have probably got more to worry about than how bumpy it is...

But how does this fit into archaeology? Unsurprisingly there are a variety of different theories and methods regarding the use of the senses in archaeology. It was a long held belief, for example, that the ancient Greeks had not developed the ability to see the full spectrum of colours by the advent of the Greek language, around 8th Century BC. This was because their writings describe only four colours: bronze, yellow/green, purple/red and light/dark. Homer describes the sky as being bronze and sheep as purple(Triulzi 2006). However, this does not necessarily mean that they actually saw the world in those colours, but rather that their perception of them was different to our own. Bronze was a shining colour that could be applied to the sky as much as swords, while a yellow/green colour was applied to honey and to birds because it was a colour of life. Furthermore, it may have been that they were restrained linguistically, and did not have the right words to describe all that they saw, thus making groupings based on more simple colours(Triulzi 2006).

This raises an interesting point, historians were quick to jump to the conclusion that their ocular ability was less developed than our own, rather than exploring different avenues of sensual perception. Vision is generally held as the most important of our senses, but then would you really be happy to lose any of your others? Our five senses together make up what we 'see' in the world, and it may be that the ancient Greeks placed a higher emphasis on the way they felt about an object, rather than what they just saw. Archaeology by its very nature lends itself to a very sensualist approach. Not only are we engaging with artefacts through the medium of touch and sight, smell, taste and sound can all be employed. The former two lend themselves very well to the identification of substances; my lab tutor was surprised but rather pleased when I started sniffing a selection of metals I was asked to identify, but did advise me not to taste them as one contained arsenic and I might die. Sound

is another important, and often overlooked, factor in archaeology. Stone Henge, for example, has been recognised as having certain audial properties, although whether or not this was instrumental in its construction has yet to be seen (Till 2009). It has been theorised, however, that the ring of stone would make a sound similar to that of a wine glass when its rim is rubbed by a wet finger. Computer models of the monument compare its acoustic qualities to that of a concert venue (Till 2009). Here we can see how looking beyond the boundaries of touch and sight can yield different results.

In history too we can see the usage of a multitude of senses within interpretation. Christian culture is very concerned with our own sensualism, as God decrees we need only have faith and not proof in his existence; this is seen clearly when Thomas is rebuked for needing to touch Jesus rather than just accepting his reappearance. Sensualist thinkers, however, deemed all senses important in gaining an understanding of the world we live in. Only by direct sensory experiences can we uncover the truth. Advocates of this approach, such as philosopher Jean-Jacques Rousseau, believed that less emphasis should be placed on sight, as it is the most easily deceived and can be unreliable. Instead the sense of touch should be paramount in our exploration of the physical world (Linsay 2000).

Vision is now increasingly being recognised as perhaps the least important of our senses. Consider the development of our senses. Vision did not come first; in evolutionary terms smell came before sight, in human development we can utilise our other four senses while still womb-bound. As a logo-centric culture we often place our importance on sight alongside our need for writing, but they do not even require each other to exist. From the point of view of a synesthete, all senses are equally important as they occupy the same place in ourselves. From an archaeological point of view this can serve as a reminder not to simply analyze artefacts with our eyes, but to experience them with all our senses (Hirst. 2009). Ancient texts are not just words, but also physical objects of wax, papyrus, paper or stone that can be experienced audibly as well as visually. In other words, vision should take its place alongside the other senses, rather than being master to them, as only through the utilization of all our senses can we truly detect meanings within objects.

Synesthetes, however, are able to employ their senses in ways beyond that of the regular archaeologist. This makes for a different and interesting perspective, especially when tackling subjects such as art or spiritual belief. Lewis-Williams and Blundell (1997), for example, researched finger dots in South African rock art. Much of the art was shamanic and represented hallucinations and imagery from altered states of consciousness. The dots represented the luminous, geometric constructs perceived during an altered state. It was concluded that the light represented a type of supernatural power that was associated and accessed via synaesthesia. This is seen in the pictures which depict human and animal forms transforming into, or out of, shapes; similar to the experiences described by those who have entered a state of altered consciousness. There is

http://www.theposthole.org/

the sensation of sensual unity and people often feel fused with these geometric forms. The curving shapes of the dotted patterns mimicked the curved sensations the shamans claimed to feel through their hands when healing; combined with synaesthesia this may have given rise to the actual appearance of dots. Moreover, the very physical act of finger painting itself can be considered of some significance. Very rarely was paint placed on top of another image, only onto unused rock, suggesting that direct contact with the rock was important. The rock acted as an object between this world and the next, touching it allowed one to pass through this gateway. The paint itself was a supernatural substance which could effectively dissolve the rock so that images could be revealed. Again, here, we see the value placed upon the sense of touch rather than relying solely on one's vision, the pictures remaining after contact serving as a reminder of that contact with the other side (Lewis Williams and Blundell 1997).

It is impossible to detect, of course, whether or not the synaesthesia experienced by these shamans was natural or chemically enhanced in some way. We know that hallucinatory drugs can induce a short synesthetic state in the user. Shaman culture is often associated with the use of these substances, the blending of one's senses created what could be construed as a spiritual gateway or altered state, which could be key to their usage amongst various cultures. Archaeological and ethnographical studies have revealed some information as to the usage of such substances in shamanic ritual.

The Taino were people indigenous to the islands of the Bahamas. Before the arrival of Columbus in 1492, they had a culture revolving heavily around shamans as figures who could heal the sick, contact the spirits and predict the fertility and future of the tribe. They used a drug called cohoba to enhance their auto-hypnotic trances, a psychoactive powder from the seeds of native trees, sometimes mixed with tobacco. The shamans used the powder to communicate with spirits and ancestors, as well as curing illnesses. The drug causes the world to be perceived in an inverted way, whereby objects and people appear upside down, movements and gestures are reversed and a state of synaesthesia is induced marking everything with shifting shapes and bright colours. Their art, much like that seen in the South African finger dots, reflected this skewed vision of the world, with upside down images and skeletal spirits. The Taino culture was centred around this 'fifth direction,' namely that which involved all five of the senses and allowed the user to communicate directly with the other side(Crystal 2011).

In archaeology today synaesthesia is more widely accepted as another medium through which the past can be analysed. Sensory archaeology investigates the effects of past places and items upon the senses, seeing how these less tangible qualities may have affected the lives of past people. Whereas items may only have been previously considered in a visual sense, now investigations consider the acoustic qualities of a structure, or the physical act of craftsmanship as much as the craft itself. Experimental archaeology has played a large role in this movement, recreating past items so that archaeologists can experience their usage and effects for themselves. Ancient instruments have been reconstructed which not only give the hearer a sense of what they would have sounded like, but also the physiological effects that may have been experienced, for example the reverberations or the changes in the speed of pulses or heartbeat. Touch is a reasonably easy sense to employ, as archaeology is already quite a physical subject, but it is important to remember that materials may have been chosen

http://www.theposthole.org/

as much for their feel or way they look (or, of course, their cost and practicality!) It is, indeed, difficult to recapture an ancient smell, but ethnographic studies tell us how important this sense can be in a society. Smell is also very closely linked to memory, making it a powerful tool in the recollection of past knowledge. Finally taste, which can include eating, drinking and occasionally intoxication (not necessarily in my order of preference there). The social importance of these acts of incorporations is well-documented within the archaeological record, but it is imperative to remember that taste forms a part of everyday life; subsidence as well as feasting.

It is almost certainly together then, that the senses help us divulge our own past. One does not have to have synaesthesia to appreciate that as much as we utilise all five of our senses in our day-to-day lives, so too we can use these to recreate the day-to-day lives of our ancestors. And those of us that can perceive Friday as smelling green can use it to our advantage to uncover new and exciting archaeological truths.

## **Bibliography**

- Crystal. E. Hallucinogens (n.d). http://www.crystalinks.com/ hallucinogens.html (Last accessed 15th February 2011)
- Lewis-Williams. J. D. and Blundell. G. (1997) New light on finger-dots in southern African rock art: synesthesia, transformation and technique. South African Journal of Science. 93.
- Lindsay. S. G. (2000) 'Mummies and Tombs: Turenne, Napoleon, and Death Ritual'. *The Art Bulletin* 82(3).
- Hirst. K. (2009) Synesthesia Conference 2009.
- Southern Illinois University Carbondale. (2009) Center for Archaeological Investigation.
- Till. R. (2009) Sounds of Stone Henge. http://soundsofstonehenge.wordpress.com/ (Last accessed 6th February 2011)
- Triulzi. A. (2006) Ancient Greek Colour Vision. http://serendip.brynmawr.edu/exchange/node/61 (Last accessed 6th February 2011)
- World Archaeological Conference.(2010) Making Senses of the Past: Towards a Sensory Archaeology. http://www.worldarchaeologicalcongress. org/events/non -wac-events/448-making-senses-of-the-past (Last accessed 11th February 2011).