

The knowledge creation process as Bricolage

Participants in the liminal space apply the programs they have to the task in hand, and try to learn the routines as they go along. The use of the tool becomes shaped by the outcome, and the skills develop through use, because the intentional outcome is to develop new knowledge. The practice becomes one of 'do-it-yourself', analogous to one in which items are taken 'off the shelf' and used in whatever way the constructor sees fit.

The French term for this is 'bricolage' – whether for a do-it-yourself store, a builders' merchant or the act of constructing new knowledge and understanding in this way. In 'The Savage Mind' (1962) Levi Strauss used the term 'Bricolage' to describe the way in which the non-literate, non-technical mind of 'primitive' man responds to the world around him, as someone who works with his hands and uses devious means compared to those of a craftsman and who has nothing else at (his) disposal. Levi Strauss describes the bricoleur as adept at performing a large number of diverse tasks, with the rules of his game, always to make do with 'whatever is at hand'. Whereas an engineer works with concepts, Levi Strauss describes the brocoleur as working with signs, the very concrete objects with which meaning is constructed.

The process involves a 'science of the concrete' which is carefully and precisely ordered, classified and structured by means of its own logic. The structures are 'made up', and are ad-hoc responses to an environment. They establish homologies and analogies between the ordering of nature and that of society, and 'explain' the world and make it able to be lived in. The bricoleur constructs the 'messages' whereby 'nature' and 'culture' are caused to mirror each other. Levi Strauss saw bricolage as a way in which pre-scientific societies construct a belief system which explained their world.

Papert (1980) used the concept of bricolage in relation to the concept of 'chunking' (Miller, 1956), a process in which knowledge is broken into 'mind-size bites', which enables new knowledge and understanding to be constructed from it. His thesis was that the use of previously learned strategies could be used as a tool in concept formation.

Levi Strauss' explanation of bricolage and the bricoleur offers an insight that is, perhaps, applicable to MirandaMod participants.

...a bricoleur is someone who works with his hands and uses devious means compared to those of a craftsman...(he) has nothing else at (his) disposal. ... The bricoleur is adept at performing a large number of diverse tasks...the rules of his game are always to make do with 'whatever is at hand'. (p.17)

The process, then, is one of working from the specific (the task that must be completed) to the general (learning from that experience to apply to future experiences). The signs by which they work are those of the Graphical User Interface, with its buttons, toolbars and the ability to undo errors. The 'devious means' which they use utilise a range of mainly open-source software, making do with 'whatever is at hand'. Their work gives an account of their lives in a world where allusion, reference and quotation seem the only possibility.

We have already noticed the connection between...the activities of the...bricoleur and the modus operandi of the jazz musician. ...This art, - an art of signifiers, not signifieds, can be said to be truly modern ... (Hawkes, 1977 p.121.)

The synthesis must be that learning is seen as experiential, observational and a semiotic experience. The question, however, is whether content is subverted by electronic form.

Concern over the subversion of content by electronic form has been identified as 'data dandyism' (Lovink, 1995). He describes those who are "... *concerned with ... the accumulation of as many immaterial ornaments as possible ...*" where digital style triumphs over substance. The ornaments are a reflection of both technical skill, in that the 'data dandy' demonstrates superior competence, and technical sophistication, in that the user possesses the latest, most powerful (and most expensive) hardware, software and peripherals. The sub-text is that the user has sufficient time to devote to the acquisition of such skills. This demonstration of social worth through cyber semiotics updates the concept of fashion and conspicuous consumption (Veblen, 1899) and can be seen as particularly apposite in the acquisition and use of the latest mobile digital device.