

Making Construals and Learning, - in the context of Kolb's Experiential Theory of Learning.

(Meurig, Piet and Hamish 25th March – 1st April)

This was an interesting conversation which I have recorded and summarised and added contribution of my own in the three attached files:

ConstrualLearn [the original, unedited, mail messages from 25th March to 1st April]
Summary [my own 'cavalier' reduction of 7 pages (in .docx format) to 2 pages]
SBRComments [my own views and questions at this stage, also text from Meurig]

The files are in various formats. Take your pick!

I suggest beginning with the *Summary* (or with the three questions below) and leaving the long *ConstrualLearn* file just for reference.

There seem to me to be (at least) three major, and pressing, questions at issue for CONSTRUCT!:

(i) What does the idea [or practice] of 'making construals' contribute to learning?
(Hamish, *Summary*, second para)

(ii) How can Kolb's learning cycle materialize [or realise, instantiate] James' view on the role of direct experience for learning? (Piet, *Summary*, last para)

(iii) Meurig makes suggestions (see Appendix below) which I think can be viewed as answers to Hamish's question (i) – even if they were not written as that. Why do I (and apparently others) find it so hard to follow - in a practical sense – these suggestions? That is, I don't enjoy or experience any of the 'thinking support' that I expect from making construals.

Response to questions (i) and (iii):

See the **Appendix** below and just take the first three bullet points – stream-of-thought, blending, and deriving OER's led by domain knowledge. These suggest making construals should be interesting, novel, enjoyable to do. I've tried recently quite hard in an area (ratio and proportion for 13 yr olds) where I had good domain knowledge. I barely 'got off the ground'. The best I got was to use the MCE in a trivial way to 'program' some visualisations. (It's at 'sbr/ratio/construal1', using jseden.dcs.warwick.ac.uk/construit-v1.2.) This is definitely not what I expect from a construal! So I am perplexed. (The shopping construal is an example of what I do expect in a construal: a network of interconnected concepts expressed in ODA terms.)

Of course, there are technical issues to overcome but I am beginning to wonder if the cognitive issues are perhaps even greater. Sometimes dependencies seem natural but

often I am not used to formulating my knowledge, or problems, or reasoning, in terms of dependencies. Perhaps we need dependency-formulating exercises! There is much more to say on this but I am running out of time.

Response to question (ii):

Meurig makes the point in his mail of 26/03 (12.38) that there are very few references to learning by William James – at least in ‘Essays in Radical Empiricism’.

To complement that, I’d make the point that – as far as I can see – there are very few explicit references in Kolb to interaction or technology/computers (see Index).

So I think it is no surprise that Meurig finds there is ‘no satisfying match’ between the descriptions on the Leicester website and the activity of interacting with a construal. [Worth saying here that the descriptions on that website are not from Kolb, they derive, I think, from the Leicester (?) author.]

However, as far as I can see, even if there is little practical connection between Kolb and making construals there is a strong theoretical connection in the role played by experience. Even if – as Meurig suggests – Kolb may be misunderstanding James in important ways, it seems to me that the character of direct experience for both James and Kolb, and the experience of interaction offered by computing in the activity of making construals, are closely related. Thus I think Kolb’s book – and its substantial legacy in terms of literature, societies and conferences – are important to us. They are worth studying and making personal links and contacts. (Googling on ‘experiential learning’ or ‘experiential education’ is a good start.) There is (or was) something called the International Consortium for Experiential Learning – looks like it might be defunct though!

Kolb sometimes calls the four nodes or quadrants of the Learning Cycle (Concrete Experience, Reflective Observation, Abstract Conceptualization, Active Experimentation) ‘modes’ of learning. If these are placed at the compass, or clock quarter, points then the N-S dialectic (experience – abstraction) is referred to as ‘grasping experience’, while the E-W tension (reflection – action) is ‘transforming experience’. “Knowledge results from the combination of grasping and transforming experience.” I find that easy to identify with. And to associate RO with observables, AE with agency, and - not so obvious - AC to include dependency although that would be contentious. But there is no need to adopt, or look for, such an artificial ‘correspondence’ at all.

What does surprise me is that in a book like Kolb’s with numerous references to other authors (educators, psychologists, philosophers etc) there seems little counterpart to anything resembling what I would call a ‘construal’. Learning (or the knowledge acquired through learning) just seems to arise, fully formed, like a phoenix. This is nothing like my experience of learning. But I may well be mis-judging the Kolb book.

Appendix

The following six bullet points, written by Meurig I presume, are to be found at:

<http://www2.warwick.ac.uk/fac/sci/dcs/research/em/construit/year2/c15/agenda>

.....

“There are several messages about the potential for using making construals in the classroom that we tried to put across in the previous workshops at C14 and C2. They include:

- making construals can give live support for the stream-of-thought and act as a trace that can be recorded.
- construals can be blended and flexibly re-engineered to an unprecedented degree: they support a Use-Modify-Create paradigm (Hamish) that is not typically available/accessible for conventional implementations.
- in principle, teachers can develop OERs from a construal without deep specialist knowledge of software development and computer programming techniques, building primarily on their specialist domain knowledge.
- construals offer unprecedented scope for collaboration, both synchronous and asynchronous, in the development of OERs, in respect of Using / Modifying and Creating.
- the principal characteristic activity in making construals is 'making connections in experience'.
- making construals potentially makes a fundamental contribution to our understanding of constructionism, experiential learning and perhaps also inquiry-based learning (a bold claim). “

I was expecting to add reference, or quotation, of the 'six claims' about making construals that are listed in the original CONSTRUIT! proposal. But in fact these say little explicitly about learning.

