Last month I posted "A case for the Cognitive principle of relevance" on this blog, and Dan Sperber expressed the wish that I had given readers some idea how that discussion was itself relevant to the discussion of cognition and culture, for indeed, I don't think I mentioned culture at all. So, here goes. . .

The Cognitive principle of relevance (CPR) suggests that our cognitive processes are guided by considerations of efficiency. The allocation of our cognitive resources-attention, memory, inferencing, etc.- is generally geared to getting the greatest cognitive effect for the least processing investment. It is not obvious what this entails for culture, so this is a topic worth exploring. My discussion here will be extremely cursory, both because there is nothing new here and also because I mean this to be the start of a list, not definitive in any way.

We cannot examine the consequences of the CPR for culture without defining what is meant by culture. I do not wish to get embroiled in anthropological debates about this term, most of which seem to lead nowhere of interest from an analytic point of view, so I ask the reader to adopt, for our purposes here, the most minimal quasi-definition of culture possible: an item (representation, practice, etc) is cultural if it co-occurs (to some arbitrary approximation) in two minds. For this definition it suffices to discriminate minds by bodies, and to assume that if two items (representations, practices, etc) co-occur together then they are part of the same culture. This is not a coherent definition and will not suffice for any kind of analytic work, but it will do for our present discussion because it includes almost everything that anthropologists have called cultural and does not write into the definition of culture anything that really ought to be shown rather than presupposed.

(1) The communicative principle of relevance

Speakers (writers, mimes, etc.) will only succeed in communicating if they anticipate correctly how their audiences will process what the speakers say (write, mime, etc). This itself is not a consequence of the CPR, as we observe the same rule in our interactions with computers: if I click the program icon on my computer I anticipate that the computer will interpret this as a signal to initiate the program's code. If I am not familiar with my computer's interface-say, I do not realize that the interface takes a click on an icon as a signal to delete the program-then I will become frustrated at my inability to communicate with my computer. So success in communication depends on correct (or nearly correct or might-as-well-be-correct) anticipation.

Sperber & Wilson (1995) turn this principle on its head with their Communicative principle of relevance. The Communicative principle of relevance states that, ceteris paribus, speakers, in grabbing the attention of their audiences, make an implicit promise that what follows will be relevant. The audience then uses this promise as a key to interpreting the speaker's words (gestures, etc.) by searching for the interpretation that fulfills the promise of relevance. (Thus stated, many objections to this principle may spring to mind, but a proper explication of the Communicative principle of relevance is not my purpose here, and the reader is referred to Sperber & Wilson.)

An entailment of the Communicative principle of relevance is that among the most important (in the sense of foundational) cultural messages is "Hey! Pay attention to this! I'll make it worth your while." This message, though implicit, is the message that enables other messages to be processed.

It is worth noting that this message is not itself cultural, even when it is expressed in a cultural form. The deictic elements ("I promise you that this message will be relevant", "You promise me that this message will be relevant") necessary to the message require that it not be the same in the

speaker's and hearer's minds. It is not culture "all the way down."

(2) Attractors

A second consequence of the cognitive principle of relevance, noted by Sperber, is that some ideas will be more easily communicated than others, with the result that there will be attractors in the space of possible cultural representations. Through repeated transmission, ideas that are difficult to process should tend to take on forms that are easier to process. I would think, though I do not recall Sperber discussing this, that ideas that have large cognitive effects should also form attractors, at least among ideas with a similar level of processing difficulty.

If I may speculate freely, I think we will likely find that attractors are likely to have many different dynamic patterns. We should be wary of thinking of attractors as particular points in space, and instead think in terms of paths. One pattern might be a spiral: given a cultural distribution of idea W, idea X becomes an attractor, then Y, then Z, then another variant of X again, and so forth. The often-noted pendulum pattern in the history of representations might be understood as a particularly small spiral. There are many other possible dynamic patterns too (cf. Kauffman, 1993).

(3) Systematicity

A third consequence of the CPR, argued in a paper last year by Nicola Knight and me (2008), is the general systematicity of cultural representations. Systematicity is not a definitional property of culture, as defined above. It could be that two cultural ideas are related, or it could be that they are not. But the CPR should produce networks of related ideas, just because a representation that is related to existing representations will have an opportunity for cognitive effects that a representation unrelated to existing representations does not. This does not guarantee, of course, that cultures will be completely integrated, just that in them we should expect to find ideas systematically connected. I envision this as overlapping semantic spaces, but then again, I probably have an overactive imagination. But however one describes it, there should be a tendency for ideas to coalesce into systems as a result of the CPR.

So, folks, what else?

Kauffman, Stuart A. (1993). The origins of order: Self-organization and selection in evolution. New York: Oxford University Press.

Malley, Brian, & Knight, Nicola (2008). Some cognitive origins of cultural order. Journal of Cognition & Culture, 8(1-2), 49-70.

Sperber, Dan, & Wilson, Deirdre (1995). Relevance: Communication and cognition. Oxford: Blackwell.