

Information and Circumstance

JON BARWISE*

I suppose that bronzesmiths in the Bronze Age had a working knowledge of bronze, but not what we would consider a very good theoretic account of bronze. So maybe it should not surprise us to discover that the same holds for information in this Age of Information. For it does. While we process information all the time, personally and with the aid of computers, there is no semblance of agreement as to the basic nature of information and information processing. The basic notions are lacking any commonly accepted philosophical and mathematical foundations. Indeed, there are at least two apparently opposing beginnings toward such foundations, a semantic one that puts the emphasis on "information", and a syntactic version with the emphasis on "processing".

Perhaps coming up with a theory of information and its processing is a bit like building a transcontinental railway. You can start in the east, trying to understand how agents can *process* anything, and head west. Or you can start in the west, with trying to understand what *information* is, and then head east. One hopes that these tracks will meet, but Fodor's paper "Information and Association" [9], in this issue, tries to prove that they won't. Although he begins with a disclaimer that the paper is only cartography, a mapping out of the basic territory of information and information processing to see how various notions might fit into cognitive science, by the end of the paper he has convinced himself, and would convince us, that processing considerations require us to replace any world-oriented semantic account of information content by a syntactic account that has recourse to a formal language of thought.

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