Letter to the Editor

The cooked and the raw

Dear Sir,

I couldn't possibly begin to reply, in any detail, to Mr. Farradane's comments on 'The cooked and the raw' [see *Journal of Information Science*, vol. 3, no. 6, pp. 261–267 and 269–270] – nor should such a reply really be necessary. Mr. Farradane has, as he himself admits, clearly had difficulties trying "to clear a path... through [my] philosophical jungle," and so he has, for the most part, simply resorted to contradiction rather than argumentation. But at the core of Mr. Farradane's theory of information lies a theory of language (which he amplifies in his comments), and it is this linguistic core that I should like to take a closer look at since it seems to be a bit, shall we say, soft.

To say that writing *is* language is like saying that a picture of a cow *is* a cow. Mr. Farradane claims that "We can associate 'streaks of ink' (writing) with sounds and concepts directly." If this indeed were the case, then he should have no trouble in directly apprehending the concepts in (and thus the meaning of) the following:

(1) Ja jalla sardno ædnag sanid

To do this without resorting to knowledge residing only within a human mind should prove about as easy as getting milk from a picture of a cow. If the set of streaks 'CAT' can be associated *directly* (i.e., without any mediation) with the concept 'cat', then why is it that we have to be *taught* to read and write? Clearly, the 'association' here is not direct, but mediated by something learned.

Similarly, one can easily demonstrate that 'streaks of ink' cannot be directly associated with sounds. Consider the following sets of 'streaks':

(2) mat (3) mate

To associate each individual 'streak' (i.e. letter) with an individual sound (let's use phonetic sym-

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bols for these), we may proceed (by convention) from left to right, associating each letter with a sound. For (2), the letter 'm' is then associated with [m], 'a' with [æ], and 't' with [t]. Now, in (3) we proceed in the same manner, associating 'm' with [m], 'a' with [ae], 't' with [t] – and by now we have obviously gone astray. The letter 'a' in (3) is not to be associated with the sound [æ], but with [ey]. And what about the final letter 'e'? What sound is it associated with? If anything, it is associated with the first vowel of the word, telling us that this vowel is to be pronounced [ey], not [æ]. But this means that we cannot make any proper associations for the letter 'a' in (3) until we have reached the end of the word, and the association made in (2) could be only tentative, pending the possibility that a silent 'e' might show up later on. The vowel sound in (3) is associated with a discontinuous set of streaks, the 'a' and the 'e'.

English is rife with discontinuities of this sort, and their existence precludes any direct association (in any non-Pickwickian sense of 'direct') between letters and sounds. But then, of course, no one in the reading business would maintain anymore that reading is a matter of letter-by-letter processing.

Mr. Farradane's views on language learning are also highly suspect. He claims that language is "learned by association with percepts, e.g. the word 'cat' and the observable animal." But he fails to explain (as have all associationists) how such an association could take place. If he believes that this can be accomplished by ostension - i.e., by someone pointing to a cat and saying "cat" - then he is out of luck, for it has long been known that ostensive definitions of this kind simply do not work. One cannot point to the meaning of a word. Pointing and saving "cat" could just as well lead to 'associations' between the observed animal (the percept, on Mr. Farradane's view) and meanings such as 'furry animal', 'quadruped', 'grey', 'this particular animal' (i.e., a proper name), 'soft to the touch', 'the cause of allergies', 'beast that bites me when I try to touch it', and so on, *ad* (almost) *infinitum*.

Nor is Mr. Farradane's notion of perception at all clear. He repeatedly speaks of 'direct associations' between concepts and, e.g., 'streaks of ink'. Yet, he also claims that we view the world by means of sense data (which he equates with percepts). If the 'streaks of ink' really are streaks of ink, then, of course, the associations are not direct. but mediated by percepts. If, on the other hand, by 'streaks of ink' he means percepts, then, for these to be recognized as 'streaks of ink' (or recognized as anything, for that matter) will require the involvement of conceptual knowledge. One cannot recognize something as 'something', except in terms of a concept of that 'something'. This is what makes any categorical distinction between percept and concept untenable. The two are of the same kind.

Of course, it is always permissible to assign a

technical meaning to a word, and use it with that meaning within a circumscribed domain. But there is always a danger lurking here: One runs the risk of becoming Pickwickian, or, at worst, of sliding into the know-nothingism characteristic of religions and pseudo-sciences (such as astrology) which exist in self-created, intellectual vacuums. So when Mr. Farradane proposes to define information as "mainly, writing or speech used for communication of knowledge", he shall have to submit to scrutiny from the cognitive sciences which have revolutionized our views on language, knowledge, and perception over the last quarter century. Under such scrutiny, I'm afraid, Mr. Farradane's theories of information fall apart.

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