

25. Fodor, 1975, 1981. His claim that his account of thinking in "Mentalese" is no more than a philosophically defended and tidied up version of the mainstream theoretical assumptions of contemporary 'Cognitive Scientists' seems to me to be on the whole quite justified. See, e.g.: Pylyshyn [1973, 1980, 1984 esp. pp.193-4]; Anderson & Bower [1973]; Kintsch [1974]; Norman, Rumelhart et al [1975]; Kosslyn [1980]; Olsen & Bialystok [1983]; Anderson [1983].

26. 1953.

### Notes to §II.B.5.

1. See Woodworth, 1938 p.42.

2. 1974.

3. An informal, but perhaps even more convincing, version of this is attributed by Block [1983a] to Geoffrey Hinton. Instead of someone being shown II.B.5\_1(a) it is described to them in terms of two interpenetrating equilateral triangles (i.e. (c) and its upside-down twin) and they are asked to form an image of that. They will probably find it quite easy. They are then asked to find parallelograms in their image. That they will almost certainly find very hard.

4. Palmer, 1977 p.463.

5. See the next chapter.

6. See Kosslyn, 1980 p.262-3.

7. Kosslyn & Pomerantz, 1977 p.57.

8. Kosslyn, 1980 p.263.

9. Fodor, 1975 p.191n. See also Taylor, 1981.

10. What is more, they are a lot simpler than the images from which Kosslyn does take his own subjects to be 'directly reading off' information. I have in mind his experiments which call upon subjects to find various, often quite small, features of imaged animals [Kosslyn, 1975, 1976a,b], or to 'mentally scan' across imaged pictures or maps [Kosslyn, 1973; Kosslyn, Ball & Reisser, 1978; Kosslyn & Shwartz, 1978]. He is simply not consistent.

11. Hinton, 1979 p.232.

12. Hinton, 1979 p.233.

13. Shepard & Metzler, 1971; Pinker & Finke, 1980.

14. 1985.

15. Except that four subjects were unable to satisfactorily draw the slightly more complex 'Schroder staircase' figure from their images.

**Notes to §II.B.6.**

1. Rare exceptions are Lindauer [1969], Segal & Fusella [1971] and Juhasz [1969, 1972]. The Sheehan-Betts questionnaire on imagery vividness [Sheehan, 1967] asks about imagery in seven modes, but it seems to have been used less, and less successfully, than Marks' [1973] VVIQ questionnaire [Marks, 1983a; Sheehan, Ashton & White, 1983], which deals exclusively with the vividness of visual imagery. Philosophers make little better showing. Newton [1982], it is true, does argue that imagery from other sense modes may be very important. However, apart from her, to the best of my knowledge only Ryle [1949 chap.8] and some of those who are responding fairly directly to the relevant arguments he propounds [e.g. Matthews, 1969] have anything substantial to say about such non-visual imaginings.

2. That is not to say that you could not imagine both the sight and, say, the smell of something at the same time. But this could be interpreted as having two separate images (one visual, one olfactory) simultaneously. It does not have to be one unified image.

3. See §§ I.C.3, 4 and 5 above.

4. Locke, 1700 Bk.II chap.9 §8. For the historical and philosophical background and consequences of this view see Morgan [1977]. Morgan argues that Locke's position can now be seen to have been mistaken [1977 p.207].

5. Blindness in a new born baby is not at all obvious. Thus there are very few people who can be reliably known to have been blind absolutely from birth. Thus the term "early blind" is often used in the literature in preference to "congenitally blind". However, it seems to be the case that children who lose their sight at anything up to five years of age quite quickly lose any ability to form mental images (those blinded later in life, however, may retain the ability to visualize for many years) [Schlaegel, 1953; Berger, Olley & Oswald, 1962; Kirtley, 1975]. Thus for our purposes no real distinction need be made between the early blind and true congenitals. I shall treat "congenitally blind" and "early blind" as synonymous.

6. Morgan, 1977.

7. I.e. their blindness might be caused by brain damage affecting these structures.