

relationship with perception. The "structural theories" concern themselves with in just what respects imagery experiences and perceptual experiences resemble one another. Clearly any iconophile<sup>E</sup> may reasonably take an interest in such questions. The iconophile<sup>F</sup> will also want to be able to say precisely what cognitive functions imagery subserves. Such issues are dealt with by Finke's "functional theories". The "interactive theories" are supposed to concern themselves with the possible interactions between imaginal and perceptual processes. Knowledge about these interactions is of considerable relevance to theoretical views about the mechanisms underlying image formation.

24. Although a thorough-going iconophobia<sup>E</sup> must surely entail taking no position at all over mechanism.

25. See §§ I.A.1 and II.A.2.

26. See chap.II.C.

27. Hebb, 1968 p.476; 1969 p.57.

28. 1949 chap.8.

29. 1958.

30. 1970.

31. Ryle, 1979 chap.3.

32. See any of his works in the bibliography.

33. Pylyshyn, 1973.

34. Paivio, 1975 p.277; 1977 §3/3.2.

#### Notes to §I.B.3.

1. Watson, 1930 p.5-6.

2. Watson, 1914 pp.16f; 1913b pp.241f.

3. Watson [1913b pp.423-4; 1914 pp.19/324]; for later, more complete statements of this view see [1919 chap.IX; 1930 chaps.X-XI].

4. 1913b p.424; 1914 p.20.

5. Cohen, 1979 chap.1.

6. Burnham, 1968 p.150.

7. Watson, 1924 pp.vii-ix.

8. Watson, 1913a - in Shipley, 1961 p.816n.
9. Watson, 1913b p.423.
10. Watson, 1913b p.423n.
11. Watson, 1914 p.18.
12. Watson, 1913a - in Shipley, 1961 p.808.
13. Watson, 1919 pp.111-2.
14. Watson, 1936 p.276.
15. Watson, 1936 p.276.
16. Cohen, 1979 chap.6.
17. Quite what "the Galtonian sense" of imagery is, and what "other kind" Watson might have accredited himself with, I am not at all sure. Galton does not provide any definition or theory of imagery. Except for a brief and rather indirect hint at a 'pictorial' theory of the image mechanism [Galton, 1883 p.111] he seems to be making no claims about what imagery is, and seems to think he is using the term in a quite atheoretical, 'ordinary language' way. If you don't have imagery "in the Galtonian sense" I don't see that you have it at all. Possibly Watson is groping after the iconophobeM/E distinction here, but he does not seem to have been able to hold onto it.
18. Watson, 1913a - in Shipley, 1961 p.816n.
19. Watson, 1936 p.276-7.
20. See his letter of 1908 to Titchener, quoted by Larson & Sullivan [1976 p.339]. Personal, as opposed to intellectual, relations between the two men seem to have remained good even after Watson's change of direction, and, indeed, his expulsion from academia [Larson & Sullivan, 1965; Cohen, 1979].
21. Dunlap, 1932 p.45.
22. Watson, 1913a - in Shipley, 1961 p.816n.
23. 1960 pp.735-6.
24. See Mackenzie, 1972.
25. Watson, 1913a - in Shipley, 1961 p.804+n; c.f. Neisser, 1972 p.239.
26. Professor of Education at Hopkins at the time, and friendly with Watson [Cohen, 1979 p.54].
27. He seems to be dating things from the publication of William James' paper "Does 'Consciousness'

Exist?" [1904]; but no doubt this too was really just another 'straw in the wind'.

28. Lovejoy, 1914 p.42.

29. Watson began as a graduate student in Chicago "more interested in philosophy than psychology" [Watson, 1936 p.273], but "it wouldn't take hold". Only out of Hume (a proto-positivist, but also a good iconophile!), and to a lesser extent Locke and Hartley, did he admit to getting anything at all [1936 p.274]. In 1913 he urged that the education of Behaviorist psychologists would be able to (and should) altogether avoid consideration of such "time-honoured relics of philosophical speculation" as the mind-body problem [1913a - in Shipley, 1961 pp.807-8].

30. Watson, 1924 p.viii; 1936 p.276.

31. See Cohen, 1979 chaps.2-3.

32. Dunlap, 1914 p.25.

33. Dunlap, 1912a.

34. Dunlap, 1912b.

35. Dunlap, 1932 p.46.

36. Cohen, 1979 p.64.

37. Burnham, 1968 p.150.

38. See Watson, 1913b pp.421f; 1914 pp.16f.

39. Watson, 1924 p.ix.

40. Cohen, 1979 pp.64/232.

41. Watson, 1936 p.277.

42. Dunlap, 1932 p.45.

43. Dunlap, 1914 p.28.

44. Dunlap, 1914 pp.38-9; 1912b pp.156-60.

45. Dunlap, 1914 p.28.

46. 1914 p.37.

47. 1914 p.34.

48. Dunlap, 1914 p.33.

49. 1914 pp.35,38.

50. Dunlap, 1914 p.39.

51. Dunlap [1914 p.36]. Watson [1914 p.18n] borrows this argument, with acknowledgement to Dunlap, to explain why people might come to believe in "the fiction of visual imagery".

52. Dunlap, 1914 p.36.

53. Watson, 1919 chap.IX; 1930 chaps.X-XI.

#### Notes to §I.B.4.

1. Watson, 1930 p.5.

2. See e.g. chapter three of Wolfgang Köhler's *Gestalt Psychology* [1929], which is entitled "A Criticism of Introspection".

3. Petermann, 1932 introduction (original German 1929); Danziger, 1980 p.256.

4. Petermann, 1932 p.5.

5. See e.g. Koffka, 1935 p.684. Carnap's attempt, around 1928, to incorporate Gestaltist ideas into his positivist system would seem to rest on a thorough misunderstanding of Gestalt Theory - as he seems later to have realised [see Carnap, 1967 §67 and p.vii].

6. Schultz, 1981 p.285.

7. In a letter to R.M. Ogden - quoted by Henle [1984 p.10]. The substance behind this extravagant claim would seem to be that, together with Einstein (who was a good friend of Wertheimer's [Wertheimer, 1959 p.213; Michael Wertheimer, 1970 p.122; Luchins & Luchins, 1979]), were finding themselves to be leading representatives of the 'Romantic' or 'dynamical' approach to science. This is the tradition of Boscovich, Faraday, Maxwell etc., the tradition which tends to take force rather than matter as the primary reality, as opposed to the more dominant 'mechanical' tradition [see Hendry, 1986 chaps.1 & 2]. The Gestaltists, especially Köhler, were quite explicit about preferring "dynamic" as opposed to "mechanical" explanation, not only in psychology but in science in general [e.g. Köhler, 1940, 1929 chap.4]. Faraday's notion of field became absolutely central to Gestalt theory, as we shall see.

8. Henle, 1984.

9. Koffka, 1922.

10. Köhler, 1929.

11. Shipley, 1961 pp.1126, 1195.