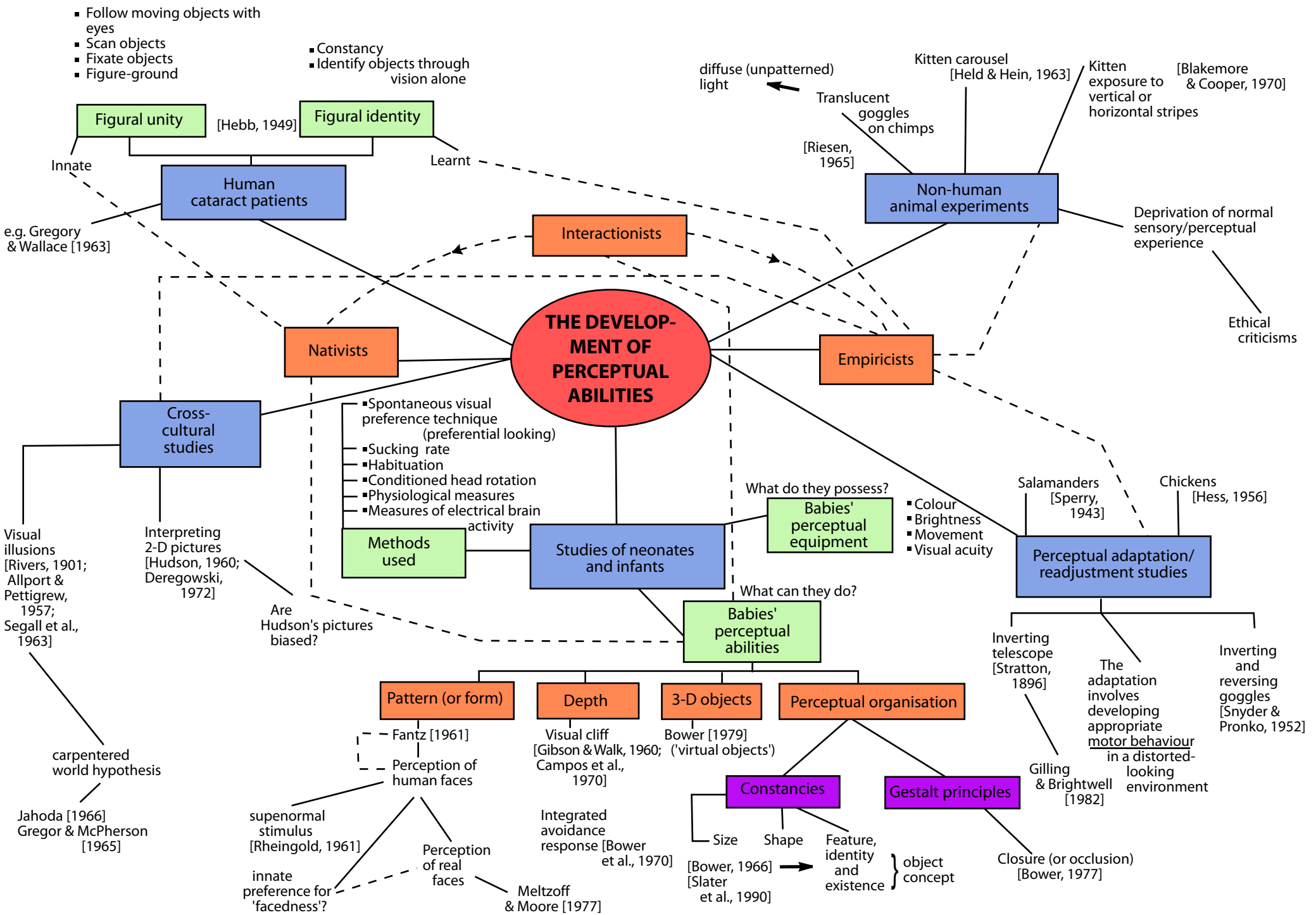
THE DEVELOP-MENT OF PERCEPTUAL ABILITIES
Nativists
Empiricists
Interactionists
Human cataract patients
Figural unity
Figural identity
[Hebb, 1949]
Innate
Learnt
e.g. Gregory & Wallace [1963]
Non-human animal experiments
diffuse (unpatterned) light
Translucent goggles on chimps
[Riesen, 1965]
Kitten carousel [Held & Hein, 1963]
Kitten exposure to vertical or horizontal stripes
[Blakemore & Cooper, 1970]
Deprivation of normal sensory/perceptual experience
Ethical criticisms
Cross-cultural studies
Visual illusions [Rivers, 1901; Allport & Pettigrew, 1957; Segall et al., 1963]
Interpreting 2-D pictures [Hudson, 1960; Deregowski, 1972]
Are Hudson's pictures biased?
carpentered world hypothesis
Jahoda [1966] Gregor & McPherson [1965]
Methods used
Spontaneous visual preference technique (preferential looking)
Sucking rate
Habituation
Conditioned head rotation
Physiological measures
Measures of electrical brain activity
Studies of neonates and infants
What do they possess?
Babies' perceptual equipment
Colour
Brightness
Movement
Visual acuity
What can they do?
Babies' perceptual abilities
Pattern (or form)
Fantz [1961]
Perception of human faces
supenormal stimulus [Rheingold, 1961]
innate preference for 'facedness'?
Perception of real faces
Meltzoff & Moore [1977]
Depth
Visual cliff [Gibson & Walk, 1960; Campos et al., 1970]
Integrated avoidance response [Bower et al., 1970]
3-D objects
Bower [1979] ('virtual objects')
Perceptual organisation
Constancies
Size
Shape
Feature, identity and existence
[Bower, 1966] [Slater et al., 1990]
object concept
Gestalt principles
Closure (or occlusion) [Bower, 1977]
Perceptual adaptation/ readjustment studies
Salamanders [Sperry, 1943]
Chickens [Hess, 1956]
Inverting telescope [Stratton, 1896]
Gilling & Brightwell [1982]
The adaptation involves developing appropriate motor behaviour in a distorted-looking environment
Inverting and reversing goggles [Snyder & Pronko, 1952]
Follow moving objects with eyes
Scan objects
Fixate objects
Figure-ground
Constancy
Identify objects through vision alone