Up to now we have been considering the child from the point of view of the observer. This may be one who intrudes as little as possible in the activities and interactions of the child with the people and objects in his normal surroundings, or the psychologist or paediatrician who deliberately intervenes to carry out some carefully controlled manipulation of the child or his environment. It is necessary to go a stage further and make an attempt to understand the world of the child as it is perceived by him. That it is possible to do so may be made clear by an example. A child who is handed what is in fact a small, shaped piece of wood and plastic will demonstrate that he has recognized the object for what it is meant to be by the way he handles it, as in Fig. 3.1 he tries to turn the tap on the kitchen sink, and subsequently explores the cupboards underneath. If he had not recognized the object as a representation or symbol his actions would be incomprehensible, and indeed he would not have been able to carry them out. This is not because of any physical limitation, but because he had not yet reached the appropriate level of cognitive development which enabled him to perceive the small object in his hand as a representation of the sink unit in his mother’s kitchen. It is on the basis of this sort of inference that Piaget has been able to reconstruct the child’s world. The pages which follow provide a summary of the three fundamental concepts of the object, space and causality which Piaget (1954) considers essential to a naive, but developing understanding of the external world. It is only after these concepts develop in the mind of the child that he can begin to understand and to use spoken language.

The Object

The nature of the object is given pride of place in the child’s material world, and neither space nor causality can be understood until this concept is grasped. It may be added that this is a two way process; the object cannot be fully comprehended
Fig. 3.1. *a* A child aged 20 months showing by his attempt to turn the tap on the miniature sink unit that he has recognized and understood the representational nature of the object he is holding. *b* A retarded and autistic child aged 3½ years unable to recognize the object in front of her as a miniature car.

until the space which contains it, and the effects which various forces and actions have on it, are also understood. The three concepts develop together through progressively more advanced stages, intertwined and dependent on each other.

In the early months, the object cannot be separated from the action which obtains it, whether this be the hand which grasps or the gaze which holds it. Though the young child might appear to the observer to be engaged in searching, it is rather that the child has the expectation that his activity will result in recreating the tactile or visual image. This emphasis on the priority of action receives support from Hamburger (1976). In his review of the developmental history of the motor neurone he emphasizes the primacy of spontaneous activity, which must not be confused with reactivity or response. So he develops the notion of the creativity of movement, and quotes Goethe's Faust "In the beginning was the Act . . .", a precise transliteration of Saint John's “In the beginning was the Word . . .”.

If one accepts Piaget's thesis it might be thought that object recognition would not be possible until some much later time than the child actually demonstrates his ability at this. Sensory schemas are however already developing which enable a