

there is nothing to cling to. Robbed of any mechanical means of ensuring close proximity with our mothers, we must rely entirely on maternally stimulating signals. We can scream our heads off to summon parental attention, but having got it we must do something more to maintain it. A young chimpanzee screams for attention just as we do. The mother rushes over and grabs it up. Instantly the baby is dinging again. This is the moment at which we need a clinging-substitute, some kind of signal that will reward the mother and make her want to stay on with us. The signal we use is the smile.

Smiling begins during the first few weeks of life, but to start with it is not directed at anything in particular. By about the fifth week it is being given as a definite reaction to certain stimuli. The baby's eyes can now fixate objects. At first it is most responsive to a pair of eyes staring at it. Even two black spots on a piece of card will do. As the weeks pass, a mouth also becomes necessary. Two black spots with a mouth-line below them are now more efficient at eliciting the response. Soon a widening of the mouth becomes vital, and then the eyes begin to lose their significance as key stimuli. At this stage, around three to four months, the response starts to become more specific. It is narrowed down from any old face to the particular face of the mother. Parental imprinting is taking place.

The astonishing thing about the growth of this reaction is that, at the time when it is developing, the infant is hopeless at discriminating between such things as squares and triangles, or other sharp geometrical shapes. It seems as if there is a special advance in the maturing of the ability to recognise certain rather limited kinds of shapes-those related to human features-while other visual abilities lag behind. This ensures that the infant's vision is going to dwell on the right kind of object. It will avoid becoming imprinted on some near-by inanimate shape.

By the age of seven months the infant is completely imprinted on its mother. Whatever she does now, she will retain her mother-image for her offspring for the rest of its life. Young ducklings achieve this by the act of following the mother, young apes by clinging to her. 108