

technique. At a close range (3-20 yards), the use of film camera prompted the reaction of 43% of subjects, while note-taking as a recording device made 17% of the studied people react. However, at a larger distance (25-40 yards), the response to the observer's presence and activity was significantly lower. Only 7% of the subjects seemed to notice the use of either of the recording techniques.

Another set of data pointing to what might constitute zones of co-presence to people in everyday situations comes from psychophysical and ergonomical research. Gilinski (1951) has shown that stationary people in outdoor spaces act as if their horizons, or their "infinite distance," were relatively close. This limit for one's visual field is of the order of 16 to 100 yards, depending both on the subject and the situation. Other studies point to a similar phenomenon. In an analysis of distances between a car and the point at which its driver focuses his eyes, Wallace (1973) estimated that at the speed of 35-65 km/h, the angle of the driver's visual field is diminished from 180° (characteristic of a stationary person) to 120° and that the focal distance is some 430 yards in front of the vehicle. In similar investigations Tunnard and Pushkarev (1963), quoted in Rapoport (1977), suggested that at driving speeds of 40 and 100 km/h, the visual fields of drivers are 100° and less than 40°, respectively. The distances for focusing eyes were found to increase with the speed. Thus, the extent of drivers' attention fields at these two velocities were approximately 200 and 660 yards long. Beyond these distances, the drivers' attentiveness to what might constitute a hazard to their vehicle tended to be greatly diminished. All this tends to suggest that in order to be present to another person, one needs not only to be well within the scanning range of the observer's senses, but also within a much narrower zone or set of zones within which one person is appropriately alive and responsive to the sights, sounds and smells of other people.

4. INTERNAL STRUCTURE OF THE FIELD OF CO-PRESENCE

The postulated above field of co-presence does not seem to be homogeneous in its properties and meaning that it has for the people encompassed by it. This is evident from a number of investigations. Goffman's (1963) study of social organization of gatherings makes a distinction between the state of immediate presence, such as the one characterizing people in a focused gathering (or encounter), and the state of general presence. The latter seems to characterize people who are aware of each other but who do not form a joint focus of attention and activity and, therefore, do not place themselves in close or very close proximity.

From the work of Schefflen (1976), Schefflen and Ashcraft (1976), Kendon (1977), and Ciolek (1977), it emerges that the state of the immediate presence has further gradations and nuances

which find their expression in the spatial structure of a focused face-to-face gathering. Between 3 and 6 zones can be said to exist with the innermost zone being the joint interaction field of all the participants; the intermediate one(s) are the area for placement of their bodies and belongings and the outer zone(s) represent a place which various categories of semi-participants and observers usually occupy.

Hall (1959, 1964, 1968) also seems to discern a number of spatial subdivisions of the field of co-presence. On the basis of his three speculative models of the spatial domain of the face-to-face interaction, it is very hard to establish what is the final number of zones he discerns (eight in 1959, eleven in 1964, a new set of eight zones in 1968) and where, finally, he locates the boundaries between them. Despite all these shortcomings in his work, it is, nevertheless, obvious that he does distinguish between zones of direct and immediate presence (e.g., intimate and personal distances) and zones in which people react to each other in limited fashion (e.g., public distances).

An experimental investigation in subjective evaluation of interpersonal distances by DeLong (1978) confirms that the zone of co-presence is not a homogeneous one. Within the range of 10 yards he has found eight distinct "proxemic zones" within which subjects felt that their psychological "relationship with the other person" (i.e., target person) had a certainly unique quality. The feeling of "proximity" was found to be the function of both the interaction distance and the type of interpersonal arrangement.

Sandstrom, in his experiments on perceptual and motor skills of people in motion (running and jumping), established (1951, 1974) that even the immediate world, the one in which an individual physically operates, is basically a discontinuous one. Sandstrom postulated that this world is made of two spatial zones, one placed within the other. According to this research, only the inner space with the radius of approximately 12 yards was perceived by his subjects as a meaningful and internally coherent whole. This was the so-called "here space," or psychologically present space. The external zone stretching beyond it, on the other hand, was perceived as the so-called "there space" and was thought by subjects to be uncertain and difficult to relate to.

Thomson (1977) studied accuracy and confidence with which blindfolded people would walk and reach for objects positioned at various distances from where they initially were. He found that the overall performance declines with the distance separating subjects from their targets and is controlled on the basis of previously acquired information stored in the form of either a mental behaviour-program or a mental map of a given physical environment. The mental programs were found to have a fairly long duration and enabled an accurate execution of complex locomotor acts for distances up to 5 yards to be made. The maps, on the other

