

rounding common speech behavior. Trager felt paralanguage had the following components:²

A. *Voice Qualities*. This includes such things as pitch range, pitch control, rhythm control, tempo, articulation control, resonance, glottis control, and vocal lip control.

B. *Vocalizations*.

1. *Vocal characterizers*. This includes such things as laughing, crying, sighing, yawning, belching, swallowing, heavily marked inhaling or exhaling, coughing, clearing of the throat, hiccupping, moaning, groaning, whining, yelling, whispering, sneezing, snoring, stretching, etc.

2. *Vocal qualifiers*. This includes intensity (overloud to oversoft), pitch height (overhigh to overlow), and extent (extreme drawl to extreme clipping).

3. *Vocal segregates*. These are such things as "uh-huh," "um," "uh," "ah," and variants thereof.

Related work on such topics as silent pauses (beyond junctures), intruding sounds, speech errors, and latency would probably be included in this category.

PROXEMICS

Proxemics is generally considered to be the study of man's use and perception of his social and personal space. Under this heading, we find a body of work called small group ecology which concerns itself with how people use and respond to spatial relationships in formal and informal group settings. Such studies deal with seating arrangements, and spatial arrangements as related to leadership, communication flow, and the task at hand. The influence of architectural features on residential living units and even on communities is also of concern to those who study man's proxemic behavior. On an even broader level, some attention has been given to spatial relationships in crowds and densely populated situations. Man's personal space orientation is sometimes studied in the context of conversational distance—and how it varies according to sex, status, roles, cultural orientation, etc. The term "territoriality" is also frequently used in the study of proxemics to denote the human tendency to stake out per-

²G. L. Trager, "Paralanguage: A First Approximation," *Studies in Linguistics* 13 (1958):1-12.

sonal territory—or untouchable space—much as wild animals and birds do.

ARTIFACTS

Artifacts include the manipulation of objects in contact with the interacting persons which may act as nonverbal stimuli. These artifacts include: perfume, clothes, lipstick, eyeglasses, wigs and other hairpieces, false eyelashes, eyeliners, and the whole repertoire of falsies and "beauty" aids.

ENVIRONMENTAL FACTORS

Up to this point we have been concerned with the appearance and behavior of the persons involved in communicating. This category concerns those elements which impinge on the human relationship, but which are not directly a part of it. Environmental factors include the furniture, architectural style, interior decorating, lighting conditions, smells, colors, temperature, additional noises or music, etc. within which the interaction occurs. Variations in arrangements, materials, shapes, or surfaces of objects in the interacting environment can be extremely influential on the outcome of an interpersonal relationship. This category also includes what might be called traces of action. For instance, as you observe cigarette butts, orange peels, and waste paper left by the person you will soon interact with, you are forming an impression which will eventually influence your meeting.

Perspectives on Nonverbal Communication in the Total Communication Process

There is a danger that the reader may forget that nonverbal communication cannot be studied in isolation from the total communication process. Verbal and nonverbal communication should be treated as a total and inseparable unit. Birdwhistell makes this point when he says:

My own research has led me to the point that I am no longer willing to call either linguistic or kinesic systems *communication* systems. All of the emerging data seem to me to support the contention that linguistics and kinesics are *infra-communicational* systems. Only in their interrela-