

HAROLD G. JOHNSON, PAUL EKMAN, AND WALLACE V. FRIESEN

COMMUNICATIVE BODY MOVEMENTS: AMERICAN EMBLEMS¹

In 1941 David Efron published his dissertation *Gesture and Environment* (re-issued as *Gesture, Race and Culture*, 1972). This pioneering study systematically explored differences between two cultural groups in their body movements during conversations. Efron's contributions were many. He combined both quantitative and qualitative methods of observation and analysis. He provided definitive evidence on how culture determines the pattern and type of certain body movements during conversation. And, he suggested the need to distinguish different classes of body movement. One such class of body movements which he termed *emblems* are the subject of this report.

Efron said that emblems were movement patterns that had a precise meaning. The pattern of the movement and its associated meaning are so precise that a glossary could be written visually depicting each action and message. Efron did, indeed, provide such an emblem glossary for immigrant Sicilians in the United States. Although recently there has been renewed interest in studies of body movement and facial expression (a number of representative articles have been published in this journal), few have been influenced by Efron's work and even fewer have been interested in the type behavior Efron termed emblems. Saitz and Cervenka (1962, 1973) were one exception, reporting a glossary of emblems (although they did not use this term), for Columbians and Americans. Ekman and Friesen are the other main exception. In the first issue of this journal (1969) they reported a theoretical classification of body movement which incorporated many of Efron's theoretical distinctions.

Their formulation distinguished among classes of body movements and facial expressions on the bases of their: (a) origin (how an action became part of the organism's repertoire); (b) coding (the principle underlying the relationship between action and significant); (c) usage (social contexts in which the action occurs). Ekman and Friesen proposed five classes of non-verbal behavior: facial expressions of emotion, regulators, adaptors, illus-

trators, and emblems. Emblems were said to be coded either arbitrarily or iconically, a disagreement with Efron who limited emblems to arbitrarily coded actions. Like illustrators (a class of movements which function to illustrate simultaneous speech), emblems occur in the presence of others and are rarely shown when someone is alone. Emblems differ in this way from adaptors (movements in which one part of the body manipulates another body part), since adaptors occur when alone as well as when *with*² another person. Emblems differ from illustrators, however, in that there need not be concomitant speech or any verbal conversation at all, although emblems can and do occur during conversation. Emblems are often used in social situations where speech is constrained or not possible, e.g., wartime patrol, hunters too distant to converse verbally, or between students in a classroom.

Emblems differ from most other body movements or facial expressions in that the person observing the emblem, the decoder, assumes that the action was performed deliberately by the actor or encoder to provide the decoder with a message. The encoder typically acknowledges he is communicating; he usually takes responsibility for what he transmits, much as he would with his words. At the opposite extreme are movements classified as adaptors, such as scratching the face. Adaptors may be informative, but they are not regarded by encoder or decoder as deliberate, acknowledged, attempts to provide information. They are regarded by the participants in a conversation the way slips-of-the-tongue were considered before Freud.

Ekman and Friesen (1972) recently refined their definition of emblems:

Emblems are those nonverbal acts (a) which have a direct verbal translation usually consisting of a word or two, or a phrase, (b) for which this precise meaning is known by most or all members of a group, class, subculture or culture, (c) which are most often deliberately used with the conscious intent to send a particular message to other person(s), (d) for which the person(s) who sees the emblem usually not only knows the emblem's message but also knows that it was deliberately sent to him, and (e) for which the sender usually takes responsibility for having made that communication. A further touchstone of an emblem is whether it can be replaced by a word or two, its message verbalized without substantially modifying the conversation.

There are a number of questions about emblems which should be of interest to students of nonverbal communication or semiotics. What is the ontogeny of emblems, at what point do different emblems become established in the infant's repertoire, and how does the acquisition of emblems interlace with the acquisition of verbal language? How are emblems utilized in conversation, are there regularities in which messages are transmitted emblematically?

cally, and do these emblems substitute, repeat or qualify the spoken messages? Are there any universal emblems, can we explain instances in which the same message is performed with a different motor action in two cultures? How are emblems related to American Sign Language? And, the phylogeny of emblems is of obvious interest.

We believe that the identification of the emblem repertoire is the most sensible first step which enables pursuit of all these questions. Once an emblem glossary has been established it would then be possible to observe when they first are shown by children, and how they appear in the structure of spoken conversation. Also the repertoire, structural characteristics and usage can be compared among different cultural groups, and with ASL. Without knowledge of the emblem repertoire, without a glossary, such observations are like searching for a needle in a haystack, since emblems are but one type of body movement or facial expression and usually they are not the most frequent type of nonverbal behavior emitted. This report describes a method of identifying the emblem repertoire for any group, literate or preliterate, which is usable with people once they reach the age where they comprehend a language.

METHOD

Neither Efron nor Saitz and Cervenka had provided much information about how they identified the repertoire of emblems. When Ekman and Friesen began their study of emblems in Japan and New Guinea (1969) they developed a method borrowing from anthropology (the use of informants), linguistics (back-translation), and psychology (quantification and rating scales). The techniques described here are a refinement and further elaboration of their methods. There are three separate steps: I. obtaining from informants the motor patterns which may be emblems (encoding emblem candidates); II. comparison of motor pattern performances across informants (visual analysis of encoding); III. obtaining judgments from a new group of informants about the semantic meaning and usage of the emblem candidates (emblem decoding).

I. Encoding Emblem Candidates

Ekman and Friesen found that simply asking people to perform the emblems they knew (once explaining the definition of an emblem) was unproductive. People remembered few. On the other hand, if people were read a list of messages and asked if they had an emblem for each message, it was

easy for them to recall and perform emblems they knew. Importantly, this procedure also seemed to stimulate memory since informants frequently would volunteer emblems not on the list of messages read to them.

The message list utilized in this study included the list developed by Ekman and Friesen for use in Japan and the Fore of New Guinea. It included all emblems found for those two groups and many messages not emblems for either. Messages which were reported as emblems by Efron and Saitz and Cervenka were also included. The list was arranged so that messages concerned with a specific information domain (e.g. insults) were not all close to each other, although some clustering of messages seemed to be conducive in eliciting volunteered items for that domain. Each informant was presented with about 220 verbal messages one at a time. For each he was asked if he knew an emblem for the message. The instructions emphasized that he would not have an emblem for every message as the list had been compiled from many cultures. The instructions also emphasized that he should not give pantomimes, charades or on-the-spot inventions. "Give only those emblems which you have used or have seen other people use in your past experience."

Each informant was queried individually, with the entire procedure recorded on videotape. The investigator was very careful not to provide suggestions (verbal or nonverbal). Frequently he paused to ask the informant to volunteer emblems or alternate ways to convey the same message.

Since emblems might vary with age, sex, ethnic background, or social class a homogeneous pool of informants was selected for this initial survey in the United States. The informants selected were white, middle-class males between the ages of 21 to 35 years, at least third-generation United States, and living in an urban setting.

The performances of fifteen informants were videotaped. It is difficult to determine how many informants to use in a study such as this. The decision was made to stop when the informants did not volunteer any new items. After the tenth subject, only one or two new emblems were volunteered and it seemed reasonable to assume that we had exhausted what could be learned about the emblem repertoire using this procedure.

II. *Visual Analysis of Encoding*

If the majority of the informants did not perform any action for a particular message we assumed that there was no emblem in this cultural group for that message. Such messages were eliminated from further consideration. For those messages in which the majority said they knew an emblem, we required that the performance be visually similar among at least 70% of the

informants. This requirement was intended to eliminate on-the-spot inventions or pantomimes which might be performed differently by various informants. Presumably, emblems are performed in much the same way by everyone. There might, of course, be more than one action pattern for a particular message, but informants were encouraged to provide more than one action for each message if they knew alternatives.

The visual analysis of the emblem performances to determine similarity did not involve precise measurement. Instead the assessment was a global judgment performed by the first author, and partially verified by the other authors. Decisions about similarity did not seem difficult. It seemed obvious that either the performances were minor variations on a particular action pattern, or they were markedly different in appearance. One hundred and thirty eight motor patterns met the criterion of visual similarity. This did not mean, however, that all 138 actions were necessarily emblems, but only that most people performed the same action for each of these messages. It was possible that most informants might invent the same movement for a message, yet that movement might not be an emblem. Take the example of the message "hammering a nail into the wall." If people are asked how to transmit this message, they usually will perform a similar motor action, involving a hammering movement with one hand while the other hand holds an invisible nail. If the informants followed our instruction to provide only actions they had seen in normal conversation, not pantomimes or charades, they would not make such an invention. But, there is no way to be certain simply on the basis of similar performances across informants. The third step of emblem decoding is needed.

III. *Emblem Decoding*

A different group of informants were shown each action and asked to decode the message. Here again, correct back-translation would not necessarily eliminate all pantomimes or charades. If the action was iconic its message might be obvious. Therefore, it was necessary to ask the informants to evaluate whether each action was currently in common everyday usage (natural), or used only in pantomimes or charades (artificial).

A new videotape was prepared showing one example of each of the 138 action patterns performed similarly by the first group of informants. Rather than use the original informants' behavior, which would vary with the physical characteristics of the 15 encoders, a single person (H.G.J.) performed each of the 138 actions. These performances were then examined by Ekman and a communications specialist (Randall Harrison) to insure that the performances were clear depictions of the informants' behavior. In

addition to the 138 action patterns which emerged from the visual analysis, 14 other action patterns were added. These included nine action patterns thought by the authors to be emblems although they had not been on the message list nor volunteered by the informants and five actions known to be emblematic in France.³

This new videotape was shown to other informants who were asked to make four decisions after viewing each motor pattern:

(1) They wrote down, in their own words, the *Message* conveyed by the emblematic behavior pattern.

(2) They made a one to seven rating of their certainty about the message they derived from the behavior pattern, a *Message Certainty* score.

(3) They scored whether the pattern was used in everyday situations, a *Natural Usage* score; or, whether the pattern was used only for games of charades or in pantomime routines, an *Artificial Usage* score.

(4) They made a one to seven rating of their certainty about the *Natural-Artificial Usage* score they gave to the emblem, a *Usage Certainty* score.

Three groups of informants acted as decoders. Each group viewed 50 or 51 performances from the videotape. There was a total of 53 decoders who met the same cultural criteria as the encoder informants. Both females (26) and males (27) were members of the decoder groups. Subsequent analysis revealed no differences between male and female decoders.

Results

The majority of the decoders judged 32 of the action patterns as artificial; these were not considered further. There were ten action patterns for which less than 50% of the decoders agreed about the message. These also were discarded from further consideration. The remaining action patterns are listed in tables one through four.

Verified Emblems. Table 1 lists all the messages where the action patterns met the most stringent criteria:

- the message derived by at least 70% of the decoders matched exactly or almost exactly the message given to the encoder;
- at least 70% of the decoders judged the action pattern as natural in usage. These messages have been grouped according to information domains discussed below.

Probable Emblems. Table 2 lists messages where the action pattern met a less stringent criteria on the ratings of naturalness of usage:

- the message derived by at least 70% of the decoders matched exactly or almost exactly the message given to the encoders (same as for Verified Emblems);

– more than 50% but less than 70% of the decoders judged the action pattern as natural in usage.

Ambiguous Emblems. Table 3 lists messages where the action pattern met less stringent criteria on both message decoding and usage:

- the message derived by more than 50% but less than 70% of the decoders matched exactly or nearly exactly the message given to the encoders;
- more than 50% but less than 70% of the decoders judged the action pattern as natural in usage (same as for Probable Emblems).

Ambiguous Emblems. Table 4 lists messages where the action pattern encoded was not decoded as the same message, but the message decoded resembled the message encoded:

- the message derived by more than 50% of the decoders resembled the message given to the encoders;
- more than 50% of the decoders judged the action pattern as natural.

Discussion

Without replication of this study on a comparable group of informants we are uncertain whether the emblem repertoire should include items listed in all four tables or just those listed in Table 1. If the results shown in Tables 2, 3, and 4 were replicated these action patterns also should be considered emblems. Replication could add a few emblems not listed in these tables, but we consider it unlikely that there would be many new emblems uncovered by these same methods, within the same population.

We can not be certain whether the emblems listed in these tables are known and used by more than middle-class, white, college educated, third generation Americans living within the San Francisco Bay area. Comparison of our results with the emblems reported by Saitz and Cervenka (1962) for Americans, showed that about half of the emblems reported in Table 1 were also found in their study. The substantial *non*-overlap in emblem repertoires may be due to: time (their study was in 1962, ours in 1973), region (their informants were East coast, ours were West coast), and/or methods of study (they did not describe their methods in any detail). Study of another group within the U.S., utilizing the same methods we have employed is needed. The age, region, social class, ethnic background, should all be varied to determine the limits of generality for this emblem repertoire.

In his discussion of Indian Sign Language, Kroeber (1972) raised a number of questions which are relevant to ask about emblems. One issue he raised is whether any of the signs are compounds, built out of identifiable elements, which recombine into other compounds. If by elements we mean actions which themselves have some emblematic meaning, then the answer

would be that there are few emblems which are compounds of such elements. Two exceptions help to illustrate. Pointing the finger or hand is an element which has emblematic meaning itself, and pointing is incorporated into a number of emblems together with other elements. The "shrug" compound can be performed with the wrists rotating so that the palms are turned facing up and then down (element one) and/or hunching upwards of the shoulders (element two). Either element when performed alone is an emblem as is the compound and the message is the same - "I don't know" or "I'm not certain."

These two examples are ones in which the elements contained in the compound are themselves emblems; the elements have meaning. And, we have said that there are few such emblem compounds. But, what of elements which are not themselves emblematic, which have no semantic meaning, but which combine and recombine into various compound elements? The answer to this question requires further work, but our judgment so far is that there are few such emblem elements.

In both American Sign Language and Indian Sign Language, the signs are usually emitted in strings or sequences. There has been considerable discussion of the principles governing such sequences and whether sign languages have a grammar similar to that of spoken languages (c.f., Tervoort, 1973; Stokoe, 1974 this journal). While there are occasions when emblems are used in sequential strings, these appear to be only those occasions when verbal conversation is some way constrained. For example, if while talking on the phone you notice a person come to the door of your office due for his appointment, you may emblematically signal that he will have to wait just a minute, and may follow this with an emblem that requests he come in and be seated. When two people are not constrained about the use of words, however, we have rarely observed a sequence of emblems.

Another question that can be asked about emblems (once the repertoire is known for a particular group), is whether there are common emblems across groups within a culture or across cultures. Efron claimed that emblem repertoires would differ across cultural groups, and Saitz and Cervenka reported a number of instances of differences in emblems between Columbians and Americans. Ekman and Friesen (1967, 1969) reasoned that as socially learned behavior emblems should be culture specific. They also suggested that there would be certain emblems common to a number of cultures. These would be "ones which involve a message describing a bodily activity which, for anatomical reasons, must be performed in similar ways." For example, if a culture has an emblem for sleeping, we have found it will involve moving the head into a lateral position, perpendicular to the body, with or without bringing one or both hands below the head as a kind of pillow" (Ekman, 1972, p. 364-365).

Comparison of our list of emblematic action patterns with those published by Saitz and Cervenka for Columbians and Efron for Sicilians suggested a surprising, unanticipated amount of overlap. Almost half of the messages listed in Table 1 are performed with the same action pattern in our U.S. sample and by the Sicilians and Columbians. Most of these presumably identical emblems in the U.S., Columbia and Sicily did *not* entail anatomically constrained bodily activity. The unusual amount of overlap may be explained by the high level of contact which U.S. citizens have with people from other cultures. The U.S. may have few indigenous emblems (as suggested by Efron), but may, more than most countries, incorporate a variety of emblems drawn from the immigrants from many different nations. Countries that have been extensively exposed to each other, particularly if that exposure is amplified by the media (as in TV's presentation of Italian emblems in crime stories) may show a great deal of overlap in emblem repertoires. Preliminary results from Ekman and Friesen's (1969) study of emblems in the South Fore of New Guinea, a group visually isolated from the U.S., showed very few emblems in common with the U.S. sample. Even their study of urban Japanese showed less overlap than the comparison of the U.S. with Columbia and Sicily. The matter is confounded, however, since the study of the South Fore and Japan utilized the same method of investigation as reported here, while Efron and Saitz and Cervenka presumably did not follow this method.

Cross cultural comparisons of emblems can consider not just equivalents in action patterns as we have just discussed, but also instances where a message is emblematic in more than one culture but with a totally different action. Approximately one third of the messages listed on Table 1 were also emblems in Sicily but performed with a different action. About a tenth of the messages in Table 1 were emblematic in Columbia but performed with a different action.

We also considered emblem repertoires in regard to the more abstract question of whether certain domains of information were emblematic in more than one culture, regardless of the specific message or motor action. For example, are there emblems for greeting and departure in each group studied? The answer to this is "yes," for the South Fore, urban Japan, U.S., Columbia and Sicily. Inspection of the messages listed in Table 1 suggested six other obvious categories or domains of information in addition to the greeting and departures, and the tables were organized in terms of these information domains.

Insults: e.g. fuck you, he's crazy, the hell with you.

Interpersonal Directions: stop, be silent, come here, go this way, hurry, etc.

Replies: yes, no, okay, I don't know, I doubt it, no way, etc.
 Own Physical State: I'm hot, I'm cold, I've got a headache, toothache,
 etc.
 Affect: I'm hungry, sad, surprised, etc.
 Appearance: Woman – nice figure.

The categorization of information domains is a tricky matter, and best performed once a list of emblems from a number of cultures has been compiled. Such work is now in progress and will be reported in our forthcoming report (Ekman & Friesen, in preparation) of U.S., Japanese, South Fore, Iranian and Israeli emblems. In that report we discuss the issue of why certain domains of information are emblematic in one culture but not another, or are covered by many different emblems in one culture and only a few in another.

Another issue which needs discussion is the context within which emblems appear, and how that context modifies the semantic meaning of the emblem. Many emblems are performed with simultaneous facial expressions which serve to qualify the emblematic message. Posture, head position and other hand movements may also serve as such contextual qualifiers. Specifying how context influences the semantic content of emblems requires research of a different kind than we have done here. Research is needed which examines how other nonverbal behaviors, how location within the conversation, and how the semantic content of the speech provide contextual qualification of emblems.

In one such study of the conversational usage of hand movements (illustrators, adaptors as well as emblems), Ekman, Dittmann and Friesen (1975) learned about the usage of one emblem, the ubiquitous shrug. While many other hand movements occurred in the conversations, this was the only emblem which occurred with sufficient frequency to be systematically studied. They found that this emblem is used as a single action, not part of a string of hand movements. Typically it is made prior to a verbal reply or during an unfilled pause in speech. Much more rarely did it occur simultaneously with a spoken statement of uncertainty. As yet they do not know if this finding is limited to the particular social context and the speakers studied or to the particular emblem studied. With the establishment of a repertoire of at least 67 emblems it should be possible now to focus on a range of emblematic behaviors as they occur in natural conversation.

There are also many questions about the ontogeny of emblems. Some of the emblems listed on Table 1 are customarily employed only by adults to children (e.g. the finger-wagging no). Are there emblems which reverse this, and are used by children to adults? Are there emblems which are used by children to children but not part of the adult repertoire? (Probably the

shame-on-you emblem.) Kumin and Lazar (1973) recently reported that 4-year-old children know how to decode more emblems than 3-year-old children. But they did not study the full list of emblems in Table 1. We do not yet know when emblems emerge in the child's repertoire, how they relate to language acquisition or the relationship between the point at which an emblem is decoded and when it is encoded by the child.

Unanswered questions about emblems abound. We have reported here but a first step in the study of this type of nonverbal communication.

NOTES

1. This research was supported by a grant from NIMH MH-11976, and is based in part on a doctoral dissertation by Harold G. Johnson conducted under Paul Ekman's sponsorship. Address reprint requests to: Paul Ekman, 401 Parnassus Avenue, San Francisco, California 94143.
2. Goffman (1971) characterizes situations where people are focused on the ongoing interaction as being in a "with." People waiting for a bus could be very close together physically but not in a "with" situation if they are not conversing or interacting.
3. Either a videotape (EIAJ-1, one-half inch) or a 16 mm film of the 152 motor pattern enactments will be made available within the next year in conjunction with a forthcoming book (Ekman and Friesen, in preparation) on cross-cultural studies of emblematic behavior.

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Table 1 VERIFIED EMBLEMS

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Interpersonal Directions (Commands)					
Sit down beside me	Sit down beside me	100	100	6.95	7.00
Be silent, hush	Be silent, hush	100	100	6.95	6.86
Come here	Come here	100	100	6.90	6.95
I can't hear you	I can't hear you	100	100	6.82	6.82
Wait-hold it	Wait-hold it	100	100	6.23	6.73
I warn you	I warn you	100	94	6.00	6.06
Get lost	*Get lost or get out or go away	100	93	6.53	6.20
Be calm	Be calm	100	93	6.20	6.00
Follow me	*Follow me or this way	100	88	6.56	6.44
++ Time to go	*Time to go or what time is it	100	87	6.27	5.60
Stop	*Stop or halt	100	81	6.81	6.44
Go the other way	*Go the other way or no - not that way	96	96	6.64	6.59
△ I want to smoke and got a cigarette?	*I want to smoke or got a cigarette?	96	74	6.64	6.32
Look!	*Look or I see something or look over there	91	100	6.36	6.41
Go away	Go away or rejection or get out of here	91	96	6.24	6.23
Take it away	*Take it away or go away or get out of here	90	87	5.45	5.91
Go this way	*Go this way or over there or that way	89	86	6.38	6.13
Go ahead	*Go ahead or go on by	87	83	4.86	5.32
△ Hurry and quickly	*Quickly or hurry or come here quickly	85	100	6.73	6.82
++ What time is it?	*What time is it? or time to go	77	100	6.45	6.64

Table 1 (continued)

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Stay here	*Stay here or down here	77	100	5.64	6.05
Own Physical State					
△I'm hot and it's hot	*I'm hot or hard work or a close shave	100	88	5.81	5.88
△Hard work	*Hard work or I'm hot or a close shave	81	100	6.45	6.55
△A close shave	*A close shave or I'm hot or hard work	81	100	5.53	5.67
△It's cold and I'm cold	*It's cold or I'm cold	100	70	6.62	6.50
I'm full of food	I'm full of food	93	93	6.00	6.27
I've got a headache	I've got a headache	93	93	5.60	5.33
I've got a toothache	I've got a toothache	87	87	5.60	5.87
I've got an earache	I've got an earache	70	81	5.19	5.81
Tastes good	Tastes good	93	70	5.69	5.19
I am smart	I am smart	93	73	5.60	5.53
How could I be so dumb	How could I be so dumb	100	95	6.38	6.31
Insults					
+Fuck you (finger)	*Screw you or up yours or fuck you	100	100	7.00	6.86
+Fuck you (arm)	*Fuck you or up yours or screw you	100	81	6.50	6.63
△The hell with you and rejection	*The hell with you or rejection	100	94	6.07	5.87
△He's crazy and he's stupid	*He's crazy or he's stupid	100	75	6.67	6.27
Shame on you	Shame on you	100	70	6.81	6.62
Replies					
Okay (fingers)	Okay	100	100	6.80	6.60

Table 1 (continued)

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
△No (head) and I disagree	*No or I disagree	100	100	6.81	6.88
I don't know	I don't know	100	100	6.73	6.80
△Yes and I agree and I like it	*Yes or I agree or I like it	100	100	6.53	6.73
Absolutely no	*Absolutely no or no way	100	95	6.81	6.62
I dislike it	*I dislike it or no way	100	93	6.53	6.20
I promise	*I promise or cross my heart	100	74	6.67	5.73
Absolutely yes	Absolutely yes	93	81	5.33	6.13
△Hard to think about this and thinking	*Hard to think about this or puzzlement or thinking	89	100	6.06	6.44
I doubt it	I doubt it	70	81	4.62	5.06
Own Affect					
I'm angry	I'm angry	100	94	6.06	6.38
△I'm disgusted and something stinks	*Something stinks	100	81	6.88	6.56
I'm sad	*I'm sad or I'm ashamed	95	72	5.44	5.13
I'm surprised	I'm surprised	95	88	5.75	6.13
Whoopee	*Whoopee or hooray	88	74	4.06	5.19
Greetings and Departures					
Goodby	Goodby	94	100	6.60	6.53
Hello	Hello	80	100	6.20	6.13
Physical Appearance of Person					
△Woman and nice figure	*Woman or nice figure	100	100	6.90	6.77
Unclassified					
You (finger point)	You	100	100	6.81	6.75

Table 1 (continued)

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Me (own chest)	Me	100	100	6.75	6.75
Hitch-hiking	Hitch-hiking	100	94	6.93	6.80
Counting	Counting	100	70	6.69	6.06
Gossip	*Gossip or talk-talk-talk	96	91	6.14	6.18
Fighting	Fighting	96	73	6.45	5.82
△Peace and victory	*Peace or victory	94	87	5.93	6.33
Good luck	Good luck	92	100	6.50	6.77
Money	Money	92	79	5.54	4.81
It's far away	*It's far away or over there	87	96	5.90	6.86
Suicide (gun)	*Suicide or shoot myself	83	73	5.95	5.95
Finished	*It's finished or that's enough	78	83	6.41	6.41

Code: Applicable for Tables 1, 2, 3, and 4.

* Either decode message was accepted, although the first message was given more often than the second.

△ The same action was performed for each encode message.

+ Two different actions were performed as alternatives for the same message.

++ Two subtly different actions were performed for two subtly different messages.

Table 2 PROBABLE EMBLEMS

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Interpersonal					
Pleading	Pleading	95	62	6.19	5.81
Get up from there	Get up from there	70	68	5.06	5.56
Own Physical State					
I'm going to throw up	*I'm going to throw up or vomiting	100	68	6.88	6.34
I'm strong (bicep)	I'm strong	100	51	6.56	6.81
Insults					
None					
Replies					
None					
Own Affect					
I'm afraid	*I'm afraid or scared	100	57	6.00	6.00
I'm going to cry	*I'm going to cry or wiping a tear	88	64	5.69	6.13
Greetings and Departures					
None					
Physical Appearance of Person					
Fat	*Fat or pregnant	100	64	6.63	6.31
Pregnant	*Pregnant or fat	100	62	5.31	5.50
Unclassified					
Your fly is open	Your fly is open	82	55	5.55	5.32
Power to the people	Power to the people	82	50	5.80	4.93
Magnifique (French)	*Magnificent or great	80	68	5.73	5.60
I'm broke	*I'm broke or no money	78	50	4.59	4.54
I'm fed up	*I'm fed up or up to here	70	57	5.06	5.94

Table 3 AMBIGUOUS EMBLEMS: LOW DECODE MESSAGE AND NATURAL USAGE SCORES

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Interpersonal					
Follow behind me	*Follow behind me or those in back come up here	63	69	3.86	4.36
Own Physical State					
△I want to eat and I'm hungry	*I want to eat or I'm hungry	53	60	5.53	5.13
Insults					
Up your ass	*Shove it or up your ass	68	61	5.93	5.40
Replies					
Only fooling	Only fooling	68	68	6.00	5.47
Own Affect					
Anticipation (rub hands)	Anticipation	62	57	4.25	4.94
Greetings and Departures					
None					
Physical Appearance of Persons					
None					
Unclassified					
He's safe (baseball)	He's safe	68	55	5.60	5.73
Bless you (religious)	*Bless you or a blessing	66	68	5.87	5.40
He's a snob	*He's a snob or stuck up	59	61	5.40	5.27

Table 4 AMBIGUOUS EMBLEMS: DECODE MESSAGE DIFFERS FROM ENCODE MESSAGE

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Interpersonal					
You don't fool me	*Scolding or no-no-no	100	88	6.94	6.88
Go left	Move that way	100	88	6.27	6.93
Go right	Move over there	100	87	6.13	5.67
Shut the door	Move that way	74	78	5.68	6.09
Don't hit me	Look out	50	88	5.93	5.87
Own Physical State					
I'm tired	I give up	55	85	5.20	5.60
Insults					
Didn't get a sou (French)	*Fuck you or up yours	79	75	4.60	4.73
Replies					
What do you want?	*I don't know	100	100	6.75	6.94
So-so, about average	I don't know or uncertainty	75	95	6.19	6.12
I'm sorry	*Uncertainty or I don't know	50	87	5.00	5.00
Own Affect					
Look out!	*Fear or surprise	57	68	5.38	5.88
Greetings and Departures					
None					
Physical Appearance of Person					
Tall person	About this tall	100	100	6.50	6.68
Short person	About this tall	95	95	6.75	6.69
Thin person	It's narrow, it's straight up and down	59	79	4.54	4.59
Bald head	Fixing hair	54	51	3.90	4.05

Table 4 (continued)

Encode Message	Decode Message	Decode Message %	Natural Usage %	Message Certainty	Usage Certainty
Unclassified					
Something small	About this big, a little bit	100	100	6.36	6.73
It's near or close by	About this long or big	100	95	5.73	6.55
Proud of myself (beat chest)	Strong, tough	96	91	6.59	6.18
Happy (hands)	I give up	86	73	4.67	5.27
Surprise (hands)	Stop, hold it, wait	81	70	4.80	5.47
Brief	It's a snap, easy	67	100	6.36	6.68
Wash hands at a feast	Nervous, anxious	54	68	5.27	5.07

Paul Ekman (b. 1934) is Professor of Medical Psychology in the Department of Psychiatry at the University of California, San Francisco. His research is focused on the study of facial expression and body movement. He has published: *Emotion in the Human Face: Guidelines for Research and an Integration of Findings*, with P. Ellsworth and W.V. Friesen (1972); "Universals and Cultural Differences in Facial Expression of Emotion" (1972); *Darwin and Facial Expression: A Century of Research in Review* (1973); and *Unmasking the Face*, with W.V. Friesen (1975).