gesture, for that is the basic gesture which does influence the individual as it influences others. Where it does not become significant is in the vocalization of the two birds. Nevertheless, the same type of process is present, the stimulus of the one bird tending to call out the response in another bird which it tends to call out, however slightly, in the bird itself.

IO. THOUGHT, COMMUNICATION, AND THE SIGNIFICANT SYMBOL

We have contended that there is no particular faculty of imitation in the sense that the sound or the sight of another's response is itself a stimulus to carry out the same reaction, but rather that if there is already present in the individual an action like the action of another, then there is a situation which makes imitation possible. What is necessary now to carry through that imitation is that the conduct and the gesture of the individual which calls out a response in the other should also tend to call out the same response in himself. In the dog-fight this is not present: the attitude in the one dog does not tend to call out the same attitude in the other. In some respects that actually may occur in the case of two boxers. The man who makes a feint is calling out a certain blow from his opponent, and that act of his own does have that meaning to him, that is, he has in some sense initiated the same act in himself. It does not go clear through, but he has stirred up the centers in his central nervous system which would lead to his making the same blow that his opponent is led to make, so that he calls out in himself, or tends to call out, the same response which he calls out in the other. There you have the basis for so-called imitation. Such is the process which is so widely recognized at present in manners of speech, of dress, and of attitudes.

We are more or less unconsciously seeing ourselves as others see us. We are unconsciously addressing ourselves as others address us; in the same way as the sparrow takes up the note of the canary we pick up the dialects about us. Of course, there must be these particular responses in our own mechanism. We are

⁶ [See Supplementary Essay III for discussion.]

calling out in the other person something we are calling out in ourselves, so that unconsciously we take over these attitudes. We are unconsciously putting ourselves in the place of others and acting as others act. I want simply to isolate the general mechanism here, because it is of very fundamental importance in the development of what we call self-consciousness and the appearance of the self. We are, especially through the use of the vocal gestures, continually arousing in ourselves those responses which we call out in other persons, so that we are taking the attitudes of the other persons into our own conduct. The critical importance of language in the development of human experience lies in this fact that the stimulus is one that can react upon the speaking individual as it reacts upon the other.

A behaviorist, such as Watson, holds that all of our thinking is vocalization. In thinking we are simply starting to use certain words. That is in a sense true. However, Watson does not take into account all that is involved here, namely, that these stimuli are the essential elements in elaborate social processes and carry with them the value of those social processes. The vocal process as such has this great importance, and it is fair to assume that the vocal process, together with the intelligence and thought that go with it, is not simply a playing of particular vocal elements against each other. Such a view neglects the social context of language.⁷

The importance, then, of the vocal stimulus lies in this fact that the individual can hear what he says and in hearing what

⁷ Gestures, if carried back to the matrix from which they spring, are always found to inhere in or involve a larger social act of which they are phases. In dealing with communication we have first to recognize its earliest origins in the unconscious conversation of gestures. Conscious communication—conscious conversation of gestures—arises when gestures become signs, that is, when they come to carry for the individuals making them and the individuals responding to them, definite meanings or significations in terms of the subsequent behavior of the individuals making them; so that, by serving as prior indications, to the individuals responding to them, of the subsequent behavior of the individuals making them, they make possible the mutual adjustment of the various individual components of the social act to one another, and also, by calling forth in the individuals making them the same responses implicitly that they call forth explicitly in the individuals to whom they are made, they render possible the rise of self-consciousness in connection with this mutual adjustment.

he says is tending to respond as the other person responds. When we speak now of this response on the part of the individual to the others we come back to the situation of asking some person to do something. We ordinarily express that by saying that one knows what he is asking you to do. Take the illustration of asking someone to do something, and then doing it one's self. Perhaps the person addressed does not hear you or acts slowly, and then you carry the action out yourself. You find in yourself, in this way, the same tendency which you are asking you that same response which you stirred up in the other individual. How difficult it is to show someone else how to do something which you know how to do yourself! The slowness of the response makes it hard to restrain yourself from doing what you are teaching. You have aroused the same response in yourself as you arouse in the other individual.

In seeking for an explanation of this, we ordinarily assume a certain group of centers in the nervous system which are connected with each other, and which express themselves in the action. If we try to find in a central nervous system something that answers to our word "chair," what we should find would be presumably simply an organization of a whole group of possible reactions so connected that if one starts in one direction one will carry out one process, if in another direction one will carry out another process. The chair is primarily what one sits down in. It is a physical object at a distance. One may move toward an object at a distance and then enter upon the process of sitting down when one reaches it. There is a stimulus which excites certain paths which cause the individual to go toward that object and to sit down. Those centers are in some degree physical. There is, it is to be noted, an influence of the later act on the earlier act. The later process which is to go on has already been initiated and that later process has its influence on the earlier process (the one that takes place before this process, already initiated, can be completed). Now, such an organization of a great group of nervous elements as will lead to conduct with reference to the objects about us is what one would find in the central nervous system answering to what we call an object. The complications are very great, but the central nervous system has an almost infinite number of elements in it, and they can be organized not only in spatial connection with each other, but also from a temporal standpoint. In virtue of this last fact, our conduct is made up of a series of steps which follow each other, and the later steps may be already started and influence the earlier ones. The thing we are going to do is playing back on what we are doing now. That organization in the neural elements in reference to what we call a physical object would be what we call a conceptual object stated in terms of the central nervous system.

In rough fashion it is the initiation of such a set of organized sets of responses that answers to what we call the idea or concept of a thing. If one asked what the idea of a dog is, and tried to find that idea in the central nervous system, one would find a whole group of responses which are more or less connected together by definite paths so that when one uses the term "dog" he does tend to call out this group of responses. A dog is a possible playmate, a possible enemy, one's own property or somebody else 's. There is a whole series of possible responses. There are certain types of these responses which are in all of us, and there are others which vary with the individuals, but there is always an organization of the responses which can be called out by the term "dog." So if one is speaking of a dog to another person he is arousing in himself this set of responses which he is arousing in the other individual.

It is, of course, the relationship of this symbol, this vocal gesture, to such a set of responses in the individual himself as well as in the other that makes of that vocal gesture what I call a significant symbol. A symbol does tend to call out in the individual a group of reactions such as it calls out in the other, but there is something further that is involved in its being a significant symbol: this response within one's self to such a word as

⁸ [See Sections 13, 16.]

"chair," or "dog," is one which is a stimulus to the individual as well as a response. This is what, of course, is involved in what we term the meaning of a thing, or its significance.9 We often act with reference to objects in what we call an intelligent fashion, although we can act without the meaning of the object being present in our experience. One can start to dress for dinner, as they tell of the absent-minded college professor, and find himself in his pajamas in bed. A certain process of undressing was started and carried out mechanically; he did not recognize the meaning of what he was doing. He intended to go to dinner and found he had gone to bed. The meaning involved in his action was not present. The steps in this case were all intelligent steps which controlled his conduct with reference to later action, but he did not think about what he was doing. The later action was not a stimulus to his response, but just carried itself out when it was once started.

When we speak of the meaning of what we are doing we are making the response itself that we are on the point of carrying out a stimulus to our action. It becomes a stimulus to a later stage of action which is to take place from the point of view of this particular response. In the case of the boxer the blow that he is starting to direct toward his opponent is to call out a certain response which will open up the guard of his opponent so that he can strike. The meaning is a stimulus for the prepara-

⁹ The inclusion of the matrix or complex of attitudes and responses constituting any given social situation or act, within the experience of any one of the individuals implicated in that situation or act (the inclusion within his experience of his attitudes toward other individuals, of their responses to his attitudes toward them, of their attitudes toward him, and of his responses to these attitudes) is all that an *idea* amounts to; or at any rate is the only basis for its occurrence or existence "in the mind" of the given individual.

In the case of the unconscious conversation of gestures, or in the case of the process of communication carried on by means of it, none of the individuals participating in it is conscious or the meaning of the conversation-that meaning does not appear in the experience of any one of the separate individuals involved in the conversation or carrying it on; whereas, in the case of the conscious conversation of gestures, or in the case of the process of communication carried on by means of it, each of the individuals participating in it is conscious of the meaning of the conversation, precisely because that meaning does appear in his experience, and because such appearance is what consciousness of that meaning implies.

tion of the real blow he expects to deliver. The response which he calls out in himself (the guarding reaction) is the stimulus to him to strike where an opening is given. This action which he has initiated already in himself thus becomes a stimulus for his later response. He knows what his opponent is going to do, since the guarding movement is one which is already aroused, and becomes a stimulus to strike where the opening is given. The meaning would not have been present in his conduct unless it became a stimulus to strike where the favorable opening appears.

Such is the difference between intelligent conduct on the part of animals and what we call a reflective individual.10 We say the animal does not think. He does not put himself in a position for which he is responsible; he does not put himself in the place of the other person and say, in effect, "He will act in such a way and I will act in this way." If the individual can act in this way, and the attitude which he calls out in himself can become a stimulus to him for another act, we have meaningful conduct. Where the response of the other person is called out and becomes a stimulus to control his action, then he has the meaning of the other person's act in his own experience. That is the general mechanism of what we term "thought," for in order that thought may exist there must be symbols, vocal gestures generally, which arouse in the individual himself the response which he is calling out in the other, and such that from the point of view of that response he is able to direct his later conduct. It involves not only communication in the sense in which birds and animals communicate with each other, but also an arousal in the individual himself of the response which he is calling out in the other individual, a taking of the rôle of the other, a tendency to act as the other person acts. One participates in the same process the other person is carrying out and controls his action with reference to that participation. It is that which constitutes the meaning of an object, namely, the common response in

¹⁰ [For the nature of animal conduct see "Concerning Animal Perception," *Psychological Review*, XIV (1907), 383 ff.]

one's self as well as in the other person, which becomes, in turn, a stimulus to one's self.

If you conceive of the mind as just a sort of conscious substance in which there are certain impressions and states, and hold that one of those states is a universal, then a word becomes purely arbitrary—it is just a symbol." You can then take words and pronounce them backwards, as children do; there seems to be absolute freedom of arrangement and language seems to be an entirely mechanical thing that lies outside of the process of intelligence. If you recognize that language is, however, just a part of a co-operative process, that part which does lead to an adjustment to the response of the other so that the whole activity can go on, then language has only a limited range of arbitrariness. If you are talking to another person you are, perhaps, able to scent the change in his attitude by something that would not strike a third person at all. You may know his mannerism, and that becomes a gesture to you, a part of the response of the individual. There is a certain range possible within the gesture as to what is to serve as the symbol. We may say that a whole set of separate symbols with one meaning are acceptable; but they always are gestures, that is, they are always parts of the act of the individual which reveal what he is going to do to the other person so that when the person utilizes the clue he calls out in himself the attitude of the other. Language is not ever

"Müller attempts to put the values of thought into language; but this attempt is fallacious, because language has those values only as the most effective mechanism of thought merely because it carries the conscious or significant conversation of gestures to its highest and most perfect development. There must be some sort of an implicit attitude (that is, a response which is initiated without being fully carried out) in the organism making the gesture—an attitude which answers to the overt response to the gesture on the part of another individual, and which corresponds to the attitude called forth or aroused in this other organism by the gesture—if thought is to develop in the organism making the gesture. And it is the central nervous system which provides the mechanism for such implicit attitudes or responses.

The identification of language with reason is in one sense an absurdity, but in another sense it is valid. It is valid, namely, in the sense that the process of language brings the total social act into the experience of the given individual as himself involved in the act, and thus makes the process of reason possible. But though the process of reason is and must be carried on in terms of the process of language—in terms, that is, of words—it is not simply constituted by the latter.

MIND

arbitrary in the sense of simply denoting a bare state of consciousness by a word. What particular part of one's act will serve to direct co-operative activity is more or less arbitrary. Different phases of the act may do it. What seems unimportant in itself may be highly important in revealing what the attitude is. In that sense one can speak of the gesture itself as unimportant, but it is of great importance as to what the gesture is going to reveal. This is seen in the difference between the purely intellectual character of the symbol and its emotional character. A poet depends upon the latter; for him language is rich and full of values which we, perhaps, utterly ignore. In trying to express a message in something less than ten words, we merely want to convey a certain meaning, while the poet is dealing with what is really living tissue, the emotional throb in the expression itself. There is, then, a great range in our use of language; but whatever phase of this range is used is a part of a social process, and it is always that part by means of which we affect ourselves as we affect others and mediate the social situation through this understanding of what we are saying. That is fundamental for any language; if it is going to be language one has to understand what he is saying, has to affect himself as he affects others.

II. MEANING 12

We are particularly concerned with intelligence on the human level, that is, with the adjustment to one another of the acts of different human individuals within the human social process; an adjustment which takes place through communication: by gestures on the lower planes of human evolution, and by significant symbols (gestures which possess meanings and are hence more than mere substitute stimuli) on the higher planes of human evolution.

The central factor in such adjustment is "meaning." Meaning arises and lies within the field of the relation between the

¹² [See also "Social Consciousness and the Consciousness of Meaning," *Psychological Bulletin*, VII (1910), 397 ff.; "The Mechanism of Social Consciousness," *Journal of Philosophy*, IX (1912), 401 ff.]

gesture of a given human organism and the subsequent behavior of this organism as indicated to another human organism by that gesture. If that gesture does so indicate to another organism the subsequent (or resultant) behavior of the given organism, then it has meaning. In other words, the relationship between a given stimulus—as a gesture—and the later phases of the social act of which it is an early (if not the initial) phase constitutes the field within which meaning originates and exists. Meaning is thus a development of something objectively there as a relation between certain phases of the social act; it is not a psychical addition to that act and it is not an "idea" as traditionally conceived. A gesture by one organism, the resultant of the social act in which the gesture is an early phase, and the response of another organism to the gesture, are the relata in a triple or threefold relationship of gesture to first organism, of gesture to second organism, and of gesture to subsequent phases of the given social act; and this threefold relationship constitutes the matrix within which meaning arises, or which develops into the field of meaning. The gesture stands for a certain resultant of the social act, a resultant to which there is a definite response on the part of the individuals involved therein; so that meaning is given or stated in terms of response. Meaning is implicit—if not always explicit—in the relationship among the various phases of the social act to which it refers, and out of which it develops. And its development takes place in terms of symbolization at the human evolutionary level.

We have been concerning ourselves, in general, with the social process of experience and behavior as it appears in the calling out by the act of one organism of an adjustment to that act in the responsive act of another organism. We have seen that the nature of meaning is intimately associated with the social process as it thus appears, that meaning involves this three-fold relation among phases of the social act as the context in which it arises and develops: this relation of the gesture of one organism to the adjustive response of another organism (also implicated in the given act), and to the completion of the given act—

a relation such that the second organism responds to the gesture of the first as indicating or referring to the completion of the given act. For example, the chick's response to the cluck of the mother hen is a response to the meaning of the cluck; the cluck refers to danger or to food, as the case may be, and has this meaning or connotation for the chick.

The social process, as involving communication, is in a sense responsible for the appearance of new objects in the field of experience of the individual organisms implicated in that process. Organic processes or responses in a sense constitute the objects to which they are responses; that is to say, any given biological organism is in a way responsible for the existence (in the sense of the meanings they have for it) of the objects to which it physiologically and chemically responds. There would, for example, be no food—no edible objects—if there were no organisms which could digest it. And similarly, the social process in a sense constitutes the objects to which it responds, or to which it is an adjustment. That is to say, objects are constituted in terms of meanings within the social process of experience and behavior through the mutual adjustment to one another of the responses or actions of the various individual organisms involved in that process, an adjustment made possible by means of a communication which takes the form of a conversation of gestures in the earlier evolutionary stages of that process, and of language in its later stages.

Awareness or consciousness is not necessary to the presence of meaning in the process of social experience. A gesture on the part of one organism in any given social act calls out a response on the part of another organism which is directly related to the action of the first organism and its outcome; and a gesture is a symbol of the result of the given social act of one organism (the organism making it) in so far as it is responded to by another organism (thereby also involved in that act) as indicating that result. The mechanism of meaning is thus present in the social act before the emergence of consciousness or awareness of meaning occurs. The act or adjustive response of the second organ-

ism gives to the gesture of the first organism the meaning which it has.

Symbolization constitutes objects not constituted before, objects which would not exist except for the context of social relationships wherein symbolization occurs. Language does not simply symbolize a situation or object which is already there in advance; it makes possible the existence or the appearance of that situation or object, for it is a part of the mechanism whereby that situation or object is created. The social process relates the responses of one individual to the gestures of another, as the meanings of the latter, and is thus responsible for the rise and existence of new objects in the social situation, objects dependent upon or constituted by these meanings. Meaning is thus not to be conceived, fundamentally, as a state of consciousness, or as a set of organized relations existing or subsisting mentally outside the field of experience into which they enter; on the contrary, it should be conceived objectively, as having its existence entirely within this field itself.¹³ The response of one organism to the gesture of another in any given social act is the meaning of that gesture, and also is in a sense responsible for the appearance or coming into being of the new object—or new content of an old object—to which that gesture refers through the outcome of the given social act in which it is an early phase. For, to repeat, objects are in a genuine sense constituted within the social process of experience, by the communication and mutual adjustment of behavior among the individual organisms which are involved in that process and which carry it on. just as in fencing the parry is an interpretation of the thrust, so, in the social act, the adjustive response of one organism to the gesture of another is the interpretation of that gesture by that organism-it is the meaning of that gesture.

At the level of self-consciousness such a gesture becomes a symbol, a significant symbol. But the interpretation of gestures

¹³ Nature has meaning and implication but not indication by symbols. The symbol is distinguishable from the meaning it refers to. Meanings are in nature, but symbols are the heritage of man (1924).

is not, basically, a process going on in a mind as such, or one necessarily involving a mind; it is an external, overt, physical, or physiological process going on in the actual field of social experience. Meaning can be described, accounted for, or stated in terms of symbols or language at its highest and most complex stage of development (the stage it reaches in human experience), but language simply lifts out of the social process a situation which is logically or implicitly there already. The language symbol is simply a significant or conscious gesture.

Two main points are being made here: (1) that the social process, through the communication which it makes possible among the individuals implicated in it, is responsible for the appearance of a whole set of new objects in nature, which exist in relation to it (objects, namely, of "common sense"); and (2) that the gesture of one organism and the adjustive response of another organism to that gesture within any given social act bring out the relationship that exists between the gesture as the beginning of the given act and the completion or resultant of the given act, to which the gesture refers. These are the two basic and complementary logical aspects of the social process.

The result of any given social act is definitely separated from the gesture indicating it by the response of another organism to that gesture, a response which points to the result of that act as indicated by that gesture. This situation is all there—is completely given—on the non-mental, non-conscious level, before the analysis of it on the mental or conscious level. Dewey says that meaning arises through communication. It is to the content to which the social process gives rise that this statement refers; not to bare ideas or printed words as such, but to the social process which has been so largely responsible for the objects constituting the daily environment in which we live: a process in which communication plays the main part. That process can give rise to these new objects in nature only in so far as it makes possible communication among the individual organisms involved in it. And the sense in which it is responsible for their

¹⁴ [See Experience and Nature, chap. v.]

existence—indeed for the existence of the whole world of common-sense objects—is the sense in which it determines, conditions, and makes possible their abstraction from the total structure of events, as identities which are relevant for everyday social behavior; and in that sense, or as having that meaning, they are existent only relative to that behavior. In the same way, at a later, more advanced stage of its development, communication is responsible for the existence of the whole realm of scientific objects as well as identities abstracted from the total structure of events by virtue of their relevance for scientific purposes.

The logical structure of meaning, we have seen, is to be found in the threefold relationship of gesture to adjustive response and to the resultant of the given social act. Response on the part of the second organism to the gesture of the first is the interpretation—and brings out the meaning—of that gesture, as indicating the resultant of the social act which it initiates, and in which both organisms are thus involved. This threefold or triadic relation between gesture, adjustive response, and resultant of the social act which the gesture initiates is the basis of meaning; for the existence of meaning depends upon the fact that the adjustive response of the second organism is directed toward the resultant of the given social act as initiated and indicated by the gesture of the first organism. The basis of meaning is thus objectively there in social conduct, or in nature in its relation to such conduct. Meaning is a content of an object which is dependent upon the relation of an organism or group of organisms to it. It is not essentially or primarily a psychical content (a content of mind or consciousness), for it need not be conscious at all, and is not in fact until significant symbols are evolved in the process of human social experience. Only when it becomes identified with such symbols does meaning become conscious. The meaning of a gesture on the part of one organism is the adjustive response of another organism to it, as indicating the resultant of the social act it initiates, the adjustive response of the second organism being itself directed toward or related to the

completion of that act. In other words, meaning involves a reference of the gesture of one organism to the resultant of the social act it indicates or initiates, as adjustively responded to in this reference by another organism; and the adjustive response of the other organism is the meaning of the gesture.

Gestures may be either conscious (significant) or unconscious (non-significant). The conversation of gestures is not significant below the human level, because it is not conscious, that is, not *self*-conscious (though it is conscious in the sense of involving feelings or sensations). An animal as opposed to a human form, in indicating something to, or bringing out a meaning for, another form, is not at the same time indicating or bringing out the same thing or meaning to or for himself; for he has no mind, no thought, and hence there is no meaning here in the significant or self-conscious sense. A gesture is not significant when the response of another organism to it does not indicate to the organism making it what the other organism is responding to.¹⁵

Much subtlety has been wasted on the problem of the meaning of meaning. It is not necessary, in attempting to solve this problem, to have recourse to psychical states, for the nature of meaning, as we have seen, is found to be implicit in the structure of the social act, implicit in the relations among its three basic individual components: namely, in the triadic relation of a gesture of one individual, a response to that gesture by a second individual, and completion of the given social act initiated by the gesture of the first individual. And the fact that the nature of

¹⁵ There are two characters which belong to that which we term "meanings," one is participation and the other is communicability. Meaning can arise only in so far as some phase of the act which the individual is arousing in the other can be aroused in himself. There is always to this extent participation. And the result of this participation is communicability, i.e., the individual can indicate to himself what he indicates to others. There is communication without significance where the gesture of the individual calls out the response in the other without calling out or tending to call out the same response in the individual himself. Significance from the standpoint of the observer may be said to be present in the gesture which calls out the appropriate response in the other or others within a co-operative act, but it does not become significant to the individuals who are involved in the act unless the tendency to the act is aroused within the individual who makes it, and unless the individual who is directly affected by the gesture puts himself in the attitude of the individual who makes the gesture (MS).

meaning is thus found to be implicit in the structure of the social act provides additional emphasis upon the necessity, in social psychology, of starting off with the initial assumption of an ongoing social process of experience and behavior in which any given group of human individuals is involved, and upon which the existence and development of their minds, selves, and self-consciousness depend.

12. UNIVERSALITY

Our experience does recognize or find that which is typical, and this is as essential for an adequate theory of meaning as is the element of particularity. There are not only facts of red, for example, but there is in the experience a red which is identical so far as experience has been concerned with some other red. One can isolate the red just as a sensation, and as such it is passing; but in addition to that passing character there is something that we call universal, something that gives a meaning to it. The event is a color, it is red, it is a certain kind of red—and that is something which does not have a passing character in the statement of color itself. If we go over from particular contents of this sort to other objects, such as a chair, a tree, a dog, we find there something that is distinguishable from the particular object, plant, or animal that we have about us. What we recognize in a dog is not the group of sensuous elements, but rather the character of being a dog, and unless we have some reason for interest in this particular dog, some problem as to its ownership or its likelihood to bite us, our relationship to the animal is to a universal—it is just a dog. If a person asks you what you saw you reply that it was a dog. You would not know the color of the dog; it was just a dog in general that you saw.

There is a meaning here that is given in the experience itself, and it is this meaning or universal character with which a behavioristic psychology is supposed to have difficulty in dealing. When there is a response to such an animal as a dog there is a response of recognition as well as a response toward an object in the landscape; and this response of recognition is something