NONVERBAL COMMUNICATION CONSISTS MAINLY OF FACIAL
EXPRESSIONS, GESTURES AND BODY MOVEMENTS, AND VOCAL
INTONATIONS AND INFLECTIONS. IN ORDER TO PROVIDE A MODEL FOR
OBSERVING TEACHER NONVERBAL CLASSROOM ACTIVITY, 12 CATEGORIES
WERE DEVELOPED THROUGH THE USE OF TWO DIMENSIONS--ENCOURAGING
AND INHIBITING TO TEACHER INITIATED AND TEACHER RESPONSE.
THREE CATEGORIES APPLY TO EACH OF THE FOUR PAIRS OF LOCATIONS
ON THESE DIMENSIONS. BEHAVIOR THAT IS BOTH ENCOURAGING AND
TEACHER INITIATED SHOWS (1) CONGRUITY BETWEEN VERBAL INTENT
AND NONVERBAL REFERENTS, (2) RESPONSIVENESS TO FEEDBACK, AND
(3) POSITIVE AFFECTIVITY. AN ENCOURAGING TEACHER RESPONSE IS
(1) ATTENTIVE AND LISTENS TO OTHERS, (2) FACILITATIVE BY
BEING RECEPTIVE TO OTHERS, AND (3) SUPPORTIVE OF PUPILS OR
PUPIL BEHAVIOR. INHIBITING TEACHER-INITIATED BEHAVIOR SHOWS
(1) DISCREPANCY BETWEEN VERBAL INTENT AND NONVERBAL
REFERENTS, (2) UNRESPONSIVENESS TO FEEDBACK, AND (3) NEGATIVE
AFFECTIVITY. INHIBITING RESPONSE BEHAVIOR IS (1) INATTENTIVE
TO OTHERS, (2) UNRECEPTIVE TO OTHERS, AND (3) DISAPPROVING OF
PUPIL BEHAVIOR. INTENSIVE TRAINING OF OBSERVERS IS NECESSARY
TO ACHIEVE SENSITIVITY AND RELIABILITY. AN ALTERNATIVE TO THE
CATEGORY APPROACH IS THE WRITING OF NARRATIVE DESCRIPTIONS OF
TEACHER-PUPIL INTERACTION, WITH EACH COMMUNICATIVE EVENT IN A
SITUATION DISCUSSED SEPARATELY. THE USEFULNESS OF TAPE
RECORDINGS FOR BOTH METHODS IS NOTED. THIS PAPER WAS PREPARED
FOR PRESENTATION AT THE AACTE WORKSHOP, 1967. (LC)
NONVERBAL COMMUNICATION
IN THE CLASSROOM

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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by

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Prepared for AACTE Workshop - 1967
Nonverbal Communication
in the Classroom

Introduction

In studies of teacher behavior we have data which give global glimpses of teacher behavior when we identify teachers as domintive or integrative, teacher-centered or learner-centered, direct or indirect, or x, y, z teachers. Such overarching rubrics are helpful to the researcher and to the student of teacher behavior in describing the overall pedagogical performances of teachers.

An assumption supporting many of these studies of teacher behavior has been that the communication process in a classroom represents a major datum for research activity. Much of this effort has centered on the amount, kind, and direction of verbal communication with little attention devoted to the nonverbal dimension. Major reasons for a lack of interest in nonverbal messages have related to observation difficulties, to the elusiveness of nonverbal messages, and to the subordinate function of the nonverbal to the verbal in teaching and learning. Analyses of interaction in the classroom have highlighted the importance of teacher influence on pupil behavior, learning, and attitude by associating influence with the teacher's verbal behavior. Interaction must be understood as a process of influence, but it must include the nonverbal as well as the verbal.

During interaction (teacher-pupil) (pupil-pupil) all signs, actions, and events have communicative consequences because such messages provide information. By our very nature as human beings we are compelled to communicate: to send and receive messages. We are constantly on the alert to discover relevant data which serves the function of lessening our confusion and of increasing our understanding. Much information in the classroom is in the form of nonverbal messages.

While we may properly be interested in what the teacher says, does, and feels in the classroom, the more profound pedagogical problem is how the teacher says what he has to say, how he behaves, and how he expresses feelings about self and content. How the teacher communicates his perceptions, motivations, and feelings can be identified with vocal tones, facial expressions, gestures, and actions. Such expressions determine in a large measure how pupils perceive the teacher when he is either talking or silent. If the teacher fails to understand what meanings his message-sending conveys to pupils, he will often not be able to comprehend their responses to the context and to him.

In highlighting the significance of nonverbal communication, the intent is not to direct our attention toward an analysis of nonverbal cues that purportedly express hidden or secret meanings. An emphasis on nonverbal communication is not an effort to become extremely sensitive or fussy over the ordinary behaviors of teachers. Nor is the purpose to begin inspecting the subterranean caverns and nooks of meaning that may lurk behind every action. Rather the purpose is simply to call attention to the interplay of nonverbal messages between teachers and pupils because such messages do, in fact influence the course of classroom interaction.
Anthropologists, sociologists, and psychologists have gone beyond the obvious explanations of the explicit culture, expected role performances, and nomothetic behaviors to explain the meaning of human activity. A graphic illustration of this point can be delineated by the following model:

<table>
<thead>
<tr>
<th>Anthropologist</th>
<th>Sociologist</th>
<th>Psychologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural behaviors</td>
<td>Role behaviors</td>
<td>Personal behaviors</td>
</tr>
<tr>
<td>Acculturation</td>
<td>Interaction</td>
<td>Personality</td>
</tr>
<tr>
<td>Implicit meaning</td>
<td>Empathic meaning</td>
<td>Inferred meaning</td>
</tr>
</tbody>
</table>

A cultural view of the teacher's nonverbal influence in the classroom is implicit in the research efforts of many anthropologists. Contemporary anthropologists agree that an ability to determine an individual's feeling state by looking at facial expressions, observing gestures, or listening to the sound of a voice is a learned ability. In fact it is accepted that any such ability is not inherited or innate. Indeed the evidence suggests that nonverbal languages of behavior vary according to different cultures and subcultures.

A sociological view of nonverbal communication is related to an analysis of role behaviors and performances. Terms such as expressive equipment, model behaviors, attitude formation, and empathic understanding can be associated with the sociologist's concern with the significance of nonverbal communication.

The psychological view of a teacher's nonverbal influence is obviously connected to the emotional and affective content of interaction. That is, expressive acts suggest a promissory character of the teacher's selfhood. Expressive behaviors function in teaching because nonverbal signs are assumed by pupils to represent the psychological state of the teacher. Especially relevant to the psychological dimension is that by interpreting and inferring from nonverbal expressions pupils obtain the full import of a teacher's perceptions, motivations, and feelings.

Communication Process: Verbal and Nonverbal

Most definitions or models of the communication process are abstract. Explanations range from Aristotle's view to the Shannon-Weaver model which describes electronic communication, to the Ruesch-Bateson description which includes anything to which persons can assign meaning. However, the four major ingredients that researchers agree are common to human communication are: (1) sender, (2) message, (3) channel, (4) receiver.

A sender of communication has ideas, interests, information, needs, and sentiments which he attempts to encode in the form of messages. Given a sender who sends messages, a channel is necessary. The channel is the carrier of messages, the medium, or the vehicular means for transmitting messages. The communication channels are the verbal and nonverbal skills possessed by the sender and the sensory skills possessed by the receiver. Once the message is decoded by the receiver, it has reached a destination which can be considered the response, interpretation, or meaning the receiver assigns to the message. If the receiver answers, the communication cycle begins anew.
A requirement of communication is that the symbols a sender chooses from his repertoire must satisfy his own peculiar requirements and meaning, and must evoke a similar meaning in the receiver. Communication is successful when the sender and receiver agree on the interpretation that should be put on the message. Perfect communication is rarely achieved because words are at best mediating symbols between the expressed intent of an inner state of being and the achieved effect they elicit in others. Vocal tones, facial expressions, and body gestures are all in themselves remarkable communicative means for codifying more precise meanings and for changing the dictionary definition of words.

Although an exchange of ideas may be almost purely at the cognitive level, communication between two persons usually carries a freightage of manifold meanings, for emotions, attitudes, and feelings are indeed communicated. A failure to interpret or to be aware of the many affective implications of ordinary speech (nonverbal as well as verbal) constantly remains a grave handicap and a profound difficulty for truly understanding the impact of a person's communication on others.

Although the common bases of nonverbal message-sending viz., facial expressions, vocal tones, and bodily movements may be listed and abstractly recognized, it may be impossible in a conscious sense to identify the exact expressive cues to which one is responding. Interaction on a nonsymbolic level operates in a different way than that relegated to the symbolic level. The nonsymbolic is distinguished by spontaneity and immediate response to nonverbal actions. It seems that individuals are generally unaware of this unconscious response simply because it does occur spontaneously, requiring no mediating interpretation. Nonverbal expressions are particularly efficient for creating an impression since they form the channels for the disclosure of feeling. Such emotions and feelings stem from the unwitting, unconscious responses that an individual makes to the nonverbal expressions of others.

Nonverbal communication is often referred to as a silent language. Individuals through both conventional means of gesture-making and idiosyncratic expressions send messages that are transmitted silently. There seems to be an understanding of another without any conscious awareness. Nonverbal channels are often difficult to identify since what occurs communicatively is differentiated in terms of each individual's reactions and personalized interpretation. In lay language, such a process is referred to as being "in-tune" with another. There appears to be no conscious awareness of nonverbal messages, but there is a validation of the most personal kind.

We are not so naive that we believe that all nonverbal expressions convey the actual feelings and attitudes of the person. Indeed, nonverbal behaviors may be calculatedly managed by both senders and receivers to form impressions of a self, and to influence the perceptions of others. When interacting with others, an individual becomes quite adroit at managing his expressive behavior to achieve a desired effect. He seems to understand the serious consequences of his expressive behavior, just because he realizes that it is the very focus of others' observations, and subsequent perceptions. Thus an individual will engineer expressions and calculatingly convey impressions that are in his own interests. More importantly, even though an individual is managing his expressive behavior to foster an impression, he may be relatively aware or unaware that he is doing so.
To check on the fidelity of verbal statements, persons read the meanings behind nonverbal expressions, for these expressions are heavily relied upon to reveal the authenticity, and genuineness of a message communicated by the sender. For example, a teacher may verbally utter an approval of some seatwork a pupil is doing, yet the pupil may pick up cues which suggest disapproval. Although a teacher may verbally insist with the most persuasive language that he holds a certain belief, a pupil will continually check the teacher's nonverbal expressions to see if a contradiction exists.

Throughout the course of a teaching day, a teacher may believe that he is communicating, "I enjoy this subject," "Aren't these ideas interesting?" "I like you," when all the time the pupils in the classroom are understanding different meanings. That is, a discrepancy exists between what the teacher says and what the teacher expresses. In effect, pupils will judge the intent or meaning of a teacher's communication by attending to the expressive aspects of his behavior as a check on the verbal. If a difference exists between the two expressions, the pupil will most often accept the nonverbal as representing the authentic message.

The perceptions and meanings assigned to a teacher's nonverbal behavior are paramount considerations for understanding the communicative process in a classroom because they have significant implications for teacher-pupil relationships. Teachers do need to understand that communication does not consist solely in the transmission of words.

The interaction of being understood and of trying to understand others is fraught with difficulties: discrepancies or incongruities can occur between verbal intent and nonverbal referents. Teachers vary in their ability or inclination to facilitate the urgencies of communication, for they are often unaware of the nonverbal messages they express and the consequences that follow. Communication breaks down when it is believed that meanings are in words, rather than in people. "I told him," is a favorite expression used by teachers to convey the view that meanings are verbal messages.

The ability to respond appropriately to the influence and effect of one's message-sending when communicating with others appears to be a learned ability. Teachers need to be more aware of the connection between the messages they communicate and the consequences that follow. Teachers also need to capitalize on the nonverbal behavioral cues expressed by the pupil as keys to his clarity and understanding. How a teacher communicates nonverbally will determine how a pupil interprets the meanings of messages, but a response is also determined by the perceptual state of the pupil.

Teaching is a highly personal matter and prospective teachers need to face themselves as well as to acquire pedagogical skills. The need to accept, modify, or eliminate nonverbal behaviors is a relevant dimension for inquiry in teaching. While nonverbal communication in the classroom is less amenable to systematic objective inquiry than verbal communication, the meanings pupils ascribe or impute to a teacher's nonverbal messages have significance for teaching and learning.

In order to inquiry systematically into the nonverbal expressions of teachers a model or paradigm is necessary. Such a model would need to identify the relevant dimensions of nonverbal interaction which can be supported by either theory or research. The presentation of the model
that follows does in fact represent the major dimensions of teacher non-verbal activity in a classroom, and can be supported theoretically and empirically.

Model of Nonverbal Communication

The teacher's nonverbal behavior constitutes a model which ranges from encouraging to inhibiting communication. Viewing a teacher's nonverbal communication as an encouraging to inhibiting continuum has the advantage of being related to the communication process and of being indicative of subsequent interpersonal relationships between a teacher and pupils. The model is also useful in regarding the potential influence and consequence of a teacher's nonverbal behavior with pupils. The conceptualization of encouraging to inhibiting reflects a process point of view: an action system of nonverbal behaviors that exist in dynamic relationship to the continuing influence of the teacher and pupil in interaction with each other.

The model represents six dimensions of nonverbal activity. Nonverbal communication that is encouraging has these six characteristics: (1) congruity between verbal intent and nonverbal referents, (2) responsive to feedback (3) positive affectivity, (4) attentive and listens to others, (5) facilitative by being receptive to others, (6) supportive of pupils or pupil behavior. Nonverbal communication that is inhibiting has these six characteristics: (1) discrepancy between verbal intent and nonverbal referents, (2) unresponsive to feedback, (3) negative affectivity, (4) inattentive to others, (5) unreceptive to others, (6) disapproving of pupil behavior.

The model can be schematized as follows -- the left side of the model is communication that is teacher initiated and the right side is viewed as teacher response.

<table>
<thead>
<tr>
<th>Teacher Initiated</th>
<th>Teacher Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congruity-Incongruity</td>
<td>Attentive-Inattentive</td>
</tr>
<tr>
<td>Responsive-Unresponsive</td>
<td>Facilitating-Unreceptive</td>
</tr>
<tr>
<td>Positive-Negative Affectivity</td>
<td>Supportive-Disapproval</td>
</tr>
</tbody>
</table>

**Congruous-Incongruous**---This dimension refers to the congruity or incongruity that exists between the voice, gesture, and actions of the teacher and the verbal content communicated by the teacher. Congruity occurs when the teacher's verbal message is supported and reinforced by nonverbal behaviors to the extent that there is consonance between the verbal intent and nonverbal referents. A mixed message or incongruity exists when there is a discrepancy or contradiction between the verbal message and nonverbal information.

**Responsiveness-Unresponsiveness**---A responsive act relates to modifications in the teacher's behavior as a result of feedback. Verbal feedback occurs when the teacher hears himself talking, but nonverbal feedback is based on the reactions and responses of pupils to the teacher. A responsive act occurs when the teacher alters the pace or direction of a lesson as a result of a detection of misunderstandings or feelings by pupils. Operating on the basis of pupil behavior the teacher uses feedback data to 'feedforward' with changed information. Unresponsive acts are an ignoring or insensitivity to the behavioral responses of pupils.
Positive-Negative Affectivity---Positive nonverbal expressions convey warm feelings; high regard; cheerful enthusiasm; displays of liking and acceptance. Negative nonverbal expressions convey aloofness, coldness, low regard, indifference, or display of rejection.

Attentive-Inattentive---Nonverbal expressions that imply a willingness to listen with patience and interest to pupil talk. By paying attention, the teacher exhibits an interest in pupil. By being inattentive or disinterested, the teacher inhibits the flow of communication from pupils, and neither sustains nor encourages sharing information or expressing ideas.

Facilitating-Unreceptive---The teacher is facilitating when acting to perform a function which helps a pupil, usually in response to a detection of pupil needs, urgencies, or problems. This may be in response to a pupil request or a nurturant act. An unreceptive act openly ignores a pupil when a response would ordinarily be expected; may ignore a question or request; or may be tangential response.

Supportive-Disapproving---Expressions that imply supportive pupil behavior or pupil interactions; manifest approval; being strongly pleased; exhibits encouragement; connotes enjoyment or praise. Disapproving expressions convey dissatisfaction, discouragement, disparagement, or punishment. The expression may be one of frowning, scowling, or threatening glances.

Observer Observations

The six dimensions that constitute the foregoing model possess several advantages. The dimensions require observers to look for nonverbal cues and specified aspects of nonverbal communication. During training sessions for observers, in a study conducted by the writer, facial expressions, gestures and body movements, and vocal intonations and inflections served as nonverbal behavioral referents. Two conditions are essential in achieving reliability. First, observers have to be willing to undergo a period of intensive training, and they have to develop a sensitivity to the observance of nonverbal cues. Secondly, observer agreement as to the meaning of nonverbal messages has to be achieved.

Two observational approaches have been used by the writer for gathering descriptive nonverbal data. One approach was to use the six dimensions of the nonverbal model as a category system, which suggests the use of twelve categories. The second approach was to write narrative descriptions of teacher-pupil interaction, much as a novelist would write. At the present time the writer is engaged in an exploratory effort to combine the two approaches by tallying in categories and by describing narratively what happened when the category occurred. Another fruitful approach that has also been undertaken has been to have two observers: one to record the verbal interaction and the other to record the nonverbal while simultaneously observing the same teacher. Even though a combination of tallying in categories and narrative descriptions appears promising, they shall be presented separately since they were initially developed in that fashion.
Tallying in Categories

Observers are required to make inferences concerning the influence and instrumental effect of the teacher's nonverbal behavior on a pupil or pupils. The instrumental character of the nonverbal message on subsequent pupil behavior is often visible and apparent to the observer, requiring a low-level inference; however, some teacher acts have to be inferred from what the observer believes about the emotional and mental state of a pupil which requires a high-level inference. Observers note the occurrence of a nonverbal message relating to the encouraging-inhibiting continuum simply by recording the number that represents the category for that communicative action in a vertical column. The process of recording in categories requires observers to make inferences and involves a sensitivity to nuances, inflections, and subtle cues. Three kinds of nonverbal behaviors are particularly noted: facial expressions, gestures and body movements, and vocal intonations and inflections. As the influence and direction of nonverbal messages conveyed by the teacher changes, differences appear in the recorded categories.

The cue for categorization to begin is contingent on a two-way communication process. No arbitrary time limit, such as every three seconds or ten seconds, is set for categorizing; observers rely on the unfolding of natural events in the contextual situation.

Nonverbal expressions conceived as isolated entities can be misleading. For example, a teacher can frown at a pupil, but the pupil may respond by smiling back and by generally indicating that he understands. In such an instance, making a decision about an appropriate category can be difficult. Apparently such a communicative event is neither inhibiting, nor negative; it may have been encouraging. Usually in such instances observers should code the communicative act as pro forma.

Pro forma is coded as PF when a communicative act is a matter of form. The nature of the act, whether it is a facial expression, action, or vocal language, conveys little or no encouraging or inhibiting communicative significance in the contextual situation.

When the model is translated into the category system it appears as follows:

<table>
<thead>
<tr>
<th>Encouraging</th>
<th>Inhibiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Initiated</td>
<td>Teacher Initiated</td>
</tr>
<tr>
<td>1. Positive Affectivity</td>
<td>7. Negative Affectivity</td>
</tr>
<tr>
<td>2. Responsiveness</td>
<td>8. Unresponsive</td>
</tr>
<tr>
<td>3. Congruent</td>
<td>9. Incongruent</td>
</tr>
<tr>
<td>4. Attentive</td>
<td>10. Inattentive</td>
</tr>
<tr>
<td>Teacher Response</td>
<td>Teacher Response</td>
</tr>
<tr>
<td>5. Facilitating</td>
<td>11. Unreceptive</td>
</tr>
</tbody>
</table>

Teacher initiated communication, which comprises category numbers 1, 2, 3, 7, 8, 9 is associated with the role of the teacher as a sender. The categories are associated with various points in time when the teacher has initiated contact with a pupil or pupils. These categories are related to self-initiated contacts by the teacher toward pupils and occur most frequently when the teacher is verbally talking to pupils. The teacher
response categories (4,5,6,10,11,12) relate to the nature of the teacher's response to a pupil or pupils, and occur most frequently when the pupil is talking, is seeking help or attention.

Observing and recording in categories is recognized as a difficult undertaking, for confounding factors enter into the process of observing. The influence of verbal communication, relative positions of the observers, and the differing interpretations of teacher nonverbal behavior by observers mitigate against the absolute certainty of obtaining precise information about the influence of teacher nonverbal communication. The approach of tallying in categories appears to be the most fruitful when analyzing teacher and pupil behavior on video tapes; for the tapes can be used several times.

Narrative Descriptions

Observers translate their observations of the teacher into the form of observation records which are descriptions of teacher nonverbal communication. Each observation record includes a narrative description of the obvious or apparent overt behavioral actions of participants and the nonverbal messages occurring in the situation. Lay language is largely employed.

In writing narrative descriptions the following ground rules are applicable to the observer. They are specifically listed because of their relevance to observer training, accuracy of the records, and significant relationship to reliable and consistent results:

1. At the beginning of each observation describe the total situation that directly confronts the observer.
2. Report the contextual situation of the teacher's behavior.
3. Continue to focus upon the behavior of the teacher.
4. Describe the "how" of everything the teacher does.
5. Describe the "how" of everything done by any pupil who communicates with the teacher.
6. Describe communicative acts as fully as possible.
7. Put inferences in parentheses, not in descriptions.
8. Write an executed behavior in a simple sentence, not in an elaborate, complex sentence.

For this observational procedure, communicative events are recognized as episodes. An episode is defined as a communicative event in a situation. The beginning and ending of an episode are the boundaries which separate the naturally occurring sequence of a communicative event. During the process of writing, the observers divide communicative events into episodes by beginning a new paragraph when a different communicative event becomes evident. When observing, however, all of the narrative account cannot be written at the time. Considerable reconstruction of notes must be undertaken after the observation for a fuller description of the behaviors. A favorite means has been to have the observer use his notes to talk into a tape recorder immediately after the observation. A script from the tape is edited as soon as possible by the observer.

The narrative descriptions may not yield the exact meanings the teacher intended while communicating. It is extremely difficult for an observer to distinguish between what is consciously intended behavior and what is ungovernable. Whether a teacher is aware of his influence is never the
question, but rather whether the behavior and nonverbal expressions make a difference in terms of consequences. The relevant context of behavior includes by definition the effects of nonverbal messages rather than conscious awareness or unintentional mishaps; a distinction between intent or unintent is less important than the meaning of the context of previous events and subsequent episodes. The procedure requires a heavy use of verbatim sentences which have been uttered verbally by teachers and pupils, and in that sense does not represent a record of pure nonverbal behaviors. It has been recognized that verbal messages between teacher and pupils must serve as the context for the nonverbal. To be sure, the converse is also true.

Problems and Promises

The difficulty of developing a wholly adequate observational procedure for describing teacher nonverbal communication has been the strongest conclusion that has resulted from the present writer's empirical work. Much of this effort has in fact been exploratory. It is unlikely that either of the foregoing observational procedures measures nonverbal communication exclusively. While observational procedures that provide faultless data for verbal interaction have not been developed, it must be admitted that greater advances have been made with the verbal than the nonverbal. There is currently no observational technique that provides valid data regarding the communicative effects of pure nonverbal expressions independent of the verbal. The position of this writer's efforts has been simply that any analysis of teacher-pupil interaction must include the nonverbal as well as the verbal.

Notwithstanding the problems, it is believed that through the continued study of nonverbal behavior, teachers can sharpen, alter, and modify the attitudes and meanings which they transmit nonverbally to pupils. Teachers do manifest nonverbal expressions and behaviors of an encouraging and inhibiting nature. Can teachers become aware of the effects and consequences of their nonverbal messages in teacher-pupil interactions? Teachers find that the elusiveness of understanding the meaning of their own nonverbal messages is greater than was first imagined and that they need help. Moreover, teachers have been aided in responding appropriately to the nonverbal messages of pupils. The advantage of including the nonverbal is clear because it raises two major questions for the teacher: What does my behavior mean to pupils? How are pupils interpreting my behavior?


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