

Metaphors of the Body in Gestural Languages

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The experience of the body, which all speaking subjects share, is at the origin of many corporeal metaphors and figurative expressions which are laced throughout all of our productions of language, and which reveal the diverse representations of the body as elaborated within linguistic communities. For instance, when the French say that someone “*does nothing with his ten fingers,*” to signify his inactivity or laziness, this expression reveals a representation of the hand, which is viewed as “THE SEAT OF ACTIVITY.”

Pushing this approach even further, one can consider experience of the body and our representations of it to be at the origin of the development of human language. For example, a grammatical clause composed of a subject, a verb, and an object, in a way reflects *the structure of human action* – which implies an “actor”: (the part of the body performing the action) and the action produced, which may be exercised upon an object, such as a hand raising to pick a fruit.

In his work, *The Body in the Mind*,¹ Mark Johnson demonstrates the extent to which our mental representations are linked to our corporeal earthly existence. This approach leads him to state that metaphors are predominant in our thought processes and hence in language. Far from being a minor issue, metaphor is “a crucial issue which possibly provides the key to the theory of comprehension.”²

Gestural languages seem to offer a unique opportunity to study corporeal metaphors in the development of language. It is deaf people to whom we owe the existence of these gestural languages. These people, deprived of the auditory-phonetic feedback which characterizes spoken languages, have had to resort to languages that function on a visual-gestural level. Indeed, these are com-

pletely natural languages. As with all languages, they vary according to the communities that speak them. Contrary to popular belief, there does not exist a universal gestural language – the deaf French have a gestural language which is different from that of the deaf British or Americans, and these languages are known by different names – “French Sign Language,” “British Sign Language,” “American Sign Language,” etc. And, as with all languages, these are not the result of invention by any one specific person. The Abbé de l’Épée never was, contrary to popular belief, the inventor of the gestural language of the deaf French. Through his educational activities, he merely enabled these deaf people to come together and experience greater opportunities for exchange among themselves, which greatly encouraged the development of their mode of gestural communication.

Gestural languages have the special feature of not using what F. de Saussure called “acoustic images.” De Saussure believed that the vocal nature of the linguistic sign was “secondary to the issue of language” – “... men could also have just as well chosen gesture.”³ This is indeed what has occurred for the people deprived of hearing: they have been able to develop a form of speech in the gestural modality, meant to be seen and not heard.

Gesture is not absent from vocal languages. Sound is indeed produced by specific gestures made by the so-called “speech-organs”; but these “gestures” are not meant to be seen. They are summed up, in a way, in the sounds they produce. In vocal languages, different “acoustic images” such as the words “cheval,” “pferd,” and “horse,” designate the same reality. In the gestural languages there are also different “gestural images” that account for the same reality. Thus, “horse” is shown differently in the gestural modality according to the image used in a specific gestural language: French Sign Language, British Sign Language, etc.

The Iconic Dimension of Gestural Languages

Gestural languages are indeed “producers of images” in the true sense of the term. And this characteristic always holds a great fascination for those who happen to discover such languages.

The sign is, in a way, “closer to the signified thing,” as Ombredanne put it in his study of the “language by gestures” of “deaf-mutes” in 1933.⁴ Indeed, the visual images encourage the iconic dimension of the language.

Our research concerning the manner in which signs are produced in a gestural language, such as in French Sign Language, has shown that these signs are developed through symbolization processes identical to those which lead to “figures of signification,” or tropes, which are known as metaphor, metonymy and synecdoche. These are not associations between the different meanings of words already in existence, but associations between signifiers and referents, associations that are *at the origin* of the production of the gestural sign and which are *responsible* for its symbolic dimension.

So, to designate the object “horse,” the British sign adopts, from the code of recognition of this object, features relative to the movement that can be made with this object. This process entails a *metonymic* representation: the gesture of “holding the reins” involves an existential link with the object “horse.” As for the French sign, it shows, at a unique location on the body, a figurative form indicated by the index fingers. The location of the index fingers on the forehead gives an evocative force to the image thus produced – by a *metonymy* of place, the index fingers strongly suggest ears. By *synecdochic* representation – the part representing the whole – the ears in turn give an image of the referent “horse.”

But how are so-called “abstract” signs developed? The referents have no visual image from which could be taken any such pertinent features of an established code of recognition. How can one account for the symbolic dimension of such signs? And how can their mode of creation be discovered?

“Abstract” Signs Reveal Body-Related Representations

Using a precise example, the sign signifying “laziness,” we will show how such signs always use figures of signification; but, in this case, they are not based on visual features but on *representations*

linked to our corporeal experience. And this brings us to the heart of the matter.

From a very precise location on the body, namely at the center of the palm of one of the hands, the thumb and index finger of the other hand *trace* the form of a thin line, perpendicular to the palm, evoking the idea of a hair. The sign *thus shows* a hair growing at the center of the palm, and the length is indicated by the distance that the thumb and index finger move away from the hand. This sign is a clear illustration of the popular expression: "*avoir un poil dans la main,*" (to have a hair growing in the hand) an expression that draws its sense from an intricate combination of tropes, which we will now analyze.

One of the many definitions of the word "hand," listed by the analogical Robert dictionary among its functions, is the following – "THE HAND used to handle an instrument, a tool, etc., to manufacture, or to do something, to work: 'The hand is made to do.'"⁵ This *metonymic* definition leads by *metaphor* to the following: "THE HAND represents the active part of the being, its efforts or its individual abilities – '... after having passed through the hands of a rude teacher ... he was given into the care of a good and strong professor ...'"⁶ And, a generalization of the metaphor then creates the following definition: "THE HAND symbolizes activity, action – 'to have free hands,' liberty, permission to act as one pleases."

The expression "to have a hair growing in the hand" gives the image of a hand rendered incapable of action by the growth of a hair that can become extremely thick if one believes the popular expression: "He has a hair in his hand he uses as a cane," signifying an extreme state of laziness, avoiding all activity and work. Popular expressions typically use tropic means to otherwise express, with the force of images, what common words say, even be they abstract.

We have discovered that these very procedures are available to gestural languages for the purpose of developing abstract signs. But it seems that they have to come into play systematically, and not simply as a marginal means of or in contravention to common usage.

There is also another sign, synonymous with the preceding sign, which consists of showing two dangling hands at the end of the forearms, which are held horizontally and move downward

twice. Only the movement of the arms causes the hands to move. They themselves are completely idle. The sign is also marked by an apathetic facial expression.

By showing two inert hands, the sign evokes the image of laziness through one of the metaphoric senses of the word "hand" that we just presented, namely *action* – the hands, ostensibly indicated as completely passive, lead to the opposing idea, i.e., *inactivity* and laziness. The tropes implemented are the same as those at the root of the popular French expression: "To do nothing with one's ten fingers," of which the sign gives a perfect illustration.

In 1865, in the *Dictionnaire du langage des signes en dessins* an illustrated dictionary of sign language by the Abbé Lambert,⁷ the sign for this same concept is described as: "cross the two arms on the chest and produce an analogical expression on the face." Here, the arms are shown to be deliberately idle.

Now, one of the definitions of the word "arm" in the Robert dictionary is that of "manual work" attested in the French expression "To live by one's arms alone." That leads to the metaphoric sense of "occupational activity" as in the following example: "The work had stopped. He who had only his arms, his daily work for his daily bread, went looking for work ..." wrote Michelet in 1860 in *Histoire de la Révolution française* (History of the French Revolution). The image given by the arms at rest thus leads to an opposite sense, that of *inactivity*, as in the expression "to cross one's arms," of which the sign is a perfect illustration.

As we have seen, these three synonymous abstract signs are created through symbolic procedures that employ *particular parts of the body* that one also finds highlighted in idiomatic and popular expressions which convey the same concept, and the three signs for which each give a striking image. This example shows how an abstract sign in French Sign Language can be developed by using *representations of the body* which are at the origin of metaphoric concepts and responsible for the symbolic dimension of such signs.

All gestural signs are built around the following parameters: their *placement* in relation to the body, their *movement*, the *configuration* of the hand(s), and the *expression on the face*. We will now show how each of these parameters can carry metaphoric repre-

sentations of our corporeal experience, starting with the parameter of placement. This parameter appears, at first, to be the most revealing for our purposes. Signs can be located at many places on the body. We only analyze two placements here: the forehead and the torso.

The Placement of Signs at the Forehead

We have previously shown how a concrete sign, the sign "HORSE"⁸ is located at the forehead. But this placement is very often used for abstract signs related to *mental activity*, as the following: TO THINK, TO THINK ABOUT, TO UNDERSTAND, TO KNOW, TO BELIEVE THEORY, SCHOLAR, TO BE CORRECT, TO KNOW HOW, TO HAVE AN IDEA, TO IMAGINE, INTELLIGENT, IDIOT, TO REMEMBER, TO RECALL, TO FORGET, TO DREAM, HUMANITY, TO CHANGE ONE'S MIND, CAPRICIOUS, STUPID, FAMOUS, DIFFICULT, TO FOREWARN, TO INFORM, TO INVENT ...

Through their placement, such signs lead to the idea of the forehead as the SEAT OF THOUGHT according to a metaphoric concept that is also found at work in French expressions, such as "un front soucieux" (a worried brow), and "un front serein" (a serene brow), as well as in a gesture made by hearing persons that consists of striking the forehead with the extended index finger to indicate a sudden inspiration.

We will now describe two signs from this list, TO UNDERSTAND and TO FORGET, to show how the other parameters of formation are also loaded with body-related representations. The sign TO UNDERSTAND is made with the fingers of one hand engaged in a grasping movement (the thumb, index, and middle fingers are in contact at their tips) while the hand *comes in contact* with the forehead. Conversely, the sign TO FORGET is made with an opposite movement: one of the hands, curved (the four fingers in contact with the thumb) against the forehead, *leaves the forehead* in an opening movement of all of the fingers. One can see how the parameter of *movement* also carries representations of the body.

By its *orientation* – going towards the forehead or, on the contrary, leaving it – the movement indicates that THE SEAT OF THOUGHT is seen as A CONTAINER THAT CAN BE FILLED OR EMPTIED.

This again is a metaphoric concept found in such expressions as “avoir la tête *vide*” (having an *empty* head, “empty-headed”) or “avoir la tête *pleine*” (having a *full* head, “full of thoughts”).

Moreover, the way that the hand makes a *movement of grasping* for the sign TO UNDERSTAND (while it opens for the sign TO FORGET) gives, to something that does not have a physical existence – the content of comprehension – a physical reality that can be grasped. This same metaphor is found in the French word “comprendre” (to understand), which comes from a Latin word signifying “to grasp”. This metaphor is found in the following expressions: “Je ne *saisis* pas ce raisonnement” (I do not *grasp* this reasoning), “Cette idée m’a *échappé*” (This idea has *escaped* me).” (This last expression, in fact, evokes a movement similar to that of the sign TO FORGET).

According to the terminology of G. Lakoff and M. Johnson,⁹ these are ontologic metaphors that lead one to perceive events, emotions, ideas, etc., as entities and substances.

Due to their gestural dimension, sign languages seem to provide more direct access to metaphoric projections, arise from our routine and recurrent experiences, such as this: THOUGHTS ARE GRASPABLE OBJECTS. This metaphor is the basis on which many abstract lexical signs are developed.

If we consider another sign, the sign DIFFICULT, which is made with a movement of the curved index finger drawing a sinusoid line across the forehead, we see that such movement has nothing metaphoric about it – it consists simply of drawing a wrinkle, depicting the image of the *corporeal reaction* that is produced when one encounters a difficulty. This is a *metonymic representation*: the mark “wrinkle on the forehead” being in an existential connection with the evoked situation. On the other hand, the representation of the forehead given by the placement of the sign is similar to that of the preceding signs: here, too, the forehead is seen as THE SEAT OF THOUGHT.

The Placement of Signs at the Chest

While many abstract signs relating to *intellectual activity* are placed at the forehead, signs expressing *emotions or feelings* are placed at the chest. Indeed the torso contains the heart, and by synecdochic

procedure the word "heart" is often used to designate the chest. As Baudelaire writes in *Curiosités Esthétiques* (Aesthetic Curiosities): "When a singer puts his hand on his heart, that usually means: I will love her forever!"

The sign TO LOVE occurs in a manner close to that noted by Baudelaire: the open palm of the hand is *raised* against the chest, then lifted and *turned upward* (the hand in supination), while the chest makes a slight forward movement.

While the sign TO NOT LOVE is also made with the open hand against the chest, the parameters of movement and of orientation are the opposite of those of the sign TO LOVE: the hand *descends* against the chest, and then falls away from it, with *the palm turned downward* (the hand in pronation), while the chest makes a slight backwards movement.

The location of these signs shows that the chest is truly seen as THE SEAT OF AFFECTIVE PHENOMENA.

But what about the double opposition of movement upward or downward, and forwards or backwards, as present in these two signs?

From expressions in everyday language, G. Lakoff and M. Johnson¹⁰ have highlighted metaphors that consist of "giving spatial orientation to concepts" and which they term "metaphors of orientation." So, the expressions, such as "I am in *seventh heaven*" or "He feels *down*" are, for these authors, tied to the following metaphoric representations: HAPPINESS IS *UP*, and SADNESS IS *DOWN*. These are developed from the physical reality that "the bent position of the body is usually associated with sadness and depression, and the straight position with a positive affective state."¹¹

The two signs TO LOVE and TO NOT LOVE, by *the orientation of their respective movements* upward or downward, bring into play such metaphoric concepts.

As for the opposition of movement forwards for the first sign and backwards for the second sign, these again are metaphoric projections of orientation that we would state as follows: ATTRACTION MOVES FORWARD and REPULSION MOVES BACKWARD. These also appear in expressions such as: "To *dive* into a beautiful adventure", or, "His behavior *made her recoil*."

These metaphors seem to be the product of recurrent gestural behavior linked to the first attitudes of a child toward food he is offered, which he can want or reject. We owe a great deal to Charles Darwin for having made detailed observations of such expressive behaviors.¹²

Thus, we see how all the parameters of formation of these two signs are full of metaphoric representations tied to the body and to the corporeal experience.

Such a demonstration can be made for all the signs designating emotions. We will take as an example the sign for ANGRY, which, of course, is also made on the chest: the hands, with spread fingers, scratch the chest twice, in a terse, sharp movement from low on the chest, upward. By its very parameters of constitution, such a sign gives an image of a metaphoric representation of anger.

We will explore these metaphoric representations by referring to the work of Z. Kövecses. In his study on the concepts of emotions, this author attempts to define these from the conventional expressions that are used to talk about them. He demonstrates how every emotion results in a very sophisticated conceptual structure based on metonymic and metaphoric representations.

Thus, to speak of anger, we refer to its *physiologic effects* which, by metonymy, represent the emotion itself, such as in the phrase "to see red." This physiological foundation may also be at the origin of metaphoric concepts such as ANGER IS HEAT.¹³ From this basis many metaphoric representations can be developed, depending on whether the heat is applied to a fluid or to a solid. These are respectively illustrated by expressions such as "To boil with anger" and "To explode (in rage)."

The sign for ANGRY thus perfectly illustrates the metaphor of an overheated liquid in a container, which can create strong internal pressure: the sharp movement of the hands on the chest evokes the internal "boiling" within the chest, which is seen as the container of the emotion.

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Through the few examples of abstract gestural signs that we have presented, we have been able to show how each of their parameters of constitution – placement on the body, orientation of movement, facial expression, and configuration of the hand(s) – can thus

carry an imaged dimension linked by metonymy, synecdoche or metaphor to a particular representation of *parts of the body*, corporeal *movements* and *organic reactions*.

This reality raises the following question about representations of the body, which are at the origin of the development of signs: Can one talk about “representations” of the body as if the body were an object external to ourselves, or are these representations that we develop *in* and *through* our body, since it is through our body that we assume our place in the world.

Concerning the body and speech, M. Merleau-Ponty writes: “The motor experience of our body is not a special case of knowledge; it provides us with a way to interact with people and objects, a ‘*praktognosis*’¹⁴ that has to be recognized as original and perhaps as originating. My body has its world or understands its world without having to go through a process of ‘representations,’ without being subject to a ‘symbolic’ or ‘objectifying’ function.” This position is similar to that found in the studies of G. Lakoff and M. Johnson, who have shown how *our physical experience* provides us with recurrent models from which originate our conceptualizations developed through metonymic or metaphoric projections.

In our ongoing research on the constitution of gestural signs, we have been able to observe that *concrete signs* were developed from *synecdochic* and *metonymic procedures* that account for their connection with their eventual referents, while *metaphoric procedures* appeared, associated with other procedures, only for the development of *abstract signs*. The domain-source of the metaphor relates to corporeal reality, or to our way of being in the world, as we have shown in the series of examples presented here.

Such an observation constitutes for us a striking confirmation of the positions of G. Lakoff and M. Johnson. For these authors, metonymy “has above all a referential function;”¹⁵ it proves sufficient for the development of concrete signs; while for the development of abstract signs, metaphor also appears. Its essential function is comprehension insofar as “most concepts are in part *understood*”¹⁶ in terms of other concepts,¹⁷ by “habitually conceptualizing the non-physical world in physical terms.”¹⁸

The conceptual difference between metonymic and metaphoric processes, as clearly indicated by these two authors, thus clarifies

how gestural signs are created by using these processes differently, depending on whether they are concrete or abstract. Of course, metonymy also has the function of “facilitating comprehension,”¹⁹ since the existential relations taken into account are not made randomly and are also a way of organizing our thinking, but this function is not its primary function.

In a gestural language, it is the body that is given to be seen. It is the material of the linguistic sign. It is not a static “sculpted body,” but a body that is sculpted in the continuum of the act of “writing” fleeting, gestural images in the air. Such images, emanating from a body as seen as an *organ of thought*, cannot help but embrace all the more closely the metonymic and metaphoric projections of thought that come from the depths of our corporeal experience, as M. Johnson has tried to demonstrate by taking profoundly into account the fact that “human beings have bodies.”²⁰

This is why, even within the abstract lexicon of French Sign Language, we find representations of the body that are also found in the imaged or metaphoric expressions of French spoken language – expressions very often disembodied from the gesturality that created them, but which the medium of a gestural language makes reappear. It is this, without doubt, that makes the study of such languages so fascinating.

The constituent gestural metaphors of abstract signs show the importance of “the enigmatic nature of the body itself,” to use an expression of M. Merleau-Ponty.²¹ For him, there is no natural behavior in man that goes against cultural behaviors: “Everything is fabricated and everything is natural in man, as one would want to say, in a sense that there is not a word, not a behavior that does not owe something to the simply biological being – and that, at the same time, does not conceal the simplicity of the animal life, does not divert from their vital behaviors, through a kind of *escape* and by a genius of ambiguity that could serve to define man.”²² [...] “For example, the frowning of the eyebrows, which was originally designed, according to Darwin, to protect the eyes from the sun, or the convergence of eyes for the original purpose of permitting clear vision, become components of the human act of meditation and signify such to the spectator. Language, in turn, does not pose any other problem: a contraction of the throat, a hissing emission of air

between the tongue and the teeth, or a certain manner of playing with our body, is suddenly imbued with a figurative sense and signifies such outside of ourselves. This is no more and no less miraculous than the emergence of love from desire, or of gestures from the uncoordinated body movements at the beginning of life."²³

This does not lead us to believe that words might be formed by a shift from the concrete towards the abstract, for while they have their origin in the body, it is still "this mysterious human compound" whose flesh and mind are "substantially linked," in the words of M. Jousse,²⁴ who speaks of *sublimation* where M. Merleau-Ponty speaks of *escape*.

The study of gestural languages indeed shows how, even at the phonological level, within the constitution of signs, one can not separate the form from the signification – all the parameters of sign formation carry a symbolic dimension.

The fact that the representations of the body, at work in the abstract lexicon of French Sign Language, provide perfect illustrations of the imaged or metaphoric expressions of French spoken language, leads one to conclude that above and beyond the real difference related to deafness – and which cannot help but affect one's way of perceiving one's surroundings – deaf and hearing people both participate in the same culture arising from a way of living and behaving gesturally, "as if following a code, secret and complex, written nowhere, known to no one, and understood by all,"²⁵ a code that appears to us linked to the sharing of a similar way of being in the world within French society.

Just as similar corporeal metaphors linked to the sharing of a same corporeal experience (the authors' works cited here in English are also applicable to French), occur within different vocal languages, the same is true of the different gestural languages, where signs, while executed differently, obey the same metaphoric body-related concepts. So, the sign TO LOVE in different sign languages, will always retain certain common characteristics despite their different constructions. In British Sign Language, TO LOVE happens to be made by crossing the hands against the heart, but it still shares a common feature with French sign in terms of its placement on the chest, and there is no movement downwards or backwards, which would be in opposition to its content.

It is no doubt this common metaphoric foundation, at the basis of the way gestural signs are created, that contributes to the relative facility with which the deaf succeed in understanding each other even though they do not speak the same sign language. This is an advantage which the hearing lack.

Notes

1. M. Johnson, *The Body in the Mind. The Bodily Basis of Meaning, Imagination, and Reason*, Chicago, 1987.
2. G. Lakoff and M. Johnson, *Les Métaphores dans la vie quotidienne*, Paris, 1985, p. 7.
3. F. de Saussure, *Cours de linguistique générale*, Paris, 1967, p.26.
4. A. Ombredanne, "La langage," in: G. Dumas (ed.), *Nouveau traité de psychologie*, Book IV, Paris, 1933, pp. 363-465.
5. P. Valéry, *Variétés V*, Paris, 1957, Vol. I, p. 1153.
6. Ch. Baudelaire, *Paradis artificiels* ("Mangeur d'opium"), Paris, Vol. I.
7. Abbé L.-M. Lambert, *Langue de la physionomie et du geste mis à la portée de tous, suivi d'une méthode courte, facile et pratique d'enseignement des sourds-muets illettrés qui sont hors des institutions spéciales, et des élèves arriérés de ces mêmes écoles*, Paris, 1865.
8. All words appearing in capital letters in this article henceforth refer to the gloss of the gestural sign.
9. G. Lakoff and M. Johnson (note 2 above), p. 36.
10. *Ibid.*, p. 24.
11. *Ibid.*, p. 25.
12. Ch. Darwin, *The Expression of Emotions in Man and Animals*, New York, 1873.
13. Z. Kövecses, *Emotion Concepts*, New York, 1990, p. 52.
14. See Grünbaum's article "Aphasie und Motorik," in: *Zeitschrift für die gesamte Neurologie und Psychiatrie*, 1930, quoted in: M. Merleau-Ponty, *Phénoménologie de la Perception*, Paris, 1945, p. 164.
15. G. Lakoff and M. Johnson (note 2 above), p. 45.
16. My italics.
17. G. Lakoff and M. Johnson (note 2 above), p. 65.
18. *Ibid.*, p. 68.
19. *Ibid.*, p. 65.
20. M. Johnson (note 1 above), p. xix.
21. M. Merleau-Ponty (note 14 above), p. 230.
22. *Ibid.*, p. 221.
23. *Ibid.*, p. 226.
24. M. Jousse, *Le Parlant, la parole et le souffle*, Paris, 1978.
25. E. Sapir, *Anthropologie*, Paris, 1967, p. 46.