

Gestures of Power and the Power of Gestures

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Introduction

Gestures are components of speech, not accompaniments or ‘add-ons’ (ADAM KENDON’S 2008 term), but actually integral parts of it. Much evidence supports this idea, but its full implications have not always been recognized. The gestures I mean are everyday occurrences – the spontaneous, unwitting, and regular accompaniments of speech that we see in our moving fingers, hands and arms. They are so much a part of speaking that one is often unaware of them, but if you look around and watch someone talking in informal terms you are likely to see the hands and arms in motion. Gestures of this kind are like watching someone’s thought in motion. The growth point, or GP, aims to explicate this insight (e.g., McNeill 1992, 2005). GPs are proposed dynamic units of language and thought. In a GP, synchronized gesture imagery and linguistic categorial content form an unbreakable idea unit. Speech, being tied to thought, is accordingly inherently multimodal – both vocal-linguistic and manual-gestural – and the resulting semiotic opposition (the same idea in two opposite semiotic modes at the same time) fuels microgenetic change (the GP, seeking closure, is ‘unpacked’ into a static, i.e., a maximally stable, grammatical form: functionally, finding a conceptually compatible construction/semantic frame is the imagery-language dialectic’s ‘stop-order’).¹

An example

As an example of gesture having an impact in communication, consider the two conversational turns (among many possible turns) marked with boldface in the selection below. The speakers were US Air Force officers enrolled at the Air Force Institute of Technology taking part in a so-called ‘war-gaming’ session in which they analyzed a finned coffee thermos standing in for a new-type alien missile head:

1. G: “So unless we have the little motor that does the turning ... you’re not gonna know what pitch ... goes on those ... So it’s going to make it a little tough.”
2. C: “Okay.”
3. F: “It was my understanding that the- the whole head pivoted to provide the aerodynamic uh moment. But uh I could be wrong on. That uh ...”
4. **G: “that would be a different design from-”**
5. **F: “From what-”**
6. **G: “from- from the way we do it.”**
7. F: “Okay.”

8. E: “Okay so if we-”
9. G: “But we can look into that.”
10. E: “If we’re making that assumption ((unintel.)) as a high fidelity test”
11. F: “Yeah.”

Speakers F and G jointly produce the idea that ‘we have a way of doing this kind of thing, and it would be different’. They build up a shared GP, with all its properties of packaging speech and crystallizing consciousness, only now with components from two speakers at once. We term this kind of joint idea unit creation ‘mind-merging’ (see MCNEILL et al. to appear). The question now to be asked is by what means gestures mediate mind-merging? A partial answer is via mimicry. Mimicry appears both in speech (the bridging “from-”) and gesture, where G produced a two-handed oscillating gesture that recreated an earlier similar gesture (made with one hand) by F. Mimicry can be explicit or implicit, and presumably works via mirror neurons – the neural circuits recently discovered in human and other primates that respond specifically to the intentional actions of others, as distinguished from responding merely to motion itself (RIZZOLATI & ARBIB 1998). By repeating F’s gesture and its oscillation feature, G at line 6 created half of a to-be-shared GP. This mimicry process of gesture sharing is widespread.

Gestures of power

In this paper, I consider how mind-merging applies to the two poles of gesture reflected in my title. First, the gestures of power: I shall show two examples – Boris Yeltsin and Bill Clinton – and analyze their gestures. Powerful figures, world leaders, perform gestures sometimes deliberately, but also unconsciously and it is here that we, the observers, can glimpse something of the mental character of the leaders, which looks in the Yeltsin-Clinton case wildly different, and imagine how such disparate cognitive styles might misunderstand (or, better, as I shall explain, *misconstrue*) one another. Second, the power of gestures: the basic question of how gestures play a role in communicating sense between individuals, and how – if our world leaders were to mis-communicate – gesture, through the mechanism of mimicry, could improve the chances of achieving some degree of mind-merging. The questions we shall explore are,

- What obstacles to mutual comprehension do gestures reveal; and
- How do gestures provide the means (if properly used) to overcome them?

The power of gesture is not limited of course to the gestures of power, and the interest of this exercise lies in its general significance, and what it may imply for the nature of language, thought and gesture in general.

The catchment

The analysis relies on the concept of a catchment. A catchment is recognized from recurrences of gesture features over a stretch of discourse. It is a kind of thread of consistent visuospatial imagery running through a discourse segment that provides a gesture-based window into discourse cohesion. The logic of the catchment is that

discourse themes produce gestures with recurring features; these recurrences give rise to the catchment. Then, working backwards, the catchment offers clues to the cohesive linkages in the text with which it co-occurs.

By discovering the catchments created by a given speaker, we can see what this speaker is combining into larger discourse units – what meanings are being seen as similar or related and grouped together, and what meanings are being put into other catchments or are being isolated, and thus are seen by the speaker as having distinct or less related or in some way highlighted meanings. Individuals differ in how they link up the world into related and unrelated components. Catchments give us a way of detecting these individual characteristics, or cognitive styles. A given catchment could, for example, be defined by the recurrent use of the same trajectory and space with variations of hand shapes within the trajectory and space. This would suggest a discourse unit within which meanings are grouped but with contrasts among them. We shall see just this kind of discourse structure in the Boris Yeltsin example.

Yeltsin and Clinton Catchments

The 'data'

The examples are from analytic samples collected by Brenda Connors, who has conducted a study of the nonverbal element of international communication for a number of years (she herself combines the two worlds – dancer and diplomat; she was the US Department of State Protocol Officer in New York City for more than a decade, and before that had danced professionally in NYC with modern dance pioneer, Erick Hawkins).

The Boris Yeltsin example is from a speech he delivered at Wichita, KS, after meeting with President George H. W. Bush and the US Congress.

The Bill Clinton's example is from a news conference in Halifax, NS, that was held after a meeting with Yeltsin. Unfortunately, we do not have any example of the two men directly conversing (which in any case would have been mediated by their translators.)

BORIS YELTSIN

Figure 1 shows the progressive steps of the Y catchment, followed by his contrasting punchline. Yeltsin's **gestures** are large and cover a wide space, often in the periphery; a variety of hand shapes often systematical; other body parts (the head especially) with abrupt motion cessations or end-markings. The overall impression is of vigor/violence. **Cognitively**, he appears to be 'linear' in that, within a catchment, he progresses or alternates one step after another, which resembles the accompanying linguistic content. Taking Yeltsin's inferred catchment, we see just such a situation:

1 RH slicing down from upper right center (11 strokes) with progression of shapes:

TEXT: negotiations to reduce of our nuclear armaments by thirty percent were on the table for 15 years, but it only took five months and two days for the President and I to sign an agreement yesterday that reduces the quantity of our strategic nuclear armament by 300%, and practically removes (wipes out) the threat to the world. (16

secs.) *Trans: JAMES GOSS.*

flat B-hand : *a paltry 30%*

through 2 fingers : *only five months and two days*

to 1-1/2 fingers : *President and I signed an agreement*

to 1 finger : *reduces the quantity*

to closed fist A-hand : *by the magnificent 300%*



Fig. 1. Boris Yeltsin catchment. Video source: CNN. Collected by Brenda L. Connors.

All the gestures have common features, one hand slicing down at the same locus in space, and different hand shapes. This set of gestures differs totally from the next gesture:

Not a catchment 00:04:36:07 - :36:20 (half second)

TEXT: and eliminates the threat to the world

2 SHs move apart in lower center (1 stroke):



Following the logic of a catchment, we suspect that these gestures belong together in Y's thinking, as a discourse unit of some kind, and that the isolated gesture is outstanding in some way; all of this is meant to be a picture of Y's own construals, his own thinking as he speaks.

If we look within the catchment, we see an incremental progression that may be typical of Y's thought process. The ideas in the catchment are related but there is a *progression of differences*. The differences are inferred from the progression of hand shapes, each one of which takes the gesture a step farther away from Y's starting point of a flat hand. Y stops when he gets to last possible step, a closed fist. Corresponding to the gesture steps are steps in the content of what he is saying. Finally, the goal to which the progression leads, and which may have been the conscious target of Y's thinking all along, is placed outside the catchment – "eliminates the threat to the world" is made with a unique gesture, highlighting it as special (as indeed it is).

BILL CLINTON

Clinton's **gestures** are small and constrained, use a limited amount of space mostly at the table top where he is seated; few hand shapes and he uses his hands only. He first creates a bounded space with the hierarchically dominant meaning of 'the larger reality here', and then, in a succession of small movements, 'removes' elements from the space allotted to this reality. The overall impression is 'cool' if not icy by comparison to Yeltsin. **Cognitively**, he appears 'analytic', in that he defines the space and then, in this space, subdivides it to extract alternative contents. Figure 3 shows the Clinton catchment which, as can be seen, lacks all hint of a punchline.



there's a larger reality here where we are in agreement and I would like to emphasize it ... Russia has made eh a historic commitment in the last two years

2 hands create discursive space = Russia's historic commitment

to essentially redefine its greatness not in terms of the territorial dominance of its neighbors



but instead of constructive

left hand removes content from space



leadership

left hand removes content 2 from upper space (possibly a metaphor of leadership)



in the region

left hand removes content 3 from space



and in the world

left hand removes content 4 from space

Fig. 2. Clinton catchments. Arrows indicate small lateral gestures. Video source: C-Span. Collected by Brenda L. Connors.

Implication

The differences between Y and C suggest contrasting modes of cohesion – what is grouped together in discourse and the basis for it. For Y, the basis is narrative, a succession of utterances leading to a punchline, with the gesture catchment bracketing the entire narration, except the punchline in this instance. For C, in contrast, it is analytic, each element relating to a hierarchy of themes, with the catchment embracing this hierarchy; there is no punchline (just as, with Y, there is no hierarchy). An important implication is that different catchments imply *different idea units, and this would be so even when speakers agree on the same references*. This point is the crucial result of the context. In a growth point, context and meaning are inseparable; the GP is what Vygotsky called a psychological predicate – a point of differentiation within a context, so context and GP must always be considered jointly. Thus, if two speakers, even while agreeing on ‘what they are talking about’ (that is, on reference), disagree (unknowingly) about the context of differentiation, they will risk misconstruing what the other is thinking. With cognitive styles as different as Y’s and C’s, this kind of misunderstanding, hidden in the context despite apparent agreement on reference, could be a serious danger (this is the source of Connor’s interest in the intersection of kinesics and diplomacy). Between them contexts are likely to be misconstrued:

Y, (mis)taking C’s to be narrative succession, wonders where the punchline is.

C, (mis)taking Y’s to be hierarchical, thinks that he rambles without purpose or cohesion.

The problem is not misinterpreting each other. Decoding reference, not to deny this also can be problematic, is not the problem. The problem foisted upon these imagined interlocutors is to understand what for the other is the context within which meaningful differentiations (GPs) occur. For Y, this was something to do with a storytelling sequence; for C, it was a logical arrangement of bits inside a bounded semantic domain.

The power of gestures

We have seen this power already in the foregoing. Gesture catchments (in the imagined Y and C conversation) create a possibility of misconstruals. There is also however the power of gestures to counteract this, although the benefit requires more awareness and activity of gesture than can realistically be anticipated of world leaders engaging in diplomatic dealings.

The growth point and mimicry

We observed gesture mimicry earlier, in the opening example. Mimicry in this sense is a means to an end. It can merge GPs and catchments between speakers. If people approximate similar growth points through mimicry they can come to some common ground, despite having different cognitive modes, as with Y and C. It works through embodiment. Recreating a gesture in mimicry is more than imitating a movement; it is the envelopment of the mimic in a world of meaning: given the gesture by another, the other’s world of meaning. The victim of a hidden misconstrual can overcome it by mind-merging the other’s GP and, from this, finding the context, the only context, in which this

mimicked GP is a possible differentiation. By their nature, growth points are not independent of the context, which means that if a speaker is generating a catchment, as our two subjects Y and C have done, the very process of mimicry of GPs and catchments means contexts tend to merge, and work against misconstrual. So C could recover Y's narrative mode of thinking and, vice versa (perhaps), Y C's hierarchical mode.

Examples of spontaneous mimicry

Mimicry of gesture is a coding tool spontaneously employed by gesture researchers, our portion of the power of gestures. Coders find themselves mimicking gestures on tape, when the sense of the gesture is not immediately apparent. Here, too, the mechanism is embodiment, the coder embodying the speaker's gestures and hence GPs.

Mimicry obviously is a social interactive response. Less obviously it is also a tool for comprehending the other person, which may be one reason it occurs in the first place. Mimicry is a form of materialization, the materialization by a listener of another person's gesture. It can merge GPs between individuals (cf. the earlier 'two person GPs' section) and is thus likely to take place when the recipient of a gesture, the mimic to be, encounters something obscure, an impediment to comprehension. This power of mimicry to create actual (or seeming) comprehension derives from Mead's Loop.

By repeating the gesture of another person, even someone on tape (or, as here, in a still shot), the mimicked gesture is imported into one's own action orchestration circuits, one's own thought-language-hand link, but in reverse (hand to thought). Mimicry recreates the Other's gesture as if it were a gesture of one's own. If people can approximate similar growth points through mimicry, they converge on common ground.

Further, since by their nature growth points are not independent of their context, mimicry can open a route to the other person's hidden contexts as well. This makes mimicry a powerful tool for accessing meanings, including contexts and GPs.

TWO-WAY MIMICRY EXAMPLE

The narrator on the left of Fig. 3 is describing from memory an animated cartoon in which one character ascended a drainpipe on the inside, in order to reach unobserved a second character (a Tweety and Sylvester cartoon; this and the following examples thanks to Susan Duncan). The listener, on the right performs, without speech, a gesture depicting a non-existent event, the pipe bulging outward as Sylvester goes up (the pipe in the cartoon doesn't change shape at this point). The narrator then mimics this gesture, as shown (her gesture, starting slightly later, has reached only a portion of its full extent) and assimilates the undulating imagery into her speech as well (in speech she continues with "like a boa constrictor", which does not correspond to any feature in the cartoon). In other words, she created a new GP out of the mimicked gesture with a lexical categorization that she herself provided, none of which corresponds to the cartoon as viewed.



Figure 3. Gesture mimicry with verbal echo.

THE POWER OF MIMICRY

As gesture coders we experience the power of mimicry directly. In effect, via mimicry, we code by encoding. Mimicry is a spontaneously adopted coding tool. The effect is to bring the GP and its context into the coder's own cognitive being; the coder 'inhabits' the gesture and gets thereby her own intuitive understanding of it. Mimicry throws light on gestures and contexts that seem otherwise obscure. The following examples are used to demonstrate this mimicry effect (I expect they will work, despite the absence of motion).

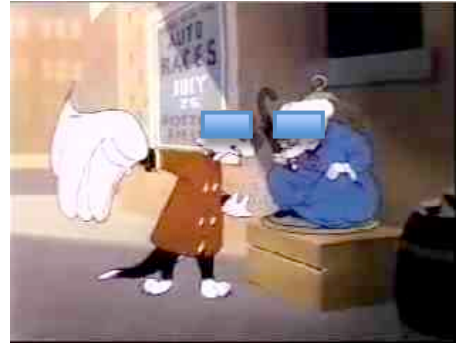


Fig. 4. Cartoon event.

The speakers are describing an episode from the cartoon in which Sylvester, disguised as a bellhop, has taken what he believes is Tweety in his birdcage, removes the cover, and discovers, too late, that instead it is his nemesis, Granny. With each example you are invited to recreate the combination of gesture and speech, and to introspect whether this clarifies the significance of the gesture. The gestures were chosen because they seem, at first glance, obscure.

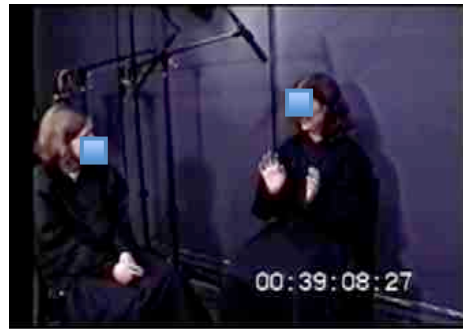


Fig. 5. Mimicy trial A.

- A. The gesture occurred with “he’s like (eek!)” and is possibly a metaphor of alarm—both hands rise upward, palms forward (more broadly, a metaphor of prevention; cf. Kendon). The gesture is ambiguous (it could be the shape of the cage, Granny’s location or other interpretation), but with mimicry and the accompanying speech, a GP highlighting ‘alarm’ shines through. The hands should start palm down and the rock up once, as a quick motion.
- B. Beats possibly highlighting a plot twist with “the grandmother // instead of Tweety”. The hands are held motionless except for the small up-down beats as the speaker says “instead of”, separated from the preceding by a brief speech pause (the double slashes). The GP is the plot-twist of Granny’s unexpected appearance. Beats, especially superimposed beats, in general emphasize the relevance of the gesture on which they ride and the speech with which they synchronize to a larger discourse theme, and such appears to be case here as well. Raising and extending the two parallel hands ‘placed’ the grandmother in the gesture space. The beats (a kind of miniature reactivation of the base gesture) highlight the grandmother’s popping up, contrary to expectation

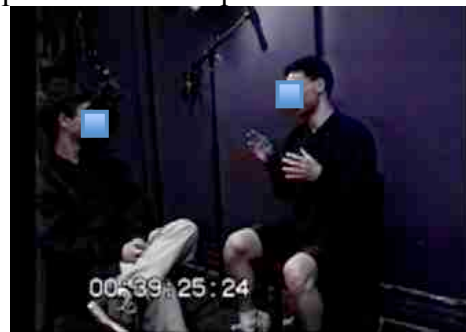


Fig. 6. Mimicy trial B.

- C. A denouement metaphor, deictically placed, with “pulls off // the cover of the cage”. The gesture is set off by a brief speech hesitation (the double slashes). This two-handed gesture with “the cover”, I find, makes little sense without mimicry, but with it the significance of a denouement emerges (the metaphor is for ‘presenting’ it). The position of the gesture in the lower space (reinforced by the speaker’s lowered held tilt) links it to several previous gestures for the locus of the birdcage.



Fig. 7. Mimircy trial C.

Thus we are able to recognize individual construals of the same objective revelation-of-granny episode in the cartoon—as something alarming, a plot-twist, or the denouement—using materialization through mimircy each time as the tool.

Mimircy in mind-merging

Human bodies offer identical possibilities for embodiment of sense and meaning. This is the foundation of mimircy and its role in unraveling the contexts of other speakers. Mimircy is a kind of *borrowed embodiment* – borrowing significant actions of the other. Gestures are a natural form of such embodiment with language, which makes mimircy a powerful tool for accessing another speaker’s meaning.

As noted, gesture coders often mimic – coding by encoding via mimircy. Doing so brings the idea unit as well as the context from which it is differentiated, or significant portions of it, into being for the mimic/coder. Applying this idea to the imaginary conversation between Y and C, we picture their contrasting contexts of construal becoming accessible to each via mimircy, and becoming that way incorporated into their own modes of being.

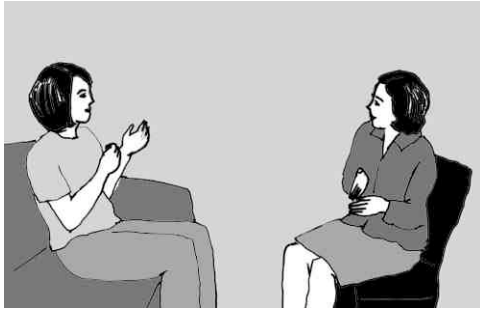
Is there spontaneous mimircy? Yes, in many cases, there is. IRENE KIMBARA (2006) documented many instances in the interactions of friends. Figure 8 is an occurrence from her research.



1



3



2



4

Fig. 8. Spontaneous mimicry between friends (from KIMBARA 2006). Computer art by FEY PARRILL.

–Panels 1 and 2. Speaker on right: describing the line as ‘irregular’; her gesture depicts lines of waiting passengers; the separation of her hands may depict the density of the crowding. Speaker on left: in (b), hands entering the gesture space and preparing to perform gesture in panels 3 and 4.

Panels 3 and 4. Continuous with panels 1 and 2. Speaker on left mimics right speaker’s two-lines gesture as she emphatically agrees (‘yes, yes, yes, yes’), including absolute direction (in both figures, the hands are moving toward camera). Meanwhile, in (4), right speaker is preparing her next gesture.

How are mimicry and mimesis connected?

I have spoken of mimicry and not used the term ‘mimesis’ purposely. Mimicry is simply the recreation of (aspects of) another person’s gesture. It could also apply to recreation of one’s own previous gesture, but then we tend to use the term ‘recurrence’; but the effects may be similar. In a sense all gesture has a mimetic side: a gesture duplicates something in form, space and action, and these embody aspect(s) of meaning. Iconic, deictic and metaphoric gestures, and even beat-like points embody discourse salience (they create some like a ‘gestural prosody’). Mimicry becomes mimesis *through interpretation*—the new action becomes the mimic’s mode of understanding. So the use of mimicry as a tool for recovering the workings of another’s mind is better called mimesis. Such gestures seem to be cases of the “interpretation of reality through imitation” (cf. AUERBACH’S 2003 gloss).

To conclude

The gestures of power, although they are the ingredients of speech and thought, can have misleading effects by hiding contexts. However, through mimesis (interpreted mimicry) and embodied cognition, the phenomenon of mind-merging is possible, even with such disparate characters cognitively as Y and C.

The linking mechanism is the GP and its dependence on context, offering a way to access the other’s (possibly hidden) context through mimicry, that is, through embodied cognition via gestures.

And *this* is the power of gestures.

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Note

¹ More broadly, a GP starts with an individual's differentiation of a significant opposition in the context, and ends with a socially-constituted 'unpacking'; or, still more broadly, starts with creativity and ends with conformity, and perhaps is a microcosm of the individual's dilemma as a self-actualizing agent in a social framework. The dual semiotic in this understanding is like Mead's "I"/"me" – two aspects of the self that alternate between the individual and the socially constituted, the free and the constrained; so the dynamic starts with this tension, and ends with capitulation to constraint: the price of thought with language itself. Is this Rousseau? Partly: "The artificial uniformity of behavior which society imposes on people causes them to ignore 'the duties of man and the needs of nature'" (*Encyclopedia of Philosophy*, Rousseau article, vol. 7, p. 219). But unlike Rousseau the dialectic does not see any way that the "I" or freedom can be separated from the "me" or social-norm constraint. It does not view "the artificial uniformity of behavior" as a process to be regretted, since it is only through this that we achieve stability and repose, and from it renew our thinking – the next cycle cannot begin until it completes and then deconstructs the preceding. So, very *unRousseau*, it is the price of continued mental life, as opposed to a rambling stream of consciousness.