

## 8 AFTER AFFECT

Sympathy, Synchrony,  
and Mimetic Communication*Anna Gibbs*

Contagion is everywhere in the contemporary world. It leaps from body to body, sweeping through mediatized populations at the speed of a bushfire. No longer confined to local outbreaks of infectious disease or even of hysteria, contagious epidemics now potentially occur on a global scale and, thanks to electronic media, with incredible rapidity. Consumer economies actually rely on contagion for everyday functioning, connecting people, money, goods, resources, ideas, and beliefs in global flows of communication and exchange in ways that fundamentally alter relations in the process. This calls for a new understanding of what I term “mimetic communication.” By “mimetic communication” or mimesis, I mean, in the first instance, the corporeally based forms of imitation, both voluntary and involuntary (and on which literary representation ultimately depends). At their most primitive, these involve the visceral level of affect contagion, the “synchrony of facial expressions, vocalizations, postures and movements with those of another person,” producing a tendency for those involved “to converge emotionally” (Hatfield, Cacioppo, and Rapson 1994, 5).

This essay examines several phenomena (sympathy, syn-

chrony, and the various forms of mimicry and imitation we might reassemble under the broad heading of mimesis) and argues that together these provide a starting point for theorizing mimetic communication. At stake in this is the tension between humanist and nonhumanist forms of thought, between those who argue for the necessity of understanding formations of the subject and those for whom thinking is a practice that should extend us beyond the known forms of the subject. Mimesis is rather like an image in which figure and ground can always be reversed, so that sometimes subjectivity is in focus, while at other times it recedes into the background, leaving something new to appear in its place. Rather than privileging one view over another, the task of theory may then be to know through which optic it is most productive to look at any given moment. Or—perhaps more difficult—to learn how to oscillate between these views, neither of which can simply be discarded. How might we, then, learn to think across the plurality of domains in which we are (and need to be) organized as subjects but in which the very process of subjectivation also produces potentials that may open unsuspected possibilities for new ways of thinking, being, and acting?

Mimetic communication can be conceived as an example of synchrony, as a pervasive “sharing of form” that seems to be “the fundamental communicational principle running through all levels of behaviour,” through both human and animal bodies, and connected to other rhythmic processes in the natural world (Condon 1984, 37). But it might equally be conceived as a contagious process that takes place transversally across a topology connecting heterogeneous networks of media and conversation, statements and images, and bodies and things. These mimetic connections are a result of contagious processes in which affect plays a central part. Or, at least, this is the aspect of affect with which the humanities and cultural studies have mostly been concerned in recent years. Here it takes on a broadly Spinozan-Deleuzian sense, emerging as an asubjective force in a perspective from which the human appears as an envelope of possibilities rather than the finite totality or essence represented by the idea of the individual organism. This is the view from which Brian Massumi can describe affect as an energetic dimension or “capacity” and emotion as a selective activation or expression of affect from a “virtual co-presence” of potentials on the basis of memory, experience, thought, and habit (Massumi 2003). What this view leaves out is the highly differentiated work performed by the “categorical” or “discrete” affects opened by the work of the American psychologist Silvan Tomkins. Tomkins derives his view of the affects as innate in large part from

Darwin's germinal observations in *The Expression of the Emotions in Man and Animals*. Although Tomkins's work has been put to serious use by both Eve Kosofsky Sedgwick and Adam Frank, who introduced it to cultural studies in 1995, it remains relatively little taken up in the United States and virtually unknown in Europe, although it has generated an exciting and heterogeneous field of thought in Australia.<sup>1</sup>

Both ways of conceiving affect understand it as intricately involved in the human autonomic system and engaging an energetic dimension that impels or inhibits the body's capacities for action. But, while affect in the Deleuzian sense is asubjective and anti-representational, operating across the boundary between the organic and the nonorganic, Tomkins's affect theory enables the specification of the energetic dimension of affect in very precise ways. It provides us with a differentiated account of the neurological, physiological, and expressive profiles of each of the nine affects it recognizes, allowing finer distinctions than the traditional psychoanalytic concentration on the degrees of arousal of anxiety and aggression. It delineates an affect dynamics that specifies which affects are likely to be called up in response to which others and why, and a systems-oriented, nonteleological way of thinking human development as affective responses are patterned—or organized—by ongoing processes of script formation. Although these two broad ways of conceiving affect doubtless begin from very different philosophical assumptions, they are both essential, it seems to me, in the overarching intellectual project of rethinking the human in the wake of a sustained critique of Western rationality.

Beyond these two major affect theories, there is widespread disagreement both between and within the various disciplines that claim a stake in affect—psychology, the neurosciences, biology, sociology, cultural studies, anthropology, and so forth—about whether to conceive of affect as innate or socially constructed, how to formulate its relationship with cognition, emotion, and feeling, and what these sorts of decisions might entail theoretically and politically. There are obvious risks in an interdisciplinary approach to affect theory, which must contend with the sheer mass of thought about it, and with incommensurabilities between and even within disciplines. Thus, what appears as the same object from one optic to the next is often not, and the conviction that attends a sense of discovery continually dissolves into doubt. Mimesis is as much contested as affect. Mimetic communication in the cognitive sciences names an ensemble of modes in a hierarchy of sophistication: mimicry, emulation, imitation, and mimesis. Distinguishing between

them is important, especially in the empirically based cognitive sciences, which need to specify exactly what they mean to accede to the standards of sound experimental design, and in ethology, where, by virtue of doing so, various animal and human capacities can be compared. But too often these distinctions become one more expression of a certain Platonically derived Western ambivalence about mimesis as a form of copying giving rise only to the fake or the second rate, and which therefore wants to see mimesis as essentially the preserve of children, "primitive" peoples, and animals. For example, in one of several important discussions of mimesis, Theodor Adorno refers to it as at once part of "biological prehistory" and as "the repressed of the Enlightenment" (Horkheimer and Adorno, cited in Potolsky 2006, 144). In part because of this, I want to argue here that these distinctions may be less important than what these various modes of mimesis have in common, since affect is a powerful vector in all of them, and taken together and considered as a phenomenon apart from philosophical prejudice, they may open the way to a new "epidemiology of affect" that sees continuities between things that were once held to be discrete, and discontinuity and difference where once there was sameness (Gibbs 2001). Ultimately, this may also facilitate a rethinking of theories of mimesis and the practices associated with them developed in non-Western cultures and referred to by Western anthropologists as "magic," a concept that, as Adorno foresaw, may have far greater purchase in contemporary Western societies than is usually realized (Horkheimer and Adorno 1972, Gibbs 2008; for theories of magic, see, for example, Mauss 1972 and Frazer 2000).

The interdisciplinary process is especially fraught when crossing between the humanities and the sciences. Rey Chow (2002) comments that perhaps the most far-reaching analysis of mimesis as both natural and cultural phenomenon in Western thought—that of René Girard—has failed to be productively taken up because it lacks empirical or scientific justification. This may be so, but if in what follows I sketch a rough map of the recurrent concern with mimesis in various kinds of empirical work, it is not to provide an empirical "grounding" or legitimation for a rethinking of mimetic communication. Rather, what I am suggesting is that theory needs to adopt a heuristic function, drawing creatively on different forms of knowledge to ask *what if* one conceived the world in this way? What then becomes possible in the space opened up by such a "passionate fiction," to borrow a term from Teresa de Lauretis (1994)?

If human mimesis—in its complex imbrication of biological capacities

with sociality—is to be properly understood, a multidisciplinary approach drawing on the sciences as well as the humanities is required. There is now a renewed interest in the biological foundations of human life, and a new curiosity about the permeability of boundaries between human and animal life as the possibility of organ transplants from animals to humans (for example) becomes part of our daily awareness. Mimicry is both nature and culture: Michael Taussig sums up the intricacy of this relation when he calls mimicry “the nature that culture uses to create second nature” (1993, xiii). As Mary Bateson puts it, “the acceptance of parents as appropriate models for imitation is certainly based on biological patterns, and then the culture elaborates on that by inventing school teachers and psychoanalysts” (1979, 67–68). And although culture is predicated on certain biological capacities, it seems clear that the biological body marks a constraining, rather than a determining, influence on the nature of the human. And—in part by virtue of constraint—it also actively enables certain kinds of development. It is now not so much a question of trying to work out what is nature and what second nature, but rather to see that the question of nature versus nurture is an artificial one, once we recognize the complex ways in which the human organism and its environments are “mutually unfolded and enfolded structures” (Varela, Thompson, and Rosch 1993, 199) and are each recomposed in and through their exchanges.<sup>2</sup> For in fact evolution demonstrates the mutability and malleability of biology as against its permanence (think of the way the functional architecture of the brain alters with the advent of literacy in certain cultures), and, in another temporality, the biological is rewritten by culture with the aid of technology from drugs to pacemakers or by the outbreak of epidemics of hysteria or multiple personality disorder (each of which can be seen, at least in part, as contagious mimetic phenomena, as Ian Hacking (1998) has argued of the latter, and Juliet Mitchell (2001) of the former).

“Mimicry is a very bad concept,” write Deleuze and Guattari (1987, 11).<sup>3</sup> But is there, then, also another way to think mimicry, that form of embodied copying that also serves as a kind of hinge between nature and culture? If the importance of mimesis in everyday forms of culture and communication has failed to be properly understood in Western culture in part because it has been associated with infants and animals, is there something now to be gained from paying attention to serious explorations of it by ethologists and researchers of infants?<sup>4</sup> And why might it matter to do this? A move in this direction would allow us to begin to rethink mimesis not as simple mimicry

or copying dependent on vision (monkey see, monkey do), but as a complex communicative process in which other sensory and affective modalities are centrally involved. What we have to gain from this is a better understanding of the role of mimetic communication in social processes, and especially of the making—and breaking—of social bonds. These form the basis for a sense of “belonging,” and, ultimately, of the polis, as what forms the affective bases of political orders.<sup>5</sup>

At the heart of mimesis is affect contagion, the bioneurological means by which particular affects are transmitted from body to body. The discrete innate affects of which Silvan Tomkins speaks are powerful purveyors of affect contagion, since they are communicated rapidly and automatically via the face, as well as the voice. This is because the distinct neurological profile of each affect is correlated with particular physical sensations, including muscular and glandular and skin responses. Of particular interest is facial expression’s activation of a mimetic impulse in response to the facial expression of observers, tending then to elicit the same affect in them. It is very difficult not to respond to a spontaneous smile with a spontaneous smile of one’s own, and one’s own smile provides sufficient feedback to our own bodies to activate the physiological and neurological aspects of joy.<sup>6</sup> Central to the working of affect is the fact that “affects are not private obscure internal intestinal responses but facial responses that communicate and motivate at once both publicly outward to the other and backward and inward to the one who smiles or cries or frowns or sneers or otherwise expresses his affects” (Tomkins 1966, vii).

People are expert readers of faces, and these communications are more often understood than not, even though they often take place outside awareness. So the face plays a central role in the expression and communication of affects, and its importance has only been amplified by the pervasiveness of media in everyday life (see Gibbs 2001, and Angel and Gibbs 2006). The face is ubiquitous in the realm of the image, where it conjures both the discrete affects and the frequent attempts to mask them (“backed up affect,” as Tomkins terms it), which television soap actors are especially good at signaling. But the human face also seems to diagram itself onto the sensuous qualities of other images in which it does not explicitly appear: landscapes, houses, foods, animals, skin, and choreographed bodies, so that the world can be facialized even in the absence of faces from the image. Magazines as well as television make use of facialization in this way to conjure more complex representations of mood, including those sustained



complexes of affects elaborated as emotions that may vary greatly culturally and historically.

But the face is not the only vector of mediatized affect contagion. Consumers of media are also conscripted into its flows at a level we might term—following Gilbert Simondon—“preindividual” (1992, 302). Increasingly, the graphic signs of logos like the Nike swoosh, or the soundbite-sized musical signatures of McDonald’s, or the brief arrangements of notes with which our computers and mobile phones greet us, function at this level. These signatures, or logos, whether in sound or image form, generate feelings that mobilize the body’s capacity for synesthesia, in which affect seems to act as a switchboard through which all sensory signals are passed. Toyota’s “Oh, what a feeling!” maps the image of a jump in slo-mo and ends with a freeze frame onto an arrangement of notes that mirrors the jump’s rising contours and then seems to cruise out over an edge *Thelma and Louise*-style, before evoking the thrill of the G-force with the falling scale of “Toy-ota.” Both sound and image trace the typical pattern of arousal and plateau of the discrete affect of joy.

Logos, whether visual or aural, evoke the “elusive qualities . . . captured by dynamic, kinetic terms, such as ‘surging,’ ‘fading away,’ ‘fleeting,’ ‘explosive,’ ‘crescendo,’ ‘decrescendo,’ ‘bursting,’ ‘drawn out’ and so on,” which the infant researcher Daniel Stern identifies as the activation contours of the discrete affects (Stern 1985, 55–57). These activation contours *qualify* the discrete affects, corresponding to the pace of rising and falling levels of their arousal: he offers the example of a rush of joy or anger. Whether an affect is coming or going is information that is then conscripted into semiotic systems of meaning: joy arriving means something very different from joy departing or deflating. But, according to Werner’s theory of physiognomic perception, which shows that a series of simple two-dimensional diagrams reliably elicits a restricted number of categorical affects (“happy, sad, angry”), the same falling line that signals joy departing or deflating will usually be read as sadness (Stern 1985, 53). Similarly, a slight lengthening of the line that composes the “sadness” diagram will tend to animate it, so that the temporal dimension is again brought into play because the line then evokes the kinematics of gesture, in the same way we are able to infer a flourish from a certain signature, which then lends the signature a particular significance since we take it to say something about the person who produced it.<sup>7</sup> Visual and musical logos orchestrate the activation contours of the discrete affects both to incite our own bodies into immediate mimetic response, and, in the same moment, by the same movement, to conscript affects into signification.

Stern’s work is of enormous importance to both kinds of affect theory, adding a new dimension to Tomkins’s thought about the apprehension of the affects, and enabling Massumi to forge a crucial connection with Walter Benjamin’s concept of “nonsensuous similarity,” which is “tied to the senses but lacking in sense content,” able to be “directly perceived”—but only “in feeling” (Massumi 2003, 142).<sup>8</sup> In thinking about the role performed by what he comes to call “vitality affects,” Stern concludes that affect functions as the “supramodal currency” into which experience in any sensory modality may be translated (Stern 1985, 53).<sup>9</sup> For Massumi, vitality affects are amodal; they can “jump not just between situations but also between sense modes,” producing “nonlocal” correspondences in which forms appear as “the sensuous traces of amodal linkage” (Massumi 2003, 148). This precisely describes the work of mimesis, even at its simplest level, in mimicry.

Mimicry may represent the desire to disguise what one is (an animal avoids its predators; an Internet predator pretends to be a teenager), or the desire to become something else (a human infant identifies with its parents). It can mean either homage or hostility; it might signify sympathy, seduction, deception, defense, or aggression.<sup>10</sup> It may serve the serious purposes of learning and those of pleasurable play, which seems to be at least partly what Walter Benjamin has in mind when he writes in his essay “On the Mimetic Faculty” that the “child plays at being not only a shopkeeper or a teacher but also a windmill or a train” (1979, 160). But at the heart of mimesis is the immediacy of what passes between bodies and which subtends cognitively mediated representation, which it does not ever entirely replace or supersede. It is not analyzable within a semiotic model, nor does it require an “I”: it is essentially asubjective even though it plays a crucial role in the formation of subjectivity. Mimesis can morph bodies, changing color, odor, form, or movement; or it might choose words or clothes or cars or even ideas as its medium. But what it signifies and the medium in which it operates is less important than its mode of operation. Mimicry is not a representation of the other, but a *rendering*—a relation between things in “which, like a flash, similarity appears” (Foucault 1973, 24).

Mimicry can be understood as a response to the other, a borrowing of form that might be productively thought of as communication. By “communication” in this context, however, I do not mean the transmission of information, but, rather, action on bodies (or, more accurately, on aspects of bodies)—as, for example, when reading fiction produces new affect states in us, which change not only our body chemistry, but also—and as a result—our attitudes and ideas as we shape from narrative a structure of meaning

(see A. Gibbs 2001, 2006). This sharing of form comprises information in the pre-cybernetic sense: it represents the organization or communication of relationships (which might be spatial, temporal, tonal, energetic, logical, causal, and so on) through temporary captures of form by way of mimesis. Not reducible to bit units, information of this kind is a “life process whereby difference [or pattern, relationship] is discovered in the environment” (Yoshimi 2006).

Mimesis, like affect, is not necessarily best thought of as occurring at the level of the individual or of the organism. It is not a property of either subject or object, but a trajectory in which both are swept up so that forms can be seen as “the sensuous traces of [the] amodal linkage” between them (Massumi 2003, 148). Another way of thinking about this would be to say that mimesis abstracts some (but not all) aspects of what is copied from the other, making use of vision, hearing, olfaction, morphology, or behavior, or several of these. But it is not simply a question of subject and object relations between mimic and model, or of the active mimic and passive model. Rather, evolutionary ecology speaks of a “mimicry complex” that includes mimic, model (which could be a different species from that of the mimic), and “dupe” (the receiver of the deceptive signal), and this dupe may be a third species, if we take the example of the predator. And while mimicry often operates to the mimic’s advantage and the model’s disadvantage, this is not always the case. Caillois’s famous essay critiquing the idea of mimicry as a device for survival makes this abundantly clear when he describes the dangers of disguising oneself as a leaf when that is what members of your own species actually eat (Caillois 1987, 67). However, the mimicry complex does nevertheless exert a transformation of both parties—an “a-parallel evolution” as Deleuze and Guattari (1987) have it.

Perhaps the best example of the effects of mimicry on the model is given by Deleuze and Guattari in their discussion of the asymmetrical co-evolution they term “becoming.” The famous case of the wasp and the orchid makes this very clear: the orchid imitates the wasp so that for a moment the wasp becomes part of the orchid’s morphology and its reproductive system, while the orchid in turn becomes part of the wasp’s alimentary system. The form of reciprocity involved here is asymmetrical, but both parties to the process are “de-territorialized.”<sup>11</sup> I return to this particular example because it was recalled to me as I read a newspaper story about a researcher, Anne Gaskett, who had discovered that wasps got wise to the orchids over time, but that the orchids seem to develop more alluring

scents, intense colors, and beautiful forms in order to stay ahead of them (Macey 2007). Although the article about her work doesn’t say this explicitly, the only parts of the orchid affected by this “arms race” are its scent and form, while only the wasp’s “bullshit detectors” change to try to keep pace with them. (Or it could be the other way around in the race, since it is not possible to say which party is ahead at any given moment.) This is communication not so much between a wasp and an orchid per se, as between the wasp’s alimentary system and the orchid’s reproductive system (Massumi 1992, 165). Mimicry is very selective in its use of sensory channels—in this case the ones used are olfactory, visual, and morphological.

Human mimicry, too, is selective (and, like the relationship between the wasp and the orchid, implicates cross-species desire), as when we put on floral perfumes or animal fur to enhance our powers of attraction. But this selectivity also has another very particular significance in human mimicry, which hijacks it in the service of the formation of that crucial site of organization, the self. Daniel Stern describes how, when a nine-month-old girl becomes excited about a toy and is able to grasp it, she “lets out an exuberant ‘aah!’ and looks at her mother. Her mother looks back, scrunches up her shoulders, and performs a terrific shimmy with her upper body, like a go-go dancer. The shimmy lasts only about as long as her daughter’s ‘aah!’ but is equally excited, joyful and intense” (Stern 1985, 140).

What Stern’s account of the mother’s cross-modal imitation—or translation—of the baby’s squeal of delight into a dancing shimmy corresponding with its length and rhythmic contour also makes clear is that similarity is crucial, but so too is the difference produced in this sensory translation. For it is the *difference*, or the correspondence—isomorphism without identity—produced in the translation from one sensory mode into another that, from within the optic of the formation of the self, facilitates the infant’s gradual recognition of the interiority of the other (as well as of itself). In the infant’s increasing awareness that experience can be communicated and shared, two subjective worlds come into momentary contact, even though the meaning of this contact and its function in the subjective worlds of mother and baby will be different for each of them. The accuracy of the translation—especially the matching of the infant’s degree of arousal—is crucial to its success, and Tomkins’s affect theory helps us chart this with some precision. Surprise (rather than startle) is provoked by the novelty of the change of sensory channel implicit in the sufficiently congruous (that is, not shocking) translation. Surprise at this level of arousal is a positive affect, directing the baby’s

attention to engagement with the mother and helping to sustain her interest in it, while startle (the same affect at a higher level of arousal) would have been frightening for the baby.<sup>12</sup>

This process of translation between different sensory modalities is what initially enables experience to be ordered into familiar patterns, including the formation of “affective scripts” designed to manage punishing negative affect and maximize rewarding positive affect (Tomkins 1962). These emergent constellations of experience operate largely outside of awareness but form an experiential matrix for ongoing affective responses to and constructions of the world. In producing difference by means of cross-modal translation, affect *organizes*, both intra- and inter-corporeally, though it does so in very different ways in different cultures. It is this organization of the self into an ongoing and more or less flexible process patterned by affect that facilitates a relatively high degree of cohesion and a sense of continuity in time, even as the self continues to undergo both analeptic and proleptic reshaping by the work of memory and anticipation. The self—whatever form it may take in different cultures and however a sense of agency may be distributed between it and the world in any given culture—then becomes a complex and ever-evolving social interface.

Mimetic knowledge may be the earliest form of knowledge of both self and other, as the infant researchers Meltzoff and Moore suggest, and this is a knowledge made possible by the work of feeling: “Because human acts are seen in others and performed by the self, the infant can grasp that the other is at some level ‘like me’: the other acts like me, and I can act like the other. The cross-modal knowledge of what it *feels* like to do the act seen provides a privileged access to people not afforded by things” (1995, 55, emphasis added).

“Feeling” in this context seems to cover a range of meanings, from the sense of proprioception and affect in Massumi’s sense of “capacity” to a sense of understanding that seems to be the basis for empathy. The same is true of the kind of feeling generated by the “embodied simulation” made possible by the operation of the mirror neuron system. When we watch someone performing an action, the mirror system in human beings evokes both the “sensory description” of the stimuli and the motor schema of the action itself (Gallese 2007).<sup>13</sup> In other words, when we see an action performed, the same neural networks that would be involved if we were to perform it ourselves are activated. In fact we may actually experience something of what it *feels* like to perform the action, as when we watch someone

jump and feel our own body strain toward the movement. Darwin (1998, 40) describes this as the motor sympathy between two bodies.

The organization of relations between bodies enabled by mimetic communication and the development of the self also facilitates one’s sense of agency. When researchers of infants slowed down films of interaction between mothers and babies, they noticed that the babies’ apparently random kicking and wriggling happened in time with their mothers’ vocal rhythms as they talked the language that came to be called “motherese”: a highly expressive, patterned, and repetitive way of speaking with exaggerated changes in pitch and intonation that seems to be designed to capture the babies’ attention and to meet and match the babies’ preferred sounds and movements in their particular rhythm, pace, and intensity. This synchrony is an important prerequisite for the “mutual affective regulation” of mother and baby. It means that the mother is able to respond to the baby’s needs because, for example, she is attuned to the level of a baby’s distress or she knows how to hold its interest. She can modulate the infant’s distress and amplify its enjoyment, and this forms the baby’s earliest experience of the regulation of affect states. It is the basis of the baby’s eventual capacity for the affective self-regulation that will afford it a measure of autonomy. The baby also knows how to solicit the mother’s attention, without which it will not survive—experience in Romanian orphanages showed even more graphically than Harlow’s controversial psychological experiments on monkeys during the 1950s that babies, even when fed adequately, died if they did not receive sufficient human comfort.

But this mimetic capacity for synchrony (and the affective attunement facilitated by it) is not just a feature of infancy, or of the relationship between mothers and babies. This phenomenon, also referred to as the “entrainment” of one person with another, as when someone’s gestures and movements are synchronized with their speech, or when an attentive listener’s or an audience’s almost invisible movements are synchronized with the speech rhythms of the person to whom they are listening, so bodies come to “move in *organizations of change* which reflect the microstructure of what is being said, like a car following a curving road,” as Condon writes (1984). But it may not be possible finally to locate agency in one person rather than another, because all aspects of behavior are “both sequentially and hierarchically continuous at the same time” (Condon 1979, 135). Behavior is “all organized together and each aspect is discriminated as a pattern of relationship in contrast to the rest” (Condon 1979, 135). One aspect of behavior may entrain

others both in one's own body and in that of someone else. Here research involving infants, which normally takes the development of the self as its object, actually enables an understanding of relationship closer to Massumi's understanding of mimesis—as a movement that assembles relations as it traverses bodies, leaving form as a trace in its wake, rather than being a property of bodies themselves. Nevertheless, the operation of the self, assembling affect with cognition and so enabling a certain “freedom of the will,” complicates human synchrony.<sup>14</sup> Human beings are perhaps as likely to fall out as to fall in with someone else.

The complexity of the relationship between affect and cognition that characterizes the human, and the dependence of cognition on affect and the senses, comes more clearly to the fore when we start to think about the way language—in the very process of making meaning—is implicated with rhythm and movement. There is a musical aspect to infant entrainment in the repetition of short “phrases” by the mother, and later on (when the infant is about two) her play tends to turn rhythmic, and games are shaped by rhyming and other forms of melodic patterning. In considering these elements of entrainment, Colwyn Trevarthen speculates about an inherent time sense that seems to be built into the human brain. This is a “shared pulse” that can be used for either synchrony or alternation—for example, turn-taking in conversation. Trevarthen asserts that pulse or rhythm and affective sympathy are the two main components of attunement between mother and infant. Rhythm (or “pulse”), like affect, *organizes* (1999/2000). As Condon writes, “There is an inner unity and integrity to the sustained relationship [between different body parts moving at the same time, even at different speeds and in different directions]. [It is] as if the body parts were obeying a pulse or wave train which organized them together. . . . Body motion appears to be an emergent, continuous series of such pulse-like, organized forms” (1984, 42).

Both animal and human bodies move in bursts of polyrhythmic expression that allow “intricately timed pulses of muscular energy in harmonious pulses of plastic transformation that push against the environment” (Trevarthen 2002).<sup>15</sup> Similarly, speech and writing may also be entrained by rhythm. The turn-taking or alternating vocal forms of mother-infant interaction were identified as an important means of organizing communication and termed “proto-conversation” by Mary Bateson (1971), who in earlier work emphasizes the complementarity of conversation in interaction with other modalities:

The essence of conversation is in fact the possibility, provided in ordinary conversation by kinesic behaviour and paralanguage, of organization into units larger than the syntactic sentence, so that both participants are included in an ongoing pattern. Infant gazing is the precursor of adult gazing, infant gesticulation a precursor of adult gesticulation, and infant vocalization a precursor of adult vocalization. But would learning in each of these types of signalling occur if they were not juxtaposed and their communicative functions were not complementary? (Bateson 1979, 72)

They are not only complementary but also analogous, and translatable. They are capable of substituting for each other and of corresponding to each other. And they are also, on occasions, capable of contradicting each other. Mother-infant communication involves participants who use different codes coordinating their behavior in a common performance (as also happens in cross-cultural communication), but adults are capable of using a number of different codes and sometimes the code-switching that governs performances is a result of complex contexts (Bateson 1979, 7).

Movement, sound, and rhythm are all anterior to symbolic verbal communication, and provide a prototype for it: verbal conversation is formally predicated on the rhythms of nonverbal behavior, which it does not ever entirely replace or supersede. Movement, sound, and rhythm are neither vestigial to language, nor unorganized accompaniments to it. Gesture, for example, is a “forceful presence” in language (Agamben 1999, 77). It seems to actively facilitate thought and speech, lending form to the sweep of an idea, helping to draw it out. Writers don't deliver messages, they make gestures, as Merleau-Ponty puts it (1974, 60).

Gesture, then, is “a ‘material carrier’ that helps bring meaning into existence” (McNeill 1992).<sup>16</sup> So sympathetic modes of communication not only persist alongside linguistic modes: they also inhabit and actively shape them. These are not rudimentary, infantile, or so-called primitive modes of communication: rather, they are the essential prerequisites for, and working collaborators with, verbal communication. They are not noise in the system: they are part and parcel of it.

Mimesis is an entirely holistic, analogue mode of communication in which “the world is apprehended as variation on continuous dimensions, rather than generated from discrete elements” (Bucci 2001).<sup>17</sup> While language involves both serial and parallel modes of processing, it can also be thought of as a form of serial processing of experience that has already been parallel-processed. This parallel processing is performed via the distributed



modes of input from the various different senses. Information from each of the senses is compared with memories of previous experience in each modality before being combined. Of course all of this happens in an instant and is always ongoing. In Tomkins's terms, this represents an informational compression that is necessary because consciousness is "a limited channel" (Tomkins 1992, 287). Such compression condenses affective, sensory, and so-called cognitive forms of knowledge, creating procedural (or more broadly, nondeclarative) memory. This is the domain of habit without which we can't function. It comprises motoric, perceptual, and cognitive skills as well as complex emotional patterns such as the one Tomkins codifies as affect scripts. These and other automatic forms of knowledge are what allow us to engage in complex multitasking, as when we think about something else while driving through a familiar streetscape.

This process of compression prompts a rethinking of just what is meant by cognition at all, especially when it is routinely associated with language. Tomkins insists on the complexity of what he calls "the cognitive system," given the importance of it to sensory and motor modes of knowledge that not only "operate outside consciousness and permit consciousness to restrict itself to other objects of knowledge," but which—in the case of sensory knowledge—give rise to a plethora of different kinds of knowledge, beyond the different senses: drive, affect, and muscle sensations, as well as the proprioceptive sense (Tomkins 1992, 16). In elaborating on the different kinds of knowing produced by these various functions, Tomkins makes clear that they are all integral to the cognitive system, which would include all of the above. He suggests that cognition has been at once too narrowly defined and too easily imagined as an independent "high command mechanism" that would assess and arbitrate other ways of knowing. Instead, he argues against the existence of a separate cognitive mechanism at all, and for "a more democratic system with no special mechanism completely in charge or, if in charge, able to endure as a stable mechanism" (Tomkins 1992, 17). What results from this picture is a "distributed authority" that makes cognition "as elusive to define as the 'power' in a democratic form of government or the 'meaning' in a sentence" (Tomkins 1992, 17).

At the limit, then, Tomkins makes clear that there can be no "pure cognition," no cognition uncontaminated by the richness of sensate experience, including affective experience. Aspects of this level of experience cannot be translated into words without doing violence to the totality of awareness, for example, to the simultaneity of various sensory experiences that renders

them indivisible, as when, sitting by the window in a café watching the busy streetscape with the warmth of the morning sun on my back, I smell the delicious aroma of coffee and simultaneously feel its warmth in my mouth, taste it, and can tell the choice of bean as I listen idly to the chatter in the café around me and all these things blend into my experience of "being in the café." But the holistic nature of everyday perception can't be directly translated into language and to express something of this in words I must split it into sensory components and list them in succession, which implies a hierarchy of importance—and so on. Of course, language also enables a reflective handle on experience, opens new forms of agency, articulates temporal relations, and links things distant in time or place.<sup>18</sup>

According to Walter Benjamin, language is "the highest level of mimetic behaviour . . . [it is] a medium into which the earlier powers of mimetic production and comprehension have passed without residue, to the point where they have liquidated those of magic" (1979, 163). Speech and writing both comprise "an archive of non-sensuous correspondences" (162) in which what Massumi calls "felt relations" can be shared "at any distance from the sensuous forms they evoke" (Massumi 2003, 148). Yet, if language is action at a distance on the forms it connects, it nevertheless acts directly on the body.<sup>19</sup> Metaphors not only often derive from bodily processes (Lakoff and Johnson 1999), but they excite a "sympathetic" response in the form of embodied simulation in much the same way as mirror neurons do (see R. Gibbs 2006).<sup>20</sup> This simulation is not voluntary, nor is it a form of pretense: it is "automatic, unconscious and prereflexive" (Gallese 2003, cited in R. Gibbs 2006). Because simulations are shaped by somatic memory, they have specific consequences for how metaphors (but also many types of nonmetaphorical language) can be understood. Language is in fact highly dependent on the body's physical capacities for its effectivity. It is also very selective, concentrating on evoking experience in one sensory channel at a time: in this respect, it treats the body not as a unified and indivisible whole, but as an ensemble of potentialities that can—and must—be selectively activated. The body, then, is not so much a medium as a series of media, each of which connects in its own way with technological media, including writing. Mimesis produces the virtual by enabling the reassembling of these disparate media, giving rise to what is "real without being actual, ideal without being abstract," as Proust writes of dreams (1992, 906).

Merlin Donald suggests that from an evolutionary perspective, mimesis makes symbolic thought possible, since symbolic thought originates in "ex-



ternalised acts" (like the act of reading aloud, rather than silent reading, the capacity for which is developed later). These acts are predicated on "a brain capacity that allows us to map our elementary event perceptions to action, thus creating, at a single stroke, the possibility of action, metaphor, gesture, pantomime, re-enactive play, self-reminding, imitative diffusion of skills, and proto-pedagogy, among other things" (2000, 33).

Mimesis operates at every level of experience, from the most immediately corporeal to the most abstract. Understanding the corporeal, nonverbal dimensions of mimetic communication is crucial to explaining its pervasiveness in human social relations and its centrality to cultural forms such as cinema and performance, which aim to bind spectators into complex forms of sociality, including story, cinematic spectatorship, and audience membership. We tend to think of vision as the most important sensory mode for mimicry, especially in the age of the image. However, although sight is in fact neurologically dominant in the so-called higher primates, it rarely operates in isolation from the other senses, and its dependence on them indicates the importance of sensory cross-modalization—or synesthesia—in mimesis.<sup>21</sup> To reconfigure mimesis as cross-modal mimetic communication enables a transformation in thinking about vision and visuality. Visuality appears not only as a biophysical phenomenon but also as a social process, a way of relating to what is seen. Mimesis can then be understood as the primary mode of apprehension utilized by the body, by social technologies such as cinema, television, and even the Internet, and by the cultural processes involving crowd behavior, fads, celebrity, and pandemics of anorexia or depression, as well as the processes by which rapid shifts of social and political attitudes may occur.<sup>22</sup> A better understanding of how mimesis is involved in these processes is important because mimetic communication contributes to the generation of the "affective social tie" (Borch-Jacobsen 1988). It is the cement of parent-child, peer, friendship, and love relations, and, under certain conditions, fleeting fellow-feeling between strangers. It also forms the affective basis for ethical dealings with others.

The whole of human culture, then, is, perhaps, predicated on imitation, in which difference and innovation are as central as reproduction and similarity. Yet—in part precisely because of this—the innate human capacity for mimesis gives rise not only to vastly different and often incommensurable modes of lived emotion but also to completely different ways of producing and archiving the nonsensuous similarities that comprise both the very qualities of lived experience and the forms of abstract knowledge in different cultures.<sup>23</sup> Massumi enjoins us to remember the "duplicity of form," which

participates "spontaneously and simultaneously in two orders of reality, one local and learned or intentional, the other nonlocal and self-organizing" (Massumi 2003, 151). It is this duplicity that necessitates an oscillation between two perspectives. On the one hand, a certain strategic humanism viewed through the optic of representation that focuses on the culturally plastic and historically changing forms of subjectivity still seems indispensable if we are to remember that what we call "the human" can never be more than an image and will always tend to exclusion and prescription. On the other hand, the world of "nonlocal," asubjective becomings in which these forms appear simply as momentary traces of other movements promises to give rise to envisionings beyond the already known, even as their discovery threatens to produce a universalizing discourse that elides the crucial specificity and particularity of differences, especially cultural and sexual ones. The "passionate fictions" of writing, and art more generally, seem to offer a way of working in both dimensions simultaneously, and contemporary theoretical writing is increasingly borrowing the techniques and methods of fiction to this end, interlocking sensation with story and in the process recreating the essay as a heuristic for innovation.<sup>24</sup>

#### Notes

Earlier versions of sections of this work were delivered to "Between the Cultural and the Clinical" (University of Sydney, 2001); the NMLA (Hartford, Conn., 2001); the International Literature and Psychology Conference (Arezzo, 2002); and the "Theorising Affect" conference (Durham University, 2006).

- 1 In particular, I have in mind work in cultural studies by Elspeth Probyn, Jennifer Biddle, Melissa Hardie, Maria Angel, Jill Bennett, Melissa Gregg, Megan Watkins, Sue Best, Cristyn Davies, Gilbert Caluya, and Kane Race.
- 2 In other words, both must be thought as relations, not terms.
- 3 I take them to mean that it requires rethinking.
- 4 After years of debate about whether or not animals actually did imitate or merely emulate, there seems to be increasing agreement that many do really imitate. For example, Gisela Kaplan (2007) argues that Australian magpies possess large vocal repertoires for which neither a reproductive nor a purely territorial function can be identified and which may possibly comprise a rudimentary form of language called referential signaling. Pepperberg (1990) makes similar arguments about parrots, and Herman (2002) about dolphins.
- 5 It has been argued that being mimicked makes human beings more pro-social (Van Baaren et al. 2004). However, the opposite is also possible (Gibbs 2008).
- 6 This is so because the activation of one part of the response (here, facial expression) is sufficient to activate the others.
- 7 "Ludwig Wittgenstein said that when one sees something beautiful—an eyelid, a

- cathedral—the hand wants to draw it” (Scarry 1997). Of course, painting involves a gestural dimension that relies on our capability to translate the curve we see before us into a loving caress. See Hommel et al. 2001 for citations of a number of empirical studies about the inference of kinematics from the trace.
- 8 My thanks go to Greg Seigworth for alerting me to this extremely helpful essay and for his very helpful editorial comments.
  - 9 Cytowic (2002 and 2003), adduces neurological evidence for the intrication of affect and synesthesia.
  - 10 “At all stages of animality, mimesis tends to produce differences as well as to efface them, to make signs appear and make them disappear. When we interpret, for example, what we call the mimesis of certain insects now as ‘intimidation,’ now as ‘camouflage,’ it is in all appearances to this double property that our interpretation returns” (Girard 2000).
  - 11 Or, as Deleuze and Guattari specify, this process of de-territorialization involves a “co-existence of two asymmetrical movements that combine to form a block, down a line of flight that sweeps away selective pressures” (1987, 293–94).
  - 12 Here I adopt Tomkins’s identification of surprise-startle as a discrete affect provoked by novelty that interrupts what has been ongoing and functions to “re-set” attention (1962).
  - 13 Much commentary on mirror neurons focuses on vision, but mirror neurons also exist for hearing (Kohler et al. 2002). Moreover, as Wolf et al. point out, “Neurons, which are visual/motor neurons, represent a subset of a larger group of neurons designated as multimodal neurons (Graziano and Gross 1994, 1031) because they contain within them the capacity to be directly activated simultaneously by different sensory modalities, for example, auditory, somatosensory, and visual” (Wolf et al. 2001).
  - 14 I refer to Tomkins’s wonderful account of how the structure of the affect system both constrains and enables freedom of the will (1962).
  - 15 Trevarthen argues that this may form the basis of narrative orchestration and he sees the apprehension of time in what he calls the intrinsic motive pulse as central to this (1999/2000).
  - 16 In fact Rizzolatti and Arbib argue that gesture (rather than subvocalization) is the evolutionary precursor to symbolic communication (1998). And the mirror neuron system in human beings may have facilitated this process:  
 Consider a PET study conducted in humans by Bonda and colleagues in 1994 that indicates that there are also significant hand movement representations in Broca’s area. The implication is that this area is specific for the expression of language developed from a gestural communication region and highlights again the consideration of the significance of a mirror neuron system in ‘the capacity to make and interpret facial communicative gestures and the capacity to emit and understand “verbal gestures” (Rizzolatti 1994, 139). *This ultimately links gesture to verbal communication.* It is important to keep in mind that the connections to the limbic system are wired to apply an emotional valence to the behaviors that, in part, are governed by the mirror neuron system. This enables humans to appreciate affective subtleties in communication. (Wolf et al. 2001, emphasis in original)

- 17 “Subsymbolic processing . . . is experientially immediate and familiar to us in the actions and decisions of everyday life—from aiming a piece of paper at a wastebasket or entering a line of moving traffic to feeling that rain is coming, knowing when the pasta is *almost* done and must be drained to be ‘al dente,’ and responding to facial expressions or gestures. [It] accounts for highly developed skills in athletics and the arts and sciences and is central to knowledge of one’s body and to emotional experience” (Bucci 2001).
- 18 For a fuller discussion of the relationship between language and the senses, see Angel and Gibbs 2009.
- 19 See A. Gibbs 2006 for an extended discussion of this aspect of language.
- 20 Massumi refers to this phenomenon as it occurs more broadly in reading as “incipient action” (2002, 139).
- 21 As Massumi writes, synesthesia and the separation of the senses are “co-primary, since the potential for each conditions the actual exercise of both” (2002, 282–83).
- 22 It is in the context of the diffusion of innovations that the work of nineteenth-century French sociologist Gabriel de Tarde now takes on renewed significance, and I take this up in Gibbs 2008.
- 23 In this essay I have drawn exclusively on the Western forms I know best.
- 24 See Schlunke 2006 for a wonderful discussion and demonstration of writing as mimesis.