Things That Talk

Object Lessons
from Art and Science

edited by Lorraine Daston
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This book was written by a working group of historians of art and historians of science who met three times over the course of the academic year 2001–2002 at the Max Planck Institute for the History of Science in Berlin to discuss, write, and rewrite their essays. Although each essay is the work of an individual author, and each is indeed strongly voiced, all went through multiple drafts, shaped by our energetic group discussions in ways that none of the authors could have predicted at the outset of the project. This is a form of intensive collaboration especially well suited to interdisciplinary projects, which usually require a shift in perspective as well as instruction in the details of a new topic. But constraints of time, space, and support — as well as of patience and ingrained intellectual habits — often mitigate against such collaborations. Hence the participants in the working group are grateful to the Institute for its hospitality (especially to Carola Kuntze and Doris Müller-Ziem) and support, and the Institute is still more grateful to the participants for their generous gifts of time, intelligence, and hard work to the project. The members of the group also profited greatly from the comments of three guests who attended one or another of our three meetings and whom we thank warmly for enlivening and enlightening our discussions:
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James Clifford from the University of California at Santa Cruz, Ken Goldberg from the University of California at Berkeley, and Miguel Tamen from the University of Lisbon and the University of Chicago.

Introduction

Speechless

Lorraine Daston

Unfortunately poetry cannot celebrate them [scientists], because their deeds are concerned with things, not persons, and are, therefore, speechless.

— W.H. Auden, “The Poet and the City” (1963)

Imagine a world without things. It would be not so much an empty world as a blurry, frictionless one: no sharp outlines would separate one part of the uniform plenum from another; there would be no resistance against which to stub a toe or test a theory or struggle stalwartly. Nor would there be anything to describe, or to explain, remark on, interpret, or complain about — just a kind of porridgy oneness. Without things, we would stop talking. We would become as mute as things are alleged to be. If things are “speechless,” perhaps it is because they are drowned out by all the talk about them. These essays are an attempt to make things eloquent without resorting to ventriloquism or projection. From a miscellany of things drawn from the preoccupations of historians of art and historians of science, this book explores the meaning of things in situ, gaze fixed firmly on this or that thing in particular rather than on the ontology of things in general. Yet although we write as historians in the manner of historians, in
gritty detail about specifics, we are indebted to philosophical and anthropological reflections about things, and we hope that these essays will in part repay that debt by showing how variously things knit together and matter and meaning. This variety suggests that not just things-as-they-are but thing-making may be rich in surprises relevant to philosophical questions about evidence and metaphysics and to anthropological concerns about significance and salience.

Each essay examines a thing; these things are the dramatis personae of the book. It is not always easy to explain briefly and colloquially what the thing in question is or wherein its thingness inheres—fruitful quandaries to which I will return below. Moreover, some of the things in question are individuals, others are genera, some are in between. Indeed, all of these things exhibit a certain resistance to tidy classification, though they are all of a sort to be seen, touched, and otherwise dealt with in the manner of tables, pencils, and other banalities. They are neither mermaids nor quarks. But it should be kept in mind that both "talk" and "things" are terms that require further illumination. For the sake of orientation and a first approximation, here is our list of things: Hieronymus Bosch's drawing The Tree Man, the eighteenth-century freestanding column, Peacock Island in the Prussian river Havel, soap bubbles, early photographs entered as court evidence, the Glass Flowers at Harvard, Rorschach blots, newspaper clippings, and certain paintings by Jackson Pollock as seen by the critic Clement Greenberg. This is a motley crew, no attempt was made to make it more homogeneous along conventional dimensions of similarity.

Why these things and not others? Surely any number of lists, all of them just as reminiscent of the entries in a Borzsian encyclopedia as this one, might have been generated by another group; we lay absolutely no claim to the unique suitability of this list to show how things talk. It was the list of things chosen by the members of our group, and obviously shaped by our idiosyncratic interests and backgrounds. But they are not the things we would have written about without the collective challenge to write about things in all their obdurate objecthood. These are the things that made each of us want to talk about how these particular things talk to us. They are objects of fascination, association, and endless consideration. We noticed early in discussions of our drafts that the essays were, for better or ill, unusually voiced by the ordinary standards of disciplinary prose. By some process of reciprocality, our things individualized us as we picked them out of all the possibilities. What these things have in common is loquaciousness: they give rise to an astonishing amount of talk. We are interested in how talkativeness and thingness hang together.

First, talk. The things in these essays talk; they do not merely repeat. They are not instruments for recording and playing back the human voice. Recall that the fates of Echo and Narcissus are intertwined in the same Ovidian tale—not only because echoes mimic reflections in another medium but also because the love-lorn nymph Echo falls victim to Narcissus's self-absorption in his own image. Narcissism was originally a certain self-regarding (and ultimately fatal) conceit that reduces others to repeat what is said to them. Cartesian anthropocentrism, which asserts a monopoly on language for human beings, is a form of narcissism that condemns things merely to echo what people say. As Descartes pointed out in the Discours de la méthode (1637), genuine language must be inventive and apt, capable of an indefinite number of utterances that suit the circumstances in which they are uttered. Hence parrots and all manner of parroting devices, from echo chambers to tape recorders, are disqualified from true speech. Descartes believed that language was distinctively human, a criterion for distinguishing anthropos from automaton. Yet the things treated in
these pages manifest something of the plentitude, spontaneity, and fitness of utterance Descartes ascribed to language. Even if they do not literally whisper and shout, these things press their messages on attentive auditors—many messages, delicately adjusted to context, revelatory, and right on target. Skeptics will insist that all this talk of talk with respect to things is at best metaphoric and at worst a childish fantasy about tongues in trees and books in brooks. Accept these doubts for the sake of argument: there is still the puzzle of the stubborn persistence of the illusion, if illusion it be. If we humans do all the talking, why do we need things not only to talk about but to talk with?!

Historically, things have been said to talk for themselves in two ways, which, from an epistemological point of view, are diametrically opposed to one another. On the one hand, there are idols: false gods made of gold or bronze or stone that make portentous pronouncements to the devout who consult them. Even in Antiquity, opinions differed as to just how the idols spoke: priests hiding in the temple basement speaking through cleverly hidden tubes, or demons masquerading as effigies of Apollo or Zeus? But at least in the Judeo-Christian tradition, there was unanimity that whatever an idol said was ipso facto untrustworthy, intended to manipulate and deceive. The very word “idol” became a metaphor for epistemological error, as in Francis Bacon’s idols of the cave, tribe, marketplace, and theater.2 An odor of fraud and folly hangs about this sort of talking thing. On the other hand, there is self-evidence: res ipso loquitur, the thing speaks for itself. It does so in mathematics, law, and religion. Geometric self-evidence comes in the form of axioms and postulates about spatial magnitudes too blindingly obvious to require (or admit of) demonstration: for example, the whole is greater than the part.1 In early-modern European legal codes, certain pieces of material evidence were called “violent presumptions” and deemed almost equivalent to full proof of guilt, as opposed to merely “probable indices”: the bloody sword in the hand of the murder suspect versus the pallor of a woman believed to be pregnant.4 Finally, within Christianity, miracles were almost always worked in things, be it the body of a cripple suddenly made whole or the water turned to wine at the wedding feast, and constituted an immediate and irrefragable token of God’s will.5 In all these cases, the talking thing spoke the truth, the purest, most indubitable truth conceivable. The chief reason why the truth was so pure was that it had been uttered by things themselves, without the distorting filter of human interpretation.

Several of the essays in this volume testify to the enduring ambivalence of idols versus evidence that still surrounds things that talk. What is particularly disconcerting is that both extremes of the epistemological polarity appear to work by the same mechanisms of reversal and replacement. The things Bosch depicted in his drawings and paintings threaten to turn the tables on spectators: “potentially active agents that engage with viewers as if they (the artworks) were the persons and their viewers were mere things.” They are depicted with hyperreal verisimilitude because they are more real (and therefore more efficacious) than the worldly things they seem to be. A similar fear of the counterfeit usurping the place of the real, the idol replacing God, provoked the horrified response of some botanists to the Glass Flowers, which were to replace the plants themselves. Although the valuation flip-flops from negative to positive, early arguments concerning the use of photographs as courtroom evidence in the United States exhibit a symmetrical logic. Opponents contended that the photograph was a pale substitute for firsthand evidence, the “hearsay of the sun,” and therefore inadmissible; proponents also stressed that the photograph was a substitute, but this time for the mental images stored in memory on which witness testimony was based.
— zerohand evidence, as it were. Whether the thing at issue purportedly replaces people or nature, whether it is imagined as agent (the artwork) or patient (the photograph), there is something unheimlich, either demonic (the idol) or divine (the miracle), about its impostures.

No one has written more perceptively about the impostures, or, as he called them, the “mythologies,” surrounding things than the French critic Roland Barthes. For Barthes, the things around which the mythologies of modern bourgeois life were woven—Einstein’s brain, the Citroën DS 19, laundry detergents—also spoke a language, or rather displayed a semiology, albeit of a vampirish kind. The significance of the myth was abstract ideological “form”—for example, French imperialism or transcendent technology—but one covertly nourished by the contextualized, embodied “sense” of its totem object: “a rich, real-life, spontaneous, innocent, indisputable image.” Barthes’s mythic objects talk by appropriation; myths “steal” language in order to “naturalize” contentious concepts like empire. Almost any language, even the well-formed language of mathematics, can fall prey to myth; almost any object can become a myth, “for the universe is infinitely suggestive.” In this account, history and context, masquerading as nature and fact, can bend any and all things to ideological ends. The thingness of things disappears in the mythologies analyzed by Barthes, because it eludes the peculiar metalanguage of myth that flickers between form and sense: “Outside of all speech, the DS 19 is a technologically defined object: it attains a certain speed, it hits the wind in a certain way, etc. And of this reality, the mythologue cannot speak.”

Although these essays (and all readings of objects as cultural artifacts) profit from Barthes’s insights, they query both the semiotics and the plasticity of Barthes’s mythic objects. Some things speak irresistibly, and not only by interpretation, projection, and puppetry. It is neither entirely arbitrary nor entirely entailed which objects will become eloquent when, and in what cause. The language of things derives from certain properties of the things themselves, which suit the cultural purposes for which they are enlisted. It is neither the language of purely conventional connections between sign and signified nor the Adamic language of perfect fit between the two. This is the language wistfully invoked in Hugo von Hofmannsthals short story “Ein Brief” (1902), in which the talented Lord Chandos confesses to Sir Francis Bacon that his long-awaited literary projects will never come to fruition, for there is no known language in which “the mute things speak to me.” These essays explore the space between these two extreme visions of the way words and world mesh together, and thereby unsettle views about the nature of both talk and things.

Second, things. The departure point for this project was a shared perplexity about how to capture the thingness of things in our respective disciplines. Given the distance separating the subject matter and methods of historians of art and historians of science, the convergence of the terms in which the dilemma was posed was striking. Joseph Leo Koerner formulates it pithily for the history of art: “Art historians today tend to be divided between those who study what objects mean and those who study how objects are made.” For historians of science, the polarization is starker still. Because the objects in question have long been assumed to be as inexorable and universal as nature itself, the history of inquiry into these objects—that is, the history of science—has traditionally been narrated as just as inexorable and universal. A chasm yawns between this older historiography and recent studies of “science in context,” which emphasize the local character and cultural specificity of natural knowledge. Once again, the opposition between matter and meaning (sometimes tricked out as that
between nature and culture) is reproduced. On the one side, there are the brute intransigence of matter, everywhere and always the same, and the positivist historiography of facts that goes with it; on the other side, there are the plasticity of meaning, bound to specific times and places, and the corresponding hermeneutic historiography of culture. This Manichaean metaphysics is, of course, a caricature, which the work of historians of art and of science often shades and softens. But the metaphysics nonetheless exerts a powerful influence on how practitioners of both disciplines grapple—or fail to grapple—with things, those nodes at which matter and meaning intersect. Entities that lie precisely at the fault line of a great metaphysical divide tend to appear paradoxical for just that reason.

The classical philosophical treatments of things are of limited assistance in overcoming the paradox. Martin Heidegger’s famous essay “Das Ding” blames the paradox on Kantian metaphysics, or, rather, on Kant’s reduction of metaphysics to epistemology. The “thing” must, Heidegger insists, be sharply distinguished from the Kantian “object” (Gegenstand), the latter being the product of ideas and representations of the thing. The thing, by contrast, is “self-sufficient,” and its essence is captured neither by its appearance as given by perception nor by scientific theories about it. Self-sufficiency does not, however, imply inertia for Heidegger; indeed, the thingness of the thing lies in its power to “gather” other elements to it: the humble jug gathers to itself heaven and earth, mortals and immortals. But Heidegger is mute on how “the thingness gathers [das Dingen versammelt]” and why it gathers these items and not others.9

The anthropological literature on gifts, commodities, and exchange is more illuminating on these specifics. Detailed studies examine how the same thing may become sacred or profane, gift or commodity, alienable or inalienable in different cultural con-

texts.10 Although the materiality of things “as a physically concrete form independent of any individual’s mental image of it” and even specific properties like durability or corruptibility figure prominently in some of these accounts, the accent has been on the malleability of interpretation.11 As Nicholas Thomas puts it: “Hence, although certain influential theorists of material culture have stressed the objectivity of the artifact, I can only recognize the reverse: the mutability of things in recontextualization.”12 Since anthropological studies are primarily concerned with things as they are enlisted to concretize social classifications, to regulate exchange and hierarchy, and to fashion selves and subjectivities, it is natural that they should highlight cultural meanings.13 But they, too, leave the paradoxical status of the thing unresolved.

The approach of the essays in this volume has been to confront the paradox head-on and to take it for granted that things are simultaneously material and meaningful. We assume that matter constrains meanings and vice versa. The chemical properties of photographic emulsions and the techniques of the darkroom play a role in how photographs are construed as courtroom evidence, but so do historical analogies with hearsay testimony. Botanical models made of wax may be visually indistinguishable from those made of glass, but the modeling procedures are entirely different, and that difference in turn makes curiosities out of the one but marvels out of the other. Certain properties of soap bubbles—elasticity, thinness, fragility—lend themselves to scientific analogies with the ether, but their fascination for Victorian men of science also stemmed from the myriad associations of soap as commodity, emissary of empire, and nostalgic plaything. In the case of works of art and architecture, materiality stakes its claim at least two levels: in the stuff of and gestures by which the work is made, and in the material objects depicted or invented therein. The columns of the Panthéon and the repetitive, assembly-line movements
frozen in Jackson Pollock’s *Mural* may seem more obviously material than the strange hybrids of trees and humans in Bosch’s drawing *The Treeman* or than George Grosz’s café scenes created out of newspaper clippings, but they are not more essentially so. Bosch’s chimeras were not only constructed out of commonplace objects; they were organic fusions that showed “the impossible zones of material transition” between, say, tree and boat. Grosz’s montages deliberately display the seams between the elements of, for example, the *Brillantenschieder im Café Kaiserhof*, but here again the matter of the subject matter matters to the mise-en-abyme effect: a picture of a gangster reading a newspaper made out of newspapers about gangsters.

Even the most malleable things treated in these essays have a bony materiality that makes them what they are. Since the utopian romances of the Renaissance, islands have been a favorite screen for the projection of cultural fantasies (a function taken over by planets in science fiction). The *Pfaueninsel* (Peacock Island) in the Havel River between Berlin and Potsdam served as just such a screen of projection for the fantasies of Prussian monarchs, a royal theme park that mingled Petit Trianon, South Sea paradise, English garden, and zoo. More utilitarian projects settled on the island — model farms and factories — partook equally of the phantasmagoric, alongside the fake ruins and imported crocodiles. Yet the landscape of the *Pfaueninsel* itself, its hills and hollows, set the stage for the most spectacular utilitarian phantasmagoria of all, a noisy, smoke-spewing steam engine that pumped water up to the highest point of the island, from whence it cascaded downward in showy fountains. The island’s watery perimeter set it off as an object of aesthetic attention as a frame does a painting in a museum. Its situation — just right for a day’s pleasure trip from Berlin or Potsdam — required visitors to set aside present preoccupations for a short journey, just as the island’s attractions were figurative journeys to pasts and futures not very far from Prussia’s present. Not just any screen could catch and reflect the projections cast upon Peacock Island.

The whole point of the Rorschach test is projection: subjects allegedly reveal their deepest selves by telling the examiner what they see in an inkblot. Since examiners are schooled to offer no guidance as to the proper response, the number of potential interpretations of the Rorschach cards is vast. Presumably any inkblot, suitably amorphous, would serve this purpose — or, for that matter, the clouds, cracks, and glowing embers of art-historical legends about the image made by chance. But in fact, the things themselves, the Rorschach cards, have been rigidly fixed by both copyright and method of manufacture, all produced by a single antique printing press in Bern. In the name of standardization, coding, and comparison, the accidents recorded on the cards — drips, splotches, smears — are now produced and reproduced with a deterministic uniformity seldom achieved even by the billiard balls of classical mechanics. Even second-order accidents — inkblots that for one reason or another came out too faint in the printing press — become regimented into the canon, used for a special test to detect psychic responses to indeterminacy. The cards are as identical as the interpretations of them are protean.

Conversely, the most stolidly functional things — buildings, soap, newspapers — radiate an aura of the symbolic. The invisible iron skeleton of the eighteenth-century freestanding column recalled the human skeleton; the architectural articulations of the parts of the colonnade harmonized with the analytic methods of the *philosophes*. Victorian soap was an imperial commodity, a harbinger of civilization, a sentimental evocation of childhood, and a microcosm of the best-kept secrets of the physical macrocosm. Newspaper clippings circa 1920 caught the speed, the evanescence, and the immediacy of modern life on the run, already
forgotten the day after tomorrow. Like seeds around which an elaborate crystal can suddenly congeal, things in a supersaturated cultural solution can crystallize ways of thinking, feeling, and acting. These thickenings of significance are one way that things can be made to talk.

But their utterances are never disembodied. Things communicate by what they are as well as by how they mean. A particular cultural setting may accentuate this or that property, but a thing without any properties is silent. Claude Lévi-Strauss once singled out certain things as “good to think with”;
these essays explore more generally the mode of thinking with things, how things helpfully epitomize and concentrate complex relationships that cohere without being logical in the strict sense, much as images in Freud’s interpretation of dreams or certain figures of speech — allegory, synecdoche, prosopopoeia — condense, displace, and concretize. Thinking with things is very different from thinking with words, for the relationship between sign and signified is never arbitrary — nor self-evident.

These essays are as much about how things are made as about what things are. Shifting attention from being to becoming can undermine seemingly obvious assumptions about thingness. One of the most thing-like properties of prosaic things is sharp outlines: it belongs to the essence of things to be neatly circumscribed; we know where one leaves off and the next begins. Commonsense thing-ontology is chunky and discrete. Moreover, things on this account come tidily parsed into the categories of art and nature: artificialia are made, naturalia are found. A glance usually suffices to tell us which is which. Finally, everyday things belong by definition to the realm of the objective, as opposed to the subjective realm of the self. It is at once a matter of morals and a matter of metaphysics to distinguish clearly between persons and things. All these banal certainties begin to unravel when the processes by which things come into being are scrutinized more closely, especially when the things in question are talkative.

Things that talk are often chimeras, composites of different species. The difference in species must be stressed; the composites in question don’t just weld together different elements of the same kind (for example, the wood, nails, glue, and paint stuck together to make a chair); they straddle boundaries between kinds. Art and nature, persons and things, objective and subjective are somehow brought together in these things, and the fusions result in considerable blurring of outlines.

The critic-artwork dyad of Clement Greenberg and Jackson Pollock’s paintings creates an entity, Jackson-Pollock-as-modernist-artist, that is neither a truth waiting to be discovered by any perceptive viewer of the Totem and Mural paintings nor the invention of the fertile imagination of Clement Greenberg. A prearranged harmony of urban grids, industrial time-motion studies, and the domestication of emotion by rational control created shared ways of seeing that artist and critic could express in tandem, and only in tandem. Greenberg talks Pollock-the-modernist-artist into being; Pollock paints Greenberg-the-modernist-critic into being. Hybrids multiply with Bosch’s “equipment,” his Heideggerian Zeug. Here there are chimeras within chimeras. The Treeman that gives the drawing its name is a literal chimera, but each of its components, so whole and homely at first glance, dissolves into a figurative chimera on closer inspection. Are Bosch’s odd but oddly familiar things — trees, boats, body parts — constructed or portrayed with his doodling pen strokes? They seem almost as haptic, as handy as they are visible. Their robustness is rooted in more than the artist’s illusionistic skill; they are also invigorated by an anti-worldly Christian metaphysics in which symbols can be more real than objects, more active than human agents.
Art/nature chimeras abound among these things. The first photographs were described as photogenic drawings and credited to the pencil of nature; bewilderment about whether they were made by the sun or by the photographer dogged debates about their status as evidence in court and as handiwork meriting copyright. The Glass Flowers were emphatically, even hyperbolically handiwork, but their eerie verisimilitude tempted some botanists to treat them as type specimens, more authentic than their originals in nature. Soap is undeniably an artifact and, in Victorian Britain, a highly industrialized and commercialized one to boot. Yet soap bubbles became models for nature writ small and large, from molecules to the ether swirling between stars. Like all gardens, Peacock Island blended nature and art. In the aesthetic vision of the island’s architects, physis reverted to cosmos, the ancient Greek word that meant both world and ornament and that supplied Alexander von Humboldt with the title of his most famous work. Not only Peacock Island but all of nature became a Gesamtkunstwerk.

Artworks have often been accorded a special status as midway between the objective and the subjective, things that purportedly incarnate selves (both individual and collective) as objects, the word made flesh. There is also a long tradition of illusionistic art flirting with nature, trompe l’œil renditions of grapes and tulips, fish and fowl, that trick the eye for an instant. Hence the difficulties of placing these kinds of things squarely on one side or another of the subjective/objective or art/nature divide might have been anticipated, though it is perhaps more surprising to find them athwart the person/thing divide as well. But the same cannot be said for the businesslike apparatus of the Rorschach test, a set of ten cards routinely shown to thousands of people by psychologists every day, all over the world. Yet it is precisely the nature of this thing to conflate the objective and the subjective, to map the innermost self onto a carefully coded array of perfectly ordinary inkblots. At once completely accidental and irresistibly significant, the inkblots become “images of self,” subjectivities revealed and classified by the mechanical methods of objectivity.

These elements of chance and self recur in collections of newspaper clippings: even the newspaper collage-poems created by the studiously random methods of the Dadaists curiously seemed their makers: “This poem will be similar to you.” Equally accidental juxtapositions of topics on a newspaper page seemed to unveil previously unsuspected affinities between, say, a horse and the Einstein Tower. Clippings collected over years from that most dryly objective of all modern media, the black-and-white newspaper, gradually became transformed into new subjectivities, “paper personae.” Psychologist and paranoiac meet in the conviction that nothing is an accident; everything—the inkblot, the newspaper layout—is saturated with significance for those who can crack the code.

All these things threaten to overflow their outlines. How to draw a line around chimeras that refuse so obstinately to fit into the prepared classificatory pigeonholes? A good part of the work of thing-making is fashioning new pigeonholes, both literally and figuratively. An ingenious new genre of furniture was created to organize newspaper clippings, full of nooks and crannies, and supplemented by boxes, albums, and drawers—all material ways of joining together into new wholes what scissors had put asunder. The river fringing Peacock Island and the internal framing elements of The Treeman also serve to make a composition out of a congeries. Even the articulate elements of the freestanding column, which lent themselves so well to the Enlightenment habit of visual and mental decomposition, blended into a single functional entity and eventually even into a single recognizable style. Scale plays an important role in the work of outlining. An empire
contracted to an island, a universe modeled by a soap bubble, the plant kingdom brought inside and put into museum cases—all these acts of miniaturization are also acts of domestication. Unwieldy things—too big, too small, too heterogeneous, too open-ended—are shepherded into the fold of “moderate-sized specimens of dry goods.”

Thing-making is not bricolage; chimeras are not mere composites. However disparate, fragmentary, and even contradictory their parts may appear to be to the analytically minded historian, things worthy of the name must have a physiognomy. It is precisely the tension between their chimerical composition and their unified gestalt that distinguishes the talkative thing from the speechless sort. Talkative things instantiate novel, previously unthinkable combinations. Their thingness lends vivacity and reality to new constellations of experience that break the old molds. Photographs cannot be subsumed within the Aristotelian categories of art and nature; Rorschach tests challenge Kantian categories of objectivity and subjectivity. As in the case of constellations of stars, the trick is to connect the dots into a plausible whole, a thing. Once circumscribed and concretized, the new thing becomes a magnet for intense interest, a paradox incarnate. It is richly evocative; it is eloquent. Only when the paradox becomes prosaic do things that talk subside into speechlessness.