falling and image

the phenotechnology of accident

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Do things ever go wrong?

The ambiguities of falling as a working mechanism have been at the heart of the notion of chance from the beginning. Merely taken as a word, "chance" is derived from the Latin word *casus*, which is again derived from *cadere*, "to fall," a connection we encounter in modern languages as well, such as the German *Zufall*. But when we go back further we find that the ancient Greeks did not immediately make the same connection. For instance, the word we generally translate into "chance," *tychē*, did not have any direct relationship to falling, but was considered to be much closer to luck and fortune, and was personified by a goddess. To be sure, gods inhabit the heavens, and their acts therefore befall us, yet in the concept of the wheel of fortune something of a horizontality and a cycle is preserved, perhaps even of a gift cycle where we mortals are "given" a chance by the gods. In the *Physics* Aristotle makes regular use of *tychē* as an inimitable act from the gods, and therefore places it outside the scope of his investigations, similar to the notion of the *automaton*, which involves involuntary acts of animals.[1] In Aristotle's mind neither *tychē* nor *automaton* are proper causes, that is, final causes, acts of deliberation. For the Greek philosopher our world is an earthly reflection of the regular mechanics of the heavens, of the predictable movements of the stars and the alternation of day and night. The final cause exerts full control over the other three causes – efficient, material, and formal – which makes events happen by necessity because it guides potentiality into actuality according to the vector of entelechy, the built-in *telos* of things and acts: "there is no art or determinate potency of accidents, since the cause of things which exist or come to be by accident is also accidental."[2]

The central question for him becomes: can chance ever be considered a cause? How is it possible, he says, when there is "no science of it,"[3] that accident can in fact cause things to happen? Does that mean that we should consider some things accidentally necessary? It truly is an important question, since its deeper meaning lies in wondering if events are part of things or not. Is there a border between events and objects, or are they both "things" that "appear" in a realm that by definition does not discriminate between the two? Do things that happen to things belong to them or not, namely as "properties"? And if so, to what thing do they belong, since things-happening usually means happening to two things, namely a thing that befalls another thing.

To answer these questions Aristotle relied on the distinction between substance and accident, where substance is defined by what Leibniz would later

call primary or necessary truths, which are tautologies or identities where the subject and the predicate, that is, what we can say about that subject, fully coincide. Since the word for substance, *ousia*, means "to be," a statement like "Socrates is a man" revolves around what Socrates is, not what he has, and therefore concerns his substance or essence, since "the essence is called the substance of the thing."[4] Another statement, such as "Socrates looks pale today," is what Leibniz would have called contingently true, based on Aristotle's use of "accidentally," *kata symbebēkos*, since paleness only incidentally belongs to Socrates, not essentially. Still, the predicate of paleness is not something that simply befalls Socrates like a bucket of white paint accidentally dropped on his head from a scaffold; the paleness is in fact his, and what fascinates Aristotle is that paleness can neither be fully ascribed to necessity nor to chance, but occupies a middle ground: *symbebēkos* concerns a property that is nonetheless occasional. This notion of accident is of quite a different nature than what Aristotle sometimes calls a "remarkable coincidence," such as abundant rain in the winter, for which he uses the word *symptoma*.[5] The difference between the two is significant: *symbebēkos* is derived from *symbaīno*, "joining together," while *symptoma* literally means "falling together"; indeed, the only ancient Greek term to link accident to falling. The first term, then, is better translated with "coincidence," two things coming together – though literally it likewise has the meaning of "falling together" – and the second with "accident," a falling thing or a thing befalling. Their mutual ambiguity will be our main theme of interest.

Let us now, armed with this small array of ancient Greek terms, look a bit more closely at moments where Aristotle makes use of his notion of accident as coincidence, as a property that belongs to something, yet not essentially. It plays both an external and an internal role in the event-thing relationship. The Greek philosopher gives many examples of *kata symbebēkos*; for instance, finding a treasure in the garden while digging for a plant,[6] or healing someone of a disease, though one is by trade a builder,[7] or the unfortunate man who runs into a bunch of ruffians at a well where they decide to rob and kill him.[8] To what extent can these events be called accidental? Can the coincidence, the event shared between two things, be understood as an accident, as an event happening to one thing? The finding of the treasure does not only happen to the man doing the planting, it also happens to the garden, and the murder of the thirsty man happens to the well too. In Aristotle's analysis the well and the garden are completely passive entities, both merely the object of deliberations, but not part of an exchange.

If we were to look at the life span of the well, we would see the hundreds of thousands of times people meeting there, with a good number of these events including a regular conversation, and again a substantial number of those ending up in a quarrel, yet a smaller number of people falling in love, or falling into the well – like Thales of Miletus who walked straight in while looking up at the stars[9] – of which again a few drowned, while a very small number were murdered by other thirsty people. Why would all these events not count in the life of the well? We should ask Aristotle why only the final cause of the well – its use as a source of drinking water – would count as adding to its substance and all the others as accidents. Let us, for the sake of argument, state the opposite, that accidents – including the minutest occurrences, like a long-legged fly landing on the water's surface – cumulatively form the nebula of the well: the stone object pervaded by a swirling cloud of dust-like events. The thousands of things that it made happen and that happened to it, even those that it might make happen and that might happen to it: at that point the Greek philosopher's distinction between potentiality and actuality starts to blur, as in Agamben's definition of the halo: "One can think of the halo … as a zone in which possibility and reality, potentiality and actuality, become indistinguishable."[10] That would make the well a thick, glowing cloud, a superactual thing. Not for nothing is the word "thing" so ambiguous. It surely turns the well more into a *tropos* than into a *topos*, a figure stretching out through space into stories, dreams, and fantasies. Looking at the various regularities of those periodic events could tell us how it speaks of "times" and "turns" – the original meaning of *tropos* – as if we are looking at a dynamic object like an oscillator or a mythological one like a labyrinth. The events circle around the physical well as in orbit; in all its verticality, the well stretches out sideways and appears flickeringly. The distinction between necessity – things that could not have happened otherwise – and contingency – things that could have happened in another way – hardly helps to distinguish substance from accident.

When there is no fundamental difference between necessity and chance the accidents that happen will start to converge, slowly adding up to substance, even when it means that that substance will meet its end – after all, a thing meeting its end means it is being defined. The swirling-cloud analysis of the well tells us that while use and deliberation help us structure events they can by no means effectuate what happens. Obviously, we cannot say the well caused the killing directly, but surely we would be permitted to say it caused it indirectly, crookedly, and in Leibniz's words, sufficiently. Or, to employ McLuhan's

terms: the formal cause of the well is much more powerful than its final cause.[11] To reverse the order of cause and effect, as he proposed, might be too strong a move against regular causality; the well ensures *that* things will happen, not directly *what* will happen. Aristotle's well puts a claim on other things, a form of charm more than of chance, similar to a ball in sports or the dice in your hand: not neutral, passive objects, but objects that play with you as much as you with them. Such objects specify a certain form of play and are, as in the case of a musical instrument, intentionally designed as "thats," much more so than kitchen knives or wells, which are intended by their designers to function as "whats," with a final cause in mind. Yet, in the exchanges between things and between us and things even whats function as thats. (Like wells, kitchen knives are known to have killed people.)

Play should be understood in the framework of gift exchange, of charm, even that of grace, since it operates on the indeterminacy and surplus of things. Things always have more to offer. (Let us not forget that grace in its ancient Greek form, *charis*, was the engine of the gift cycle – giving, receiving, returning – as personified by the Charites, the Three Graces.)[12] Surely it does not suffice in that context to say that we play an instrument, as if a bunch of efficient causes simply produce the sounds. No, *the instrument is playing us too*, not by deciding on *what* we should play, but on *that* we play. And, yes, we do not have to play, or use the knife or go to the well, but as gifts they keep on offering themselves to us. Before we start producing any sound, the instrument claims us in the form of a chant or song, like a charm. What happens in these cases is not simply instigated by the order of cause and effect, nor by McLuhan's reversal of them: it concerns *an exchange between two causes*, or better, between two types of cause that oscillate between active and passive states as in a game, one of which is vague yet sufficient, the other exact and efficient. That we act efficiently, completely certain of what we are doing, with deliberation and having our goals exactly in sight and in focus, does not mean we are not being acted upon, though not deliberately or efficiently, but indeterminately and sufficiently.

To conclude that events therefore require sufficient reason to exist, as Leibniz did,[13] suspends the linear chains of efficacious reason, because now the cause of things occurs within their own range of possibilities, as *thats*, not as *whats*. Strangely enough, sufficient reason means internal reason, not effectuated by external causes; in that sense Leibniz's concept is a radically acausal principle, the reason why Jung was so interested in it.[14] Only the extremely idealistic constitution of harmony can then save the correspondence between things, which

takes the shape of God in the case of Leibniz and of the collective unconscious in that of Jung. What sufficient reason does, then, is place the need of things for an explanation to a higher level form of necessity, to that of an explication or unfolding of the internal variations of the monad. *Things are what they can be*. Leibniz therefore needed to consider contingency as part of things, and accident as belonging to substance, without logically suspending or abolishing causality.

For causality to make a detour by way of heaven would in itself never overcome the fact that accident is no science, as Aristotle said. If things are what they can be that does not just define what happens to them, it also defines what they make happen: their indeterminacy is as much active as passive. What they do is what they undergo. Causality can neither remain straightforward nor be abolished, it simply bends and becomes reversible as in the exchange of gifts. In meeting a range of possible variations, things still need to be specified, a *that* to be specified by a *what*. Crooked causality consists of a *that-what loop*, a loop of blurring and focusing, really a matter of external as much as internal variation. The indeterminacy of things is therefore not folded away like a hidden virtuality, but a superactual, visible indeterminacy, a charm, an I-do-not-know-what or *je ne sais quoi*, even when we consider kitchen knives and wells. Crooked causality is a form of "sufficient" causality, again that word so mysteriously introduced by Leibniz in the context of reason, giving all things a cause for their existence, but at the same time pushing that cause so far away from a ground (*Grund*) and so deep into infinity that it loses all mechanical linearity.

No doubt the word "sufficient" was derived from the notion of sufficient grace, which dates back to St. Paul himself.[15] Sufficient grace was extensively interpreted and advocated by Leibniz in the continuing theological debates of his day, and directly opposed to its efficient form, the version so ferociously defended by Pascal, the Jansenist.[16] (On a closely related matter, Pascal is often called the founder and Leibniz the philosopher of probability theory, the only conceivable candidate to claim the title of a "science of accident.")[17] To place causality in the hands of God – Leibniz's synonym for infinity – is a conceptual construct very similar to Kleist's concave mirror when speaking of the grace of marionettes: puppets manipulate their puppeteers as much as the other way around, forming a "ring-shaped" loop where things "devoid of consciousness" are suddenly linked to the "infinite consciousness" of God.[18] By pushing events back into infinity Leibniz enabled them to return as causes. The Principle of Sufficient Reason, then, is nothing but the Principle of Sufficient Grace in dis-

guise, making the supernatural continuous with natural laws, and vice versa. When Leibniz famously stated that when Caesar crossed the Rubicon – *alea iacta est* – the "predicate is contained in the subject,"[19] that is, the accident in the substance, he meant nothing less than that the thing happening to Caesar was what the Roman general in actual fact made happen, namely becoming dictator and emperor. Things are caught in a curved mirror, groundless, monadically self-sufficient insofar as they act, yet wholly dependent on – literally meaning "hanging from," like Kleist's puppets – sufficient grace insofar as they are acted upon. Whereas linear causality believes things must happen and nonlinear causality believes things could happen, crooked causality believes that things that could happen are looped with things that must happen. Yet, the could-clause that relies on chance undermines necessity, and the must-clause undermines chance.

falling images

When we now return to our brief discussion of Aristotle's notion of the terms, we can historically pinpoint the conceptual shift away from his final cause to the moment when Epicurus starts using the word *symptomata* more frequently than Aristotle did, a word that, in contrast to *symbebēkos*, makes accident a working on its own, instead of being linked to necessity. Whereas Leibniz's monads still bore the Aristotelian name of "entelechies,"[20] Epicurean atoms are completely indeterminate: everything that happens now happens to things, ergo a pure falling. He even denoted time as the "accident of accidents" (*symptoma symptomaton*).[21] In fact, only two things properly exist, atoms and voids, and the atoms fall through the void. Earlier, Democritus had theorized atoms as having only form, in addition to their indivisibility and invisibility, but Epicurus adds weight to them, and being subject to gravity makes them fall. This is how he describes it in his *Letter to Herodotus*:

> Moreover, the atoms must move with equal speed, when they are borne onwards through the void, nothing colliding with them … nor is the motion upwards or sideways owing to blows quicker, nor again that downwards owing to their own weight. For as long as either of the two motions prevails, so long will it have a course as quick as thought, until

> something checks it either from outside or from its own weight counteracting the force of that which dealt the blow.[22]

This initial falling is not yet what creates events, *eventa*, the word his Roman devotee Lucretius used for *symptomata*. Falling is merely the precondition for the actual befalling, which happens purely by chance, denoted by the illustrious term *clinamen*, "swerve," the smallest possible deviation from that initially straight fall. Here is how Lucretius describes it in his *On the Nature of Things*:

> while the first bodies are being carried downwards by their own weight in a straight line through the void, at times quite uncertain [*incerto*] and uncertain places, they swerve [*declinare*] a little from their course, just so much as you might call a change of motion. For if they were not apt to incline, all would fall [*caderent*] downwards like raindrops through the profound void, no collision would take place and no blow would be caused amongst the first-beginnings: thus nature would never have produced anything.[23]

His use of the Latin *declinare* and *clinamen* are literal translations of Epicurus's Greek word *parenklisis*, with *klisis* meaning "angle" or "slope," of which Michel Serres so lucidly explained the connection to Leibniz's linking of the smallest in the form of the infinitesimal and the slope in the form of the tangent.[24] The smallest possible element, the atom, makes the smallest possible deviation from the straight trajectory of the fall, the swerve, "at times quite uncertain and uncertain places," to then link up by conjunction, *coniuncta*, which is a direct translation of the term *symbebēkota*, coincidences. So, starting with the primordial fall happening to primordial things, "atoms," the universe is a conglomerate of coincidences and accidents, of "conjunctions" and "events."[25]

Even though there is still a remnant of the Aristotelian distinction between essential substances and accidental properties in both Epicurus and Lucretius, their view of the nature of things has radicalized enormously, making it hardly possible to distinguish between the conjunctive events that create things and the disjunctive events that destroy them. The falling never stops, all conjunctions and disjunctions are sheer moments in a constancy of vertigo, which Serres compares to a vortex, the term that played a central role in Democritean atomism:

> First a sheaf of parallels, where a laminar flow slips by. At some point, that is to say by chance, a deviation, a very small angle, is produced. A vortex forms at once from this point on.[26]

Generally models of creation start with chaos and end with order, yet the Lucretian model starts with sheer order, laminar flow, to then be disrupted by the slightest of deviations, producing temporary forms that can intermittently be viewed as stable or unstable. The vortex would indeed be the appropriate figure to illustrate the continuation of the fall while things simultaneously stabilize and fall apart. Here is the paradox of the funnel, eddy, whirlpool, tornado, or any other temporary, spiraling form: while its parts spiral downwards *the vortex as a whole stands*. While in a funnel the water falls and spirals down, the funnel itself stands and stabilizes.[27] Or, to employ the Lucretian terminology: while the *eventa* swirl around, the *coniunctum* stands, what Michel Serres cleverly calls "circum-stance."[28] While it declines, it inclines, an ambiguity that cannot be attributed to either of the terms. Accident irrevocably leads to substance, or in other words, the model of the vortex leads directly to an anti-materialist, if not outright monadic notion of entities. (Something that is not fully appreciated in Lucretius, nor in Serres's comments in *The Birth of Physics*.) Indeed, what is actually materialist about their notion of atoms? Nothing really. Atoms are considered forms, and how could forms ever be materially indivisible? That is not possible. To say that atoms are little figures would be much closer to the truth, as is corroborated by Serres's forthright remark that "atoms are letters,"[29] a statement he borrows from Democritus.[30] Instead of a materialist understanding of figures as material forms that have the capacity to touch, atoms seem much closer to a figuralism. If so, it would mean that at the moment figures aggregate they again form figures, and so on and so forth.

The spinning of the vortex supersedes in that sense the model of pure flow, drift and rhythms that Serres makes of it by turning vorticism into a precursor of late twentieth-century dynamic systems theory that advocates emergence and what is called order on the edge of chaos. The funnel, though a "dissipative system" in terms of Prigogine, might be open from a material and atomist viewpoint, yet forms a wholly closed figure from a monadic viewpoint.[31] Again, while generated by flow and rhythm, the figure of the vortex stands; the latter a word lying at the heart of existence, since it literally means "to stand forth," *ek sistere*. The strongest confirmations of circum-stance are the way Epicurus and Lucretius understood images and perception. For the atomist we do not

see things in the sense that light falls on them to bounce back into our eyes; no, things emit light-films: "I say, therefore, that semblances and thin shapes of things are thrown off [*mittier*] from their outer surface."[32] These thin, photo-like shapes are what he calls *figuras*, *effigiae* or *simulacra*, the literal Latin translation of the Epicurean Greek *eidola*. It is like an olfactory theory of seeing, where images are secreted by things like a vapor:

> since amongst visible things many throw off [*mittunt*] bodies, sometimes loosely diffused abroad, as wood throws off smoke and fire heat, sometimes more close-knit and condensed, as often cicadas drop their neat coats in summer, and when calves at birth throw off the caul from their outermost surface, and also when the slippery serpent casts off his vesture amongst the thorns (for we often see the brambles enriched with their flying spoils): since these things happen, a thin image must also be thrown off from things, from the outermost surface of things.[33]

The operative verb here, "to throw off," *mittere*, which also means "to send out," indicates a form of *emission* or quite literally broadcasting. The model of the spinning vortex explains not only how the circumstantial fall of the atoms creates the stance of that vortex, it also explains how the light particles are being emitted by its swirling, omnidirectional motion. The more one studies the Lucretian outlook on Epicurean atomism the less one finds literal particles and the more it seems that the figure of the vortex claims a central role. The vortex not only stands by itself, it also appears by itself. Taking that interpretation and applying it to the various scales of figuration would mean that on the lowest possible scale level, atoms, when viewed as letters like A, N or V, should by consequence also be visible, and that would provide a lot more depth to the emission of light than the single, thin image of the simulacrum which, in Lucretius's view, is only shed at the highest scale level of the thing as a whole. Surely, when atoms are letters, one might take that as a form of literalism, but letters are literally readable, part of the realm of figuration; ergo, atoms are *bits of consciousness*. Lucretius can speculate on the invisibility of atom-letters as much as he likes, the letters he uses to write his ideas down immediately prove the contrary.

The thinness of simulacra, then, raises major questions. First of all, how would it be possible for a shell to be a "semblance of a thing" while that thing itself is not visible? Visibility must penetrate the full depth of things. We just

have to cut a thing, anything, in two, to again have an image emitted, a procedure we can repeat all the way to infinity. Secondly, any material vapor would slowly deplete the object and would leave a dark, invisible object behind after years of evaporating images. Thirdly, how would things keep on shedding photos if, to employ Lucretius's terms, the close-knittedness of the image was not related to a smoky thickness? Things must be thick packets of interpenetrating images, blurring each other into a nebulous, glowing continuity and only coming into focus when secreting single films – the same construct as the that-what loop discussed above. In short, when thought through in all its consequences, Lucretian atomism is a brilliant theory that consumes its own materialism, while remaining a highly technical procedure, since the simulacra are artifacts.

decadent media theory

Where does that leave us? Definitively at the intersection of falling and emission, that is, at the intersection of falling and broadcasting. (Maybe we should hyphenate that last word: broad-casting, since Lucretius uses *partim diffusa solute*, "loosely diffused abroad.")[34] Falling things broadcasting themselves: we should not hesitate to call Lucretian ontology a media theory, even a *decadent media theory*, though his poem consists more of a spectral decadence than the material decadence of imperial Rome it is generally confused with. The spiraling fall turns into vertical standing and sideways appearing. And it does not merely concern a notion of the thinnest possible image, but of *an image plus speed*, an image that includes throwing, as if the vertical throw of the dice turns into a horizontal throw of images. Yes, it is a form of decline and decay, but in the meantime it stands and appears. Again, we are not witnessing the mere merging of stance and chance, but how that mergence turns into appearance.

It is no surprise that the switching relations between stance, chance and appearance lie at the heart of both art and the technical media. In the realm of art the most famous depictions of falling are those from the Mannerist period which, with its obsession with the serpentine figure, drove artists to extremely complex figures of falling that in German are termed *Flugfiguren*.[35] Hans Bock's study from 1582 shows forty-five such figures in the most contorted and complex bundles of serpentines: figures fall, swirl and whirl with their arms spread,


DVM SIBI QVISQ. SAPIT, NEC IVSTI EXAMINA CERNIT. ICARVS ICARVS NOMINA DONAT AQVIS
SCIRE, DEI MVNVS, DIVINVM EST NOSCERE VELLE. SED FAS LIMITIBVS SE TENVISSE SVIS.


CVI SIBI COR PRVRIT PLAVDENS POPVLARIBVS AVRIS QVEM FAMÆ STOLIDVM GLORIA VANA IVVAT.
EXEMPLO SIT EI IXION, CVI IVPITER AVRAM PRO IVNONE SVA SVPPOSVIT NEBVLAM.


NON AMBIRE PROBAT SAPIENS SED LAVDAT HONORES. LAVDAT CONTINGANT SI TAMEN ILLA PROBIS.
SIC PHAETONTEOS NIMIVM TEMERARIA LAPSVS VOTA DOCET TANDEN FINE CARERE BONO


TANTALVS IN MEDIIS RESIDENS SITIT ARIDVS VNDIS. QVAM MISER INTER OPES QVI MALE VIVIT INOPS!
HAVD BONA FORTVNÆ. QVISQVAM PVTET ESSE BEATA, ILLA BONIS PROSVNT, ILLA NOCENTQ. MALIS

their legs bent asymmetrically, each completely different while neatly filling the page as if it concerns a pattern.[36] Surrounding each figure with the same amount of white creates the impression that they are floating, even suspended in a celestial space of light, indicated by the presence of God at the top of the drawing. In contrast to a correspondence with flow, Mannerism is above all interested in *falling as a posture*, casting the figures as if in glass, in a strange immobility. We get the same impression from Hendrick Goltzius' famous 1588 series of engravings titled "The Four Disgracers," in Dutch *De Vier Vallers*, "the four fallers," referring to the four mythological figures of Icarus, Ixion, Phaeton, and Tantalus. And again they seem to float, not because an engraving does not move, but because they are placed in a tondo, a round frame that neutralizes the verticality of the falling motion – a falling not related to any ground. Even more remarkable is the drawing by an unknown fellow artist who meticulously copied Goltzius's fallers but removed them from their context to combine the four figures in a wheel-like shape, a pattern suggested by the original series where the head of each figure points in one of the four cardinal directions: east (Phaeton), west (Ixion), north (Icarus), and south (Tantalus).[37] With the swirling arms and legs the cruciform structure seems to start spinning like a pinwheel, resembling a wheel of fortune, again equating fixity with falling.

Perhaps the most perplexing contemporary version of falling as a posture is shown in Richard Drew's photo titled *Falling Man*, the picture of the unknown man who had jumped from one of the top floors of the burning World Trade Center, a few hours after it was attacked in September 2001. The photo is anything but Mannerist; there is no swirling of arms and legs and the torso is perfectly vertical. Something disconcerting, and at the same time comforting, happens in this photo: the man seems to be standing, *but upside down*. We see a standing leg and a bent leg in contrapposto, a posture that reminds us of the statues of generals and unknown soldiers that we find in so many American cities, with their chests swollen, one leg bent and a hand on the saber. Drew's photo is a monument, emphasized by the verticalism of the building's linear structure. We see a photo that is shocking at first, because we face death so directly, to then suddenly realize that the point (what Roland Barthes calls the *punctum*)[38] of the photo is not the accident or the fall, but the man's stability: *the man stands while he is falling to his death*; like the standing vortex of Lucretius, the falling man emitted his own photo. The far deeper question the picture raises is, of course, whether the man would have fallen, i.e., whether the two towers would have been attacked without the light of the cameras. Is the technical light of the media that precedes all events not the producer of those events, and by consequence, is that not also the reason why that light prefers or favors images of falling, that is, accidents? – a question that cannot be answered with concepts such as the spectacle or the masses, but with something much closer to Lucretius's connection between falling and broadcasting.

A year or two ago, I was watching a number of short videos online taken by mostly anonymous people with their smartphones, and one of these, not more than a minute long, showed a woman falling to her death. (Maybe we should title the video *Falling Woman*, as it likewise concerns a figure in the manner of *Falling Man*.) We are in Brazil, probably in the city of São Paulo, and see a woman standing on a balcony. We are pretty high up in a tall residential building, and she stands with her back to the edge of the balcony. She is about to take a selfie with her smartphone, and slowly walks backward trying to find the right background for the self-portrait, as people taking selfies often do. She takes one step too many, and falls to her death from what we learn from the captions was the twenty-sixth floor of the tower. Horrible, of course, and shocking too. However, that is not the *punctum* – the *punctum* is the fact that somebody in the adjacent apartment building, also standing on a balcony, on the same floor level, likewise with a smartphone in hand, is filming the whole event. To be sure, there is the shock, the shock of seeing someone falling to their death, and the shock of someone not crying out to warn that person, but that is nothing compared to the shock that *two smartphones are pushing someone over the railing*.

Why is it possible to qualify both Lucretius's theory of the simulacrum and these events as spectrally decadent, while they follow an inverted route? Probably mainly because the figure is defined by a closed loop: when falling is connected to emission, that path can be followed in both directions. This fundamental connection between emission and falling was what Paul Virilio conceptualized as *luminous emission*,[40] a term that the French "art critic of technology"[41] developed in *The Aesthetics of Disappearance*, his 1980 follow-up to the earlier *Speed and Politics*. The two books follow diametrically opposed concepts. Whereas *Speed and Politics* was based on the idea that the link between speed and the image is fundamental to war – making other human endeavors such as planning and architecture derivatives of war – the second book discovers the reverse of that link – namely between the image and its interruption, disappearance – as fundamental to consciousness. We see only because perception alternates with not-seeing, with absences, even those of the minutest scale. We

see flickeringly,[42] and things flicker in the same way, what Virilio terms luminous emission, the central concept of the book. Virilio, a student of early film, traces the concept back to the experiments of Étienne-Jules Marey, who famously transformed photography into film by what he termed chronophotography. Referring to Marey, Virilio writes:

> With him the effect of the real becomes that of the readiness of a luminous emission; what is given to see is due to the phenomena of acceleration and deceleration in every respect identifiable with the intensities of light.[43]

Photography, which according to Barthes needs to link the *punctum* of the image to catastrophe and accident,[44] found its technical parallel in film by what we can only call the alternation of the image with its absence, the non-image or gap. This is what Marey discovered: the question of the continuity of time, consciousness and perception requires a saltational answer. Only in the flickering of the image, in the suspension of the continuous, do we find movement. It is something Virilio even traces down to the way Marey used to dress his subjects in full black costume, with black hood and white reflective stripes along the limbs so as to be able to "digitally,"[45] in the combination of absence and presence, record their movements.

He spots that alternation between absence and presence as readily in the dance movies of Fred Astaire and Ginger Rogers, where the black-and-white cinematography of the medium coincides with Astaire's black-and-white tuxedo and the black-and-white steps of the stairs in Art Deco style, merging into a flickering image that becomes luminous, a term not merely indicating the presence of light, but one of bliss and happiness too. Virilio quotes Astaire singing

> Heaven, I'm in heaven,
> And my heart beats so that I can hardly speak
> And I seem to find the happiness I seek
> When we're out together dancing, cheek to cheek.[46]

The connection of bliss to luminosity pervades *The Aesthetics of Disappearance*. He finds it in the epileptic seizures of Dostoevsky, for instance, who famously suffered from the "falling sickness,"[47] which produced such ecstatic feelings of

happiness that the Russian novelist bestowed the same condition on the protagonist of *The Idiot*, Prince Myshkin.[48] The aura of epilepsy belongs in the same category as the aforementioned radiance and radiation of the decaying image, similar to Benjamin's aura or Agamben's halo. Hence, Virilio, the technocatholic, readily switches to the visions of Bernadette Soubirous, otherwise known as Sainte Bernadette of Lourdes, who sees the Virgin Mary in the form of a spectral, glowing white apparition. Luminosity, or luminous emission, we can conclude, is the technical, or better, the *phenotechnical* connection between light and absence, between appearing and disappearing, between substance and accident – between image and falling. In this sense, we should not speak of technological accidents, but of the accident *as a technology*.

Virilio, who justly calls himself a phenomenologist,[49] more precisely a phenomenologist of technology, followed the much deeper links between the world of appearances and that of workings which led him to their inherent connections with death, falling and the accident. From very early on Virilio advocated the view that technology had a far more intimate relationship to the accident than media theorists such as McLuhan had thought possible. McLuhan, who arrived at his investigations of technology via the study of language, asked himself how technology changed the notion of meaning, but similar to the way meaning was caught in the circular logic of the medium, technology was directly related to accident through its rhetoric of comfort, problem-solving and progress. Virilio does not link the accident to causality, but to invention:

> In classic Aristotelian philosophy, substance is necessary and the accident is relative and contingent. Every technology produces, provokes, programs a specific accident. For example: when they invented the railroad, what did they invent? An object that allowed you to go fast, which allowed you to progress – a vision à la Jules Verne, positivism, evolutionism. But at the same time they invented the railway catastrophe. The invention of the boat was the invention of shipwrecks. The invention of the steam engine and the locomotive was the invention of derailments. The invention of the highway was the invention of three hundred cars colliding in five minutes. The invention of the airplane was the invention of the plane crash. I believe that from now on, if we wish to continue with technology (and I don't think there will be a neolithic regression), we must think about both the substance and the accident – substance being both the object and its accident.[50]

He is right to reference Aristotle, but there is an important difference. While for the Greek philosopher such accidents could only belong to a substance accidentally, *kata symbebēkos*, for Virilio they belong to technology essentially. Accidents do not happen from the outside of things to then stick to them or not; they happen from the inside out, what Virilio calls "production," the word that literally means "bring forth" in the sense of bringing into the light or revealing. In short, accidents are no coincidence, they happen necessarily. When pursued all the way through, the phenomenological approach would logically lead to these conclusions. Simply by including all the phenomena that pervade technology it moves the analysis away from the rhetoric of progress to an ontology of technology. Technology appears in the accident. Both the appearance of accidents and appearances as accidents in the form of predicates and attributes, are not added on to substance, but are part of it, all the way to its very core. The appearance of the accident makes up the substance of technology.

On the one hand, such a technophenomenology arrives at many correct conclusions because by following appearances it may lead to an understanding of the ontological dependence of substance on accident. However, the phenomena it studies are those of technical workings and the interruptions of those workings, that is, accidents, which, when not pursued all the way to the end, might as easily take us back to the Aristotelian idea that substance is what works, functioning with its eyes fixed on a final cause, while the accident breaks with that purpose. Exactly this rudimentary view made the later Virilio, the alarmist and eschatologist, warn against a future Integral Accident[51] where all technology networked into a single entity would lead to a single catastrophe at world scale, very probably taking the form of ecological disaster.

In that sense, his approach fell short because it did not lead him to the Lucretian, ontological conclusion that *all* substance relies on accident, and that the link between falling and standing cannot be made without the emission of simulacra. And let me immediately rephrase that last sentence by saying that the link between falling and standing cannot be made without the *phenotechnical* emission of simulacra. Technology did not invent the link between the accident, substance and phenomena, but conversely, technology was invented by that link. In short, technophenomenology traces the same connections as what we might now call phenotechnology, but arrives at opposite conclusions. Consciousness was already in the air, it only needed to boost its reach and agility, which according to Hegel it is bound to do in the form of self-movement. That must be why technologies of speed (trains, ships, cars, etc.) and technologies of the image (photography, film, television, etc.) have been so fundamentally entangled from the beginning. We only have to think of the famous photo of the Montparnasse derailment on 22 October 1895, an event that could never have resulted in a painting in the way Géricault's *Raft of the Medusa* still did; a difference as big as that between media and museums.

From the viewpoint of technology accidents are the moment when things stop working, but *from the viewpoint of phenotechnology nothing ever stops working*: everything works and keeps on working because everything that makes it to the level of appearance exists. And that was as much the case for a vortex a hundred thousand years ago as for a derailment or a car crash in our own time. Whereas with Marey "the effect of the real becomes that of the readiness of a luminous emission," Lucretius showed us the readiness was always there, but in different forms. In that sense, yes, technology is a process of revelation, because the increase of speed increases the need for the flickering image. While a derailment stops train services from working, the innumerous photos and films of those *eventa* are immediately absorbed by a faster network of circulation, i.e., the media. Yet, we should keep in mind that the process of emission follows a phenotechnical route before it becomes a technological one. The first is about speed (of falling) plus image, the second about image plus speed (of media). The emission of simulacra via the decay of substance is a mechanism that has worked since time immemorial, long before there were any machines. In short, spectral decadence is and always has been the driving mechanism of reality.

Virilio's fellow countryman, the theorist Jean Baudrillard, would probably have laughed in my face at that last sentence concerning the mechanism of reality. If there was anybody suspicious of reality, it was him, though he would certainly have supported the view that things radiate and are taken up in cycles of exchange. For him, simulacra were directly connected to the exchange mechanism of the gift cycle, ideas that he based on the work of Mauss and Caillois. The simulacrum was part of what he called the "fatal strategy"[52] of seduction, which involved the notion of the fetish and the effigy we encounter in Mauss's sociology and that of the game and the duel we find in Caillois's theories of play.[53] At the same time, he was strongly influenced by postmodern notions of the flat mask and the pure sign, which made him theorize irony long before anybody else from that period, by linking it to the French, post-war passion for simulacra.[54] In short, he understood simulacra as part of a symbolic exchange, and conceived its cyclical procedures as ironic reversals of normative

categories such as economy, causality, sex, truth, reality, meaning, and so on. For seduction there is always something to be turned upside down: "To seduce is to die as reality and reconstitute oneself as illusion,"[55] an idea he modeled on the *trompe l'oeil*, a form of illusionistic painting created with the purpose of deception:

> In the *trompe l'oeil*, whether mirror or painting, we are bewitched by the spell of the *missing dimension*. It is the latter that establishes the space of seduction and becomes a source of vertigo.[56]

Ergo, reality is turned upside down by the illusion of the simulacrum. At first that does not sound implausible, yet on second thought it raises a rather fundamental issue: illusions are not themselves illusions, are they? Only in relationship to what they mirror can they be denoted as illusory, but taken by themselves – as appearances by and of themselves – they are completely real, just like paintings, dreams or stories are real. Mirrors can reflect anything they want, so they are independent or, when phrased in German, *selbstständig*, or, in its literal English translation, self-standing. The situation of an exchange or a duel between a seducing mirror and a seduced reality would be more accurately characterized as a matter of *two realities*, or two causes, even as two vortical simulacra, each with their own claim on reality that is neither the same claim nor the same type of reality, but both real nonetheless. Personally, I would not dare to call a mirror flat.

Seduction is theorized by Baudrillard as what reverses production,[57] the latter leading things into the light, the former leading them away from it. But how would it be possible to have one working principle which is subsequently overruled by a second principle that also works? Ontologically that makes no sense. Either one or the other works, and whenever we say "working" it implies a principle of reality. Mirroring is real. In other words, seduction is productive; even when phrased negatively as an undoing, it still acts positively. Maybe, instead of reflective mirroring, we should postulate an absorptive, *deep mirroring* where thickened appearances claim full independence while developing mimetic relations. Baudrillard's seduction alleges to use gift exchange to abolish the real, while it merely upholds the separation of appearance and reality in the worst essentialist tradition. He simply decides in favor of appearances and against reality, as so many other philosophers have voted against appearances in favor of real substance. Whether we choose one or the other is irrelevant,

because either choice upholds the distinction. Whatever is real, whatever stands by itself in its own groundless manner, needs to access consciousness by itself; in other words, emit images before human agency lays eyes on it. Comparing Baudrillard's simulacra to the original Lucretian rendition, we see that Baudrillard's merely exist in a state of reflection, not able to absorb anything to make it their own, whereas Lucretius's simulacra are emitted by self-standing vortices, independent of any external consciousness perceiving them.

Leaving this little quarrel genially behind us, we should unreservedly applaud the crucial questions Baudrillard asked – his *America* is the perfect book ("Money is fluid. Like grace, it is never yours")[58] – and agree with his interrogation into the status of things in relation to technology and media. In this he was influenced by McLuhan's adage "the medium is the message," transferring it from the realm of meaning and language to that of existence and reality. Baudrillard considered the seductive character of simulacra to be wholly transformed in the context of technology by what he called simulation. As early as in his *Symbolic Exchange and Death* of 1976 he theorized simulation as a final stage of simulacra, which he encountered in every aspect of our society where media and technology, in Virilio's words, "produce, provoke, and program" events they claim merely to record and report.[59] Now, instead of concentrating on dramatic, world-scale events such as the Gulf War or 9/11, which he analyzed later in his career, let us have a look, like Lucretius and Leibniz, at an example of *the smallest possible deviation* that emits *the smallest possible simulacrum*, again, not unlike a snapshot. (Baudrillard was fascinated with photography – especially Polaroids – and many of his ideas function as photos, which became very clear when he published a series of diaries under the title *Cool Memories*.)

An altercation – a *falling out* – between two experts during a live broadcast on television. It is like a little accident, a mini-falling like dropping your keys or breaking a glass. The typical scene is shown in split-screen with the anchor in the middle and the two experts left and right. First, the conversation slowly switches from debate and communication to louder speech, then ever more rapidly to shouting and the exchange of expletives, impossible to bleep away. We are not interested in the content, it is always the same anyway, we are not even interested in the reason for things going wrong, we are interested in one question only: is something actually going wrong? Baudrillard asked himself such questions long before the advent of reality TV.[60] Of course, there is only one possible answer: *nothing goes wrong*, the event is enabled by the technical light of live television. This is how sufficient reason is superseded by sufficient

grace – the traditional term for "enabling grace" – presenting us with a brute fact without an explicable why. It is a form of radically sufficient, *technical grace* that does not acknowledge disgrace. In similar vein, Baudrillard notes in *Cool Memories*:

> Today electronics has replaced grace; it circulates in the semitetanic, semifluid networks of the immense and flexible mortification system which serves as our driving force.[61]

Grace is a machine[62] that converges groundlessness with stance and while doing so makes a thing appear, demonstrating its phenotechnical nature. Disgrace plays no role whatsoever in the grace machine's functioning, only as the distribution of the thinnest possible image of shame to be quickly recycled by on-screen atonement – just another form of radiation. It is simply impossible to be purged from the screen. Since electronic luminosity precedes the events, they can only present themselves as *eventa*, as accidents and fallings. See how gently the technical light of the cameras and the nation-wide distribution pushes the two participants into their brutal disposition, truly a matter of sufficiency and inexplicable, crooked causality. That nothing goes wrong does not mean the whole thing is staged; either staged by a behind-the-scenes director as in *The Truman Show* or staged in the sense that a nonhuman machinery decided on the course of events. As if we can control the loss of control. No, it is the technical form of *that* – a medium – which is answered by a *what*. Though much less of an eschatologist than Virilio, Baudrillard was tempted to classify these as end-stage simulacra, as simulations, a term that wholly denies the reality of such events and also denies them their true origin in spectral decadence: everything falls and nothing goes wrong, everything radiates and nothing is illusory.

things falling

We are at the top of a small, steep hill just outside a village in Gloucestershire, England. A man in white is surrounded by a bunch of rowdy young men, dressed in jeans and T-shirts tagged with messages, logos and signs, some of them in costume, dressed up like a big chicken, a teddy bear or Spider-Man, one or two are naked though still wearing their shoes. The man in white is

holding a round, ten-pound cheese wheel and sends it rolling down the hill by giving it a firm push. The group behind him immediately scatters and starts running downhill, trying to catch the cheese, which is gathering speed and as it rolls over the bumpy surface of the hill, the missile starts to bounce violently, gathering even more speed. The men and the few women try to follow, but due to the steepness of the hill their feet cannot keep up with the speed, causing them to tumble and roll over, jump back on their feet, trying to run down, but again falling and rolling. Attempting to get back up is almost hopeless, but they keep trying, because only while running might there be a chance to catch the dangerous object and be declared the winner.

The photos of the annual "cheese-rolling" event[63] are remarkable, equal to Jeff Wall's best: the figures are completely distorted, yet frozen in space, arms in all directions, legs too, and they all take on different postures, some flat in the grass moving upward, others half-standing while falling over, some just getting up, some fully suspended in the air in Mannerist fashion, the corpulent ones even have their bare bellies distorted with the violent speed of the rolling, some have lost their trousers. It's magnificent, and hilarious. It's violent too. The crowds standing along the side of the hill are laughing their heads off, which is quite a sight in itself. Some are in shock, because clearly some of the runners are getting badly hurt, yet most of them are laughing out loud, mouths wide open, teeth bared, jaws alternately opening and closing, the breathing done in bursts of inhaling and exhaling, hands symmetrically in the air or slapping on the knees, bellies are shaking here too, and the sounds are loud but incomprehensible.

While most theories of laughter consider them only separately, we should be looking at both the *laughers* and the *laughees*, the ones that are being laughed at, and study how the two are interlinked. Let us look at the laughees first. We see a slope, the very same slope of Leibniz's inclination of tangency and of habit, which means that any possible theory of laughter must include a philosophy of habit and its failures, as Bergson did in his essay *Laughter*, a book that starts with falling: "A man, running along the street, stumbles and falls; the passers-by burst out laughing."[64] (Like the Thracian woman laughing at Thales when he fell into the well while looking up at the stars.) At this point, we become very much aware of the weakness and frailty of bodies, rolling in all possible shapes without any control over their posture, almost boneless, which obviously relates it to falling and failing, a word derived from the Latin *fallere*, "to trip, to cause to fall." We notice a form of cascading too, derived from

another Latin word meaning "to fall," *cascare*, linked to the earlier mentioned *casus*, "chance": we see the cumulative effects of things getting out of hand and getting worse, not by cause and effect, but via an exponential worsening that Baudrillard attributed to the nature of the catastrophe.[65] Most importantly, we are witnessing the failure of the realm of habit and rhythm to be bridged with that of things and language. At first, we seem to be encountering a massive lack of grace: while the running loses all its necessary coordination the cheese wheel, being completely out of place, bounces away into oblivion. It's like the mathematical parity of stupidity, the cheese not knowing what to do equaled by bodies not knowing how to act. What I earlier referred to as a grace machine seems to completely falter in making things appear. Almost, but not quite, since the failure itself still makes it to the level of appearance. Stated in our earlier terminology: things fail to be exchanged, yet the failure can still be exchanged – and that's the whole secret of humor and comedy. One step more extreme and things would definitively not be funny anymore. And one step less extreme, such as replacing the cheese wheel with a ball or the participants with athletes, would likewise kill all possible humor.

When we watch the laughers in their turn, above all we need to acknowledge the absolute strangeness of laughing, a strangeness that, when described from the disinterested perspective, shows there are two main characteristics we can identify as being linked to the laughees. The first indicates that laughing exists at the *edge of language*: though the laughers are processing air by moving their chests up and down, opening and closing their mouths, as well as making spasmodic, repetitive sounds that are varied and loud, we cannot understand what they are saying. Clearly, we are dwelling here on the outer reaches of language, though the act of laughing involves all the physiological aspects of speaking. The second characteristic indicates that laughter can be viewed as a *form of eating*. In relation to the edge of language we observe the very specific role of the teeth: the mouths are opened so far that they reveal the teeth, sometimes only baring them partly, sometimes only the top row, yet in this case showing both the top and bottom rows of teeth, and in addition we see the heads of the laughers shaking back and forth as if they are chewing. The connection between teeth and laughter has been made regularly, particularly by Darwin:

> During laughter the mouth is opened more or less widely, with the corners drawn much backwards, as well as a little upwards; and the upper lip is somewhat raised. The drawing back of the corners is best seen in

> moderate laughter, and especially in a broad smile – the latter epithet showing how the mouth is widened … judging from the manner in which the upper teeth are always exposed during laughter and broad smiling, as well as from my own sensations, I cannot doubt that some of the muscles running to the upper lip are likewise brought into moderate action.[66]

Yet, from Darwin's evolutionary perspective, which emphasizes struggle and battle, the showing of teeth is directly passed down from the threatening snarl, not from chewing or eating. Darwin's analysis of laughter was expanded upon by Anthony Ludovici, in *The Secret of Laughter* from 1932:

> At all events, if now, instead of the term "laugh" we proceed to use, in regard to all the examples of laughter I have given, the term "show teeth" (meaning a display signalling superior adaptation), we shall find, not only that it explains everything, but also that the number of further examples which it fits may be extended indefinitely.[67]

The evolutionary interpretation of laughter turns here into a form of symbolism, making the showing of teeth a sign or a symbol of superiority, which fits well with the so-called superiority theories of humor that have long since been advocated by Plato, Aristotle and Thomas Hobbes:

> "Sudden glory" is the passion which maketh those "grimaces" called "laughter"; and is caused either by some sudden act of their own that pleaseth them or by the apprehension of some deformed thing in another by comparison whereof they suddenly applaud themselves.[68]

However, the theory quickly encounters many exceptions, too many, for instance laughing at jokes and wordplay, which can scarcely be described as a moment of feeling superior. Also, it does not explain why any sense of superiority is accompanied by strange, inexplicable sounds. On top of that, it is a theory that mostly considers one side of the equation, that of the laughers, not that of the laughees; a problem of many theories of humor. For instance, Bergson's theory considers mainly the laughees and the failure of their habitual, automatic behavior as the source of laughter, without explaining the strangeness and enormous range of laughter types that we know, from the near-imperceptible smile to chuckling and giggling, all the way to guffawing and roaring.

Hence, eating is by far the most plausible explanation that links the awkward physiology of laughter with the specific characteristics of laughees, yet we will not find the obvious connection between the falling of the laughees and the chewing motions of the laughers widely discussed in the literature. As far as I know, the only link between the two is made in Elias Canetti's *Crowds and Power* from 1960, in the short chapter "On the Psychology of Eating," where, fortunately for us, he includes falling in the comparison between laughing and eating:

> A human being who falls down reminds us of an animal we might have hunted and brought down ourselves. Every sudden fall which arouses laughter does so because it suggests helplessness and reminds us that the fallen can, if we want, be treated as prey. If we went further and actually ate it, we would not laugh. We laugh *instead* of eating it.[69]

The final remark points at a connection of laughing to playing, meaning that we laugh *as if* we are eating, while Canetti in other passages puts eating in the larger structure of the potlatch, the feast of destruction, as well as the mother breastfeeding the child, which is always accompanied with smiling. Though Marcel Mauss's theories are not part of Canetti's references, it seems obvious that in his linking of the potlatch, mother's milk and the sharing of food at the table, especially during large ceremonies and feasts, eating and laughing are part of gift exchange. When Canetti compares human laughter to that of hyenas he appropriately points at the fact that we laugh collectively. There is an expense and abundance to laughter with a readiness to share that makes it immediately fit the profile of liberality.

The connections between laughter, eating, falling, and gift exchange are enormously constructive for the fundamental appreciation of humor, though there looms a danger in misunderstanding the role of appearances. Canetti's formulation of falling as something that "reminds us of an animal we might have hunted" turns the as-if character of laughing as eating into a symbolic reference to some bygone reality preserved by psychology. Phenotechnology, and the grace machine in general, does not make any use of symbols to make things appear – for this it makes use of figuration, and figures claim full access to reality. The notion of *symbolic eating* would imply that laughter is not really eating

in the sense of digestion, but remains an unprocessed visual remnant roaming around in the deeper, paleopsychic layers of the unconscious. But phenotechnology makes things appear in order to be exchanged, making laughing not so much a form of symbolic eating that replaces or represents literal eating, but a form of *figural eating*, which is continuous with, yet expands considerably on literal nourishment. The literal merely claims access to the real via the material, and is therefore limited to the actual and factual, while the figural stretches out over all possible entities that find themselves at the turn – *tropos* being the essence of the figure – from falling to image. The image is not allowed to be stored without the falling, as psychology and symbolism would have it. The falling is never to be dissociated from the image. The figure of eating operates on the same moves, the same pleasure, and the same sharing as the literal version while discarding the materiality of food, yet without retreating in the mind by archiving its mere image. Laughing is postural and performative.

Canetti's remark, that "we laugh *instead* of eating it," though brilliant, misses the point that we are positively biting, chewing, and swallowing, while laughing: "we laugh *because* we're eating it." We do not interrupt the process, as he suggests. Eating is continuous with laughing, not the other way around. How often do we not find that laughing and factual eating go together? Does literal eating actually exist? I wonder – images always intervene in matter, that is what makes things groundless. As I said above, things are caught in a curved mirror. (Monkeys, who invented apery, also invented laughter.) There is full exchange and no need for the unconscious to keep images out of circulation – things are wholly processed, nothing stays behind. The fallen prey is fully taken in and absorbed. The as-if character of laughter is that of a corporeal, *absorptive mimesis*, not of reflectivity, which keeps everything at a distance. Absorption is the reason why the failing of form is answered by the failing of language. In that sense, laughing is more than eating, since it comes with the ferocity of devouring. The fallen animal we have brought down with our Paleolithic arrows is as real as anything else that fails and falls, and all humor is about failure. Words fail (in jokes), situations fail (in sitcoms), habits fail (in farce), appearances fail (in parody), forms fail (in caricature), gestures fail (in buffoonery), concepts fail (in wit), behavior fails (in clownery); everything can fail, and what fails *offers itself*, that is the rule of the gift. There is nothing symbolic in the failure of words, and we process them in full participation of our bodies – ergo, we laugh, and we laugh together. The term "feasting" covers the double meaning of laughter particularly well, because its ambiguity combines the feast as the sharing of joy with the feasting in the form of the devouring, possibly going so far as the *omophagia*, the ritual described by a shocked Plutarch,[70] where the participants in Dionysian frenzy set their teeth directly in the flesh of the living bull. It is no coincidence that laughter is often considered cruel, since that word, like "crude," is derived from the Proto-Indo European root *kreue-*, meaning "raw flesh." Any theory of laughter should acknowledge that deep-rooted cruelty and taste for brutality.

breaking things

From the perspective of the grace machine laughter should be considered a very specific act: it can claim the powers of figuration even though it is unable to claim those of language. That is why we make such strange sounds when we laugh: language itself fails, as if we are speaking without saying anything. How startling to see the failure of words, as encountered in jokes, wordplay and puns, answered by the failure of finding words. And very probably we encounter similar effects in anger, that responds with shouting and expletives; in shock, that can only show the gasp of the open mouth; or in sadness, that answers with howling and crying. We use mouth, lungs, diaphragm, and larynx, but no words come out properly, we are truly on the outskirts of the domain of language. Each of these four emotions (laughter, anger, shock, sadness) can be considered a form of reception by way of absorption, a form of incorporation without internalization, since they all go as mysteriously as they come. The four emotions are raw, brute emotions: utterly unexplainable by themselves and of a very primitive nature, like an inborn form of figuration. And in that sense Darwin, Jung, and Canetti have been astute with their paleolithic references. When we are laughing, it seems something else in us is laughing, something very old and ancestral, something we do not associate with the Self, but a fossile psychology of sorts, perhaps an atavism. Laughter, shock, anger and sadness are of a planetary, *mineral nature*, of a geological order of the dead that suddenly reveals itself at such moments: every time we weep, laugh, swear, howl or shout with anger, the dead speak in their ancient, incomprehensible tongue, trying to cope with an impossible situation. Such ancestry points at *the objectivity of emotions*, not at their subjectivity. Something other than us is laughing or crying, an object that passes through us and transforms at every stage of its trajectory.

Of all four emotions that orient our lives, laughter is the mildest, our south. Opposite laughter we might locate sadness in the north, with the two poles forming a meridian, an *axis of falling*: we laugh when seeing things fail and fall, in itself ranging from relatively mild to cruelly severe, yet never concerning our own, personal mishap, while we feel sad when it does concern ourselves, when things "fall away" from us,[71] when we lose them, again ranging from mild to severe, from forgetting things to losing them, to losing friends or losing one's mind. And the axis is continuous, there is no clear border between laughter and crying, as we often see one transform in the other. Perpendicular to this vertical axis we find a horizontal one; in fact, the horizon – running between east and west – of the meridian, where the realm of falling ends and turns into that of breaking. And here too, we find this *axis of breaking* spanning passive and active sides: we're in shock when we see things break, when they come crashing down and truly fall apart; at that point we are mortified and nothing will be left for us but to gasp for air. It is the most extreme form of language being impossible. But in anger it is again we ourselves who are the agent, when we break things, shatter them against the wall, all the way to breaking up friendships and marriages, to much, much worse. And here language returns, distorted at first in the form of shouting, to punctuating sentences with profanities (not unlike a form of percussive rap), to its mildest form, the great art of the insult,[72] which welcomes us back into the realm of language.

For the record, this sphere is not the space where we and things lead our lives, where we exchange things as gifts and appearances, where we speak and handle things; on the contrary, it is the outer limit of that realm, where clumsiness and unhandiness begin, where things get out of hand, yet where we can still exchange them – barely. With words such as slips, mistakes, mishaps, mislayings, breakdowns, downfalls, with things failing, getting out of hand, getting lost, being dropped and forgotten, it starts to dawn on us that the realm of grace does not exclude but fully includes disgrace by expanding its realm to falling and breaking. Doing so, grace closes the loop between brutality and gentleness.

Notes

1. Aristotle, *Physics*, trans. Robin Waterfield (Oxford: Oxford University Press, 2008), 197a36–198b15.
2. Aristotle, *Metaphysics*, Vol. II, Books X–XIV, trans. Hugh Tredennick. Loeb Classical Library 287 (Cambridge, MA: Harvard University Press, 1935), 1027a9–10.

3. Ibid., 1026b21–26.
4. Ibid., 1031a13–20.
5. Aristotle, *Physics* 199a1–3.
6. Aristotle, *Metaphysics* 1025a17–20.
7. Ibid., 1027a1–4.
8. Ibid., 1027b1–15.
9. Plato, *Theaetetus*, 174a.
10. Giorgio Agamben, *The Coming Community*, trans. Michael Hardt (Minneapolis: University of Minnesota Press, 2005), 55.
11. Marshall McLuhan and Eric McLuhan, *Media and Formal Cause* (Houston: NeoPoiesis, 2011), 43.
12. See my first chapter "The Grace Machine: Of the Figure and the Gap," in *Grace and Gravity: Architectures of the Figure* (London: Bloomsbury, 2020). Also my "Charis and Radiance: The Ontological Dimensions of Beauty," in *Giving and Taking: Antidotes to a Culture of Greed*, ed. Joke Brouwer and Sjoerd van Tuinen (Rotterdam: V2_Publishing, 2014).
13. See Leibniz's *Theodicy: Essays on the Goodness of God, the Freedom of Man and the Origin of Evil*, trans. E. M. Huggard (Peru, IL: Open Court, 1985 [1706]), and his famous §32 in *The Monadology,* trans. Robert Latta (Oxford: Oxford University Press, 1898 [1714]).
14. cf. Carl-Gustav Jung, *Synchronicity: An Acausal Connecting Principle*, trans. R. F. C. Hull (Princeton: Princeton University Press, 2011 [1955]), 82–85.
15. 2 Corinthians 12:9: "But he said to me, 'My grace is sufficient [*arkei*] for you, for my power is made perfect in weakness.' Therefore I will boast all the more gladly about my weaknesses, so that Christ's power may rest on me."
16. Gottfried Wilhelm Leibniz, *Discourse on Metaphysics and Related Writings*, trans. Niall Martin and Stuart Brown (Manchester: Manchester University Press, 1988 [1686]), 75: "this grace of God has its degrees and measures, always in itself efficacious in producing a proportionate effect. Moreover, it is always sufficient." Blaise Pascal's "Of Sufficient Grace" in *Provincial Letters* (Derby & Jackson, 1859 [1657]), 155: "'So that, according to this doctrine,' said I, 'this grace is sufficient without being sufficient.' 'Exactly so,' he replied; 'for if it suffices, there is no need of anything more for acting; and if it does not suffice, why – it is not sufficient.'"
17. Ian Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas about Probability, Induction, and Statistical Inference* (Cambridge: Cambridge University Press, 1975), 23 and 57–59. When Leibniz moved to Paris in 1672 it was already too late to meet Pascal, who had died ten years earlier.
18. Heinrich von Kleist, "On the Theater of Marionettes," in *Selected Prose of Heinrich Von Kleist*, trans. Peter Wortsman (New York: Archipelago Books, 2010), 269 and 273. cf. Spuybroek, *Grace and Gravity*, 215-18.
19. Leibniz, *Discourse on Metaphysics*, section 13.
20. Leibniz, *The Monadology*, 224 (§14), 229 (§18), 230 (§19), 245 (§48), 253 (§62, 63), 256 (§66), 257 (§70), 259 (§74).
21. Sextus Empiricus, *Against the Professors*, trans. R. G. Bury, Loeb Classical Library 382 (Cambridge, MA: Harvard University Press, 1949), 10.219, 227: "As Demetrius of Laconia explains, Epicurus says that time is an accident that happens to another accident … So, it makes sense to say time is an accident of accidents."
22. Epicurus, "Letter to Herodotus, 61" in *Epicurus: The Extant Remains*, trans. Cyril Bailey (Oxford: Clarendon Press, 1926), 37.

23. Lucretius, *On the Nature of Things*, trans. W. H. D. Rouse. Loeb Classical Library 181 (Cambridge, MA: Harvard University Press, 1924), 2.217–24.
24. Michel Serres, *The Birth of Physics*, trans. David Webb and William Ross (London: Rowman & Littlefield, 2018 [1977]), 52–58.
25. Cyril Bailey comments in *Epicurus: The Extant Remains*, 235: "He divides qualities into *symbebēkota* and *symptomata*. We may roughly render these words by 'properties' and 'accidents,' as Lucretius does by the corresponding terms *coniuncta* and *eventa*." For example: "For whatsoever reasons things have a name, either you will find them to be properties [*coniuncta*] of these two or you will see them to be accidents [*eventa*] of the same" (Lucretius, *Nature of Things*, 1.449–50).
26. Serres, *The Birth of Physics*, 30.
27. cf. Fritjof Capra, *The Web of Life: A New Synthesis of Mind and Matter* (London: Flamingo, 1997), 164–66.
28. Serres, *The Birth of Physics*, 50.
29. Ibid., 170, 178.
30. Aristotle, *Metaphysics*, Vol. II, trans. Hugh Tredennick. Loeb Classical Library 287 (Cambridge, MA: Harvard University Press, 1935), 985b15–20.
31. Ilya Prigogine and Isabelle Stengers, *Order Out of Chaos* (New York: Bantam Books, 1984).
32. Lucretius, *Nature of Things*, 4.42–43.
33. Ibid., 4.54–64.
34. Ibid., 4.55.
35. cf. Emil Maurer, *Manierismus: Figura serpentinata und andere Figurenideale* (Munich: Wilhelm Fink Verlag, 2001), 94–109.
36. Ibid., 95. In the Öffentliche Kunstsammlung, Basle.
37. An anonymous drawing, probably by a seventeenth-century Dutch artist, "after Hendrick Goltzius, after Cornelis van Haarlem," in the Fralin Museum of Art, Charlottesville, VA.
38. cf. Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill & Wang, 2010 [1980]), 27.
39. See my *Grace and Gravity*, but also Simone Weil's *Gravity and Grace* (London: Routledge and Kegan Paul, 1972 [1947]), 3–4: "Creation is composed of the descending movement of gravity, the ascending movement of grace and the descending movement of the second degree of grace."
40. Virilio uses "émission lumineuse" (with the double meaning of emanation and broadcast) in the original publication: *Esthétique de la disparition* (Paris: Balland, 1980), 62.
41. John Armitage, "From Modernism to Hypermodernism and Beyond: An Interview with Paul Virilio," in *Theory, Culture & Society* (London: SAGE Publications, 1999), vol. 16 (5–6), 34.
42. cf. Oliver Sacks, *The River of Consciousness* (New York: Alfred A. Knopf, 2017), 163–66.
43. Paul Virilio, *The Aesthetics of Disappearance*, trans. Philippe Beitchman (Los Angeles: Semiotext(e), 2009), 28.
44. Barthes, *Camera Lucida*, 96.
45. For a "digital" reading of Marey's chronophotographies, see: Dick Raaijmakers, *CAHIER-M: A Brief Morphology of Electronic Sound* (Leuven: University Press of Leuven, 2000, revised 2005), and: Arjen Mulder and Joke Brouwer, eds. *Dick Raaymakers: A Monograph* (Rotterdam: V2_Publishing, 2008).
46. Paul Virilio, "Un confort subliminal," *Traverses* 14–15*, Panoplies du corps*, April 1979 (Paris: Editions de Minuit, 1979), 149.

47. cf. Owsei Temkin, *The Falling Sickness: A History of Epilepsy from the Greeks to the Beginnings of Modern Neurology* (Baltimore: Johns Hopkins University Press, 1971), 393–95.
48. Fyodor Dostoevsky, *The Idiot*, trans. Richard Pevear and Larissa Volokhonsky (New York: Vintage Books, 2003 [1869]), 225–27.
49. Paul Virilio, *The Administration of Fear*, trans. Ames Hodges (South Pasadena, CA: Semiotext(e), 2012), 25.
50. Paul Virilio and Sylvère Lotringer, *Pure War*, trans. Mark Polizotti (New York: Semiotext(e), 1983), 32.
51. Paul Virilio, *The Original Accident*, trans. Julie Rose (Cambridge: Polity Press, 2005), 38.
52. Jean Baudrillard, *Fatal Strategies*, trans. Philippe Beitchman and W. Niesluchowski (Los Angeles: Semiotext(e), 2008 [1983]).
53. Jean Baudrillard, *Seduction*, trans. Brian Singer (Montreal: New World Perspectives, 1990 [1979]), passim.
54. Pierre Klossowksi, *Simulacra,* catalog to the exhibition in Kunsthalle Bern (1981), and: *Diana at her Bath and The Women of Rome*, trans. Sophie Hawkes and Stephen Sartarelli (New York: Marsilio, 1990), 123–25. Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (London: Continuum, 2001 [1968]), 66–69.
55. Baudrillard, *Seduction*, 69.
56. Ibid., 67.
57. Ibid., 37–41.
58. Jean Baudrillard, *America* (London: Verso, 2010 [1986]), 64.
59. Jean Baudrillard, *Symbolic Exchange and Death*, trans. Iain Hamilton Grant (London: SAGE Publications, 1993 [1976]), 70–76.
60. Jean Baudrillard, *Simulacra and Simulation*, trans. Sheila Faria Glaser (Ann Arbor: University of Michigan Press, 1994 [1981]), 27–32.
61. Jean Baudrillard, *Cool Memories: 1980-1985*, trans. Chris Turner (London: Verso, 1990), 46.
62. cf. Spuybroek, *Grace and Gravity*, Chapter 1: "The Grace Machine: Of the Figure and the Gap."
63. The annual Cooper's Hill Cheese-Rolling and Wake. The photos I am referring to were taken by Ben Birchall for PA Images.
64. Henri Bergson, *Laughter: An Essay on the Meaning of the Comic* (New York: MacMillan & Co., 1911), 8. In *Interview Magazine* (November 11, 2014) John Cleese states succinctly that "Humor is about things going wrong."
65. Baudrillard, *Fatal Strategies*, 188.
66. Charles Darwin, *The Expression of the Emotions in Man and Animals* (London: John Murray, 1872), 202.
67. Anthony Ludovici, *The Secret of Laughter* (London: Constable & Co., 1932), 72–73.
68. Thomas Hobbes, *Leviathan* (London: Penguin Books, 1985 [1651]), 125.
69. Elias Canetti, *Crowds and Power* (London: Penguin Books, 1981 [1960]), 261.
70. Plutarch, *Moralia, Vol. V: The Obsolescence of Oracles* (De defectu oraculorum), trans. Frank Cole Babbitt. Loeb Classical Library 306 (Cambridge, MA: Harvard University Press, 1936), 14.
71. In Dutch that would be "ontvallen," which might range from a word that slips your mind to someone taken away from you. The German *entfallen* has a slightly different meaning.
72. "One of those characteristic British faces that, once seen, are never remembered" – Oscar Wilde.