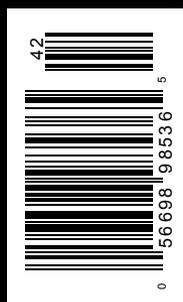


# Cabinet

A QUARTERLY OF ART AND CULTURE  
ISSUE 54 THE ACCIDENT  
US \$12 CANADA \$12 UK £7



DESDE LAS OFICINAS DE CABINET INVOCAMOS A LA VIRGENCITA DE GUADALUPE POR SALVAR DE TAN GRAVE ACCIDENTE A NUESTRA EDICION ACTUAL DE LA REVISTA CUANDO FUE ATACADO EL BARCO QUE LA TRANSPORTABA DESDE ANTWERP HASTA NUEVA YORK POR UN TERRIBLE MONSTRUO MARINO POR ELLO AQUIEN PRUEBA DE NUESTRA ETERNA GRATITUD DE DICAMOS ESTE RETABLITO. CANAL DE GOWANUS EN BROOKLYN SEPTIEMBRE 2014.



WONDERS TAKEN FOR SIGNS:  
AN INTERVIEW WITH MICHAEL WITMORE  
Justin E. H. Smith & Sina Najafi

*A building collapses, and some of its occupants die; two people have a chance encounter at the marketplace; a woman gives birth to conjoined twins—in early modern England, unforeseen “accidents” such as these acquired a new significance in the philosophical and cultural imagination. Where accidents had once seemed of no intellectual value precisely because they were singular, they were now transformed into events that raised fundamental questions about the way the world was ordered. This transformation—which took place in religious life, dramatic practice, and experimental philosophy, among other spheres—is the subject of Michael Witmore’s book *Culture of Accidents: Unexpected Knowledges in Early Modern England* (Stanford University Press, 2001). Justin E. H. Smith and Sina Najafi spoke to Witmore by phone.*

---

**CABINET:** In your book, you discuss how during the early modern period, starting roughly around the beginning of the seventeenth century, the notion of the accident was transformed from a peripheral concept into a central motif in religion, philosophy, and theater. In the Aristotelian tradition leading up to that point, the accidental event was a one-off and thus could not be philosophized, and for Calvinism the notion of a providential God meant that nothing was ever an accident—accidents were a theological impossibility. Can you tell us how it is that the accident—apparently unthinkable and impossible—became such a central idea in their period?

**WITMORE:** What interests me about this moment is that in the Aristotelian tradition accidental events are a dead end epistemologically. That’s not to say that they are uninteresting, but that they have no unifying cause that precedes them. Here we’re leaving aside the question of Aristotelian substance ontology and his notion of accidental predicates—which qualities are essential to a thing and which are not. I’m interested in the accidents that Aristotle described in the *Physics* and the *Metaphysics*, which are events that unfold in time.

I think that up through the sixteenth century, the idea of an accident as an event was essentially the idea that two independent causal lines could meet in a given place at a given moment and produce something that could not have been foreseen by either of those causal agents. So Aristotle’s example would be: Two people go to the marketplace, one goes to buy olive oil, the other goes to buy grapes, and they meet accidentally in the marketplace and settle a debt on that occasion. Now, neither went to the marketplace intending to settle a debt; it is the accidental outcome of their preceding and independent desires to do something else in that place.

In the Aristotelian tradition, the fact that there is a plurality of independent substances—that could be a deliberating person, or it could be a piece of earth that desires to move towards the center of the universe—means that there is a space for accidents insofar as these agents are causally independent. What I think starts to happen in the late sixteenth century is that exactly this notion of the causal independence of different lines of action is transformed through the metaphor of the theater, and so when John Calvin says that all of creation is a spectacle designed to put us in awe of the creative power of God, he is saying that even though these lines seem to be independent, they are actually and specifically intended by God, who is paying particular attention to making those things happen.

**CABINET:** To what purpose?

**WITMORE:** Calvin’s sense is that there’s a theater of God’s judgment in the world, that God communicates through theater, and that accidental events—things that just seem to happen—are precisely those startling events that get a rise out of the spectator and in fact engage the conscience in unusual and startling ways. So Calvin says that every time you step onto a ship or walk down the street, you’re putting yourself in danger of shipwreck or of a tile falling down and hitting you on the head. Now Aristotle also used examples like that, and pre-Reformation Christianity did

have quite a complicated way of saying how God might foresee those things happening to you. But with Calvin, you get the idea that there's an active someone—the Shakespearean word for it is a practitioner—who is making it all happen, who is there staging all these accidents in order to awaken the conscience. What I take from that is the developing idea—and for me it's the most startling intellectual development of the turn of the seventeenth century—that contingency in accidents is something that can be manufactured through the careful management of different lines of causal action. The theater is one place to think about that insofar as it sets up certain constraints that allow you to imagine how someone could put this person here and that person there and make them meet in the marketplace. That's the place for something like *The Comedy of Errors*.

But here we need to add the work of Francis Bacon to the picture, because his technique of thinking of how to stage empirical experiments is precisely the exhaustion of combinatory possibilities in latent form. In the *Novum Organum*, Bacon defines an “experiment” as an accident that one seeks deliberately to create. To me, this is like someone saying, “I want to make that accident in the marketplace happen over and over and over again.” Bacon is building an entire system around the idea that we could either manufacture or simulate the effects of chance and fortune. For Calvin, God could do this, but the ambition to make humans capable of manufacturing contingency starts with Bacon and it culminates in surrealism, John Cage, and aleatory art.

CABINET: And of course at the turn of the seventeenth century, the distance between the theater and the laboratory would not be nearly so far as it would be, say, in the mid-twentieth century, when you have aleatory experiments in the creative arts but they are culturally and epistemically a world away from scientific research. What is perhaps fertile about the period in which Bacon was living is that the experiments that he was arranging and carrying out might have had some kind of clear connection to the world of theater. We see this in the history of science in concrete examples such as the *theatrum anatomicum* or the various “stagings” of experiments in the Royal Society.

WITMORE: Yes, I think this period is so interesting because we haven't seen that partition yet between the realm of craft and action, between the theater and the laboratory.

CABINET: We don't need to go into Aristotelian ontology here and into the idea of accidents as inhering in substances, but of course you can't cordon off the two conceptions of accident altogether because they both share one feature, namely that there are things that could have not been there. The reason that's the case with substances is because a man remains the same man whether he is standing or sitting. And the accidental events of the kind you are interested in are the result of the combinatorics of substances, each of which itself has so-called accidental attributes.

WITMORE: Yes, and so the intention to go to the marketplace is a non-essential predicate of a substance.

CABINET: And then you add two of those and it results in an accidental repayment of a debt. But both types of accident are also problematized by determinism, which is becoming, over the course of the seventeenth century, a prevailing philosophical theory of the successions of states of substances. You see it in Spinoza and Leibniz, and arguably these are really only philosophical elaborations of theological concerns that had already been developed in Calvin and others. So it would be interesting to consider how that overwhelming occupation with determinism in the period problematized the notion of the accident.

WITMORE: One of the shortcomings of my book was that it did not go through the seventeenth century and examine the kind of wrestling with angels that had to happen to fully naturalize the arts of disposition, those techniques of actively arranging things that—with the Reformation—become the power of an active providential God. To describe the transition roughly: in an Aristotelian system, one has

---

Opposite: *The Great Fire of London, with Ludgate and Old St. Paul's*, 1670. Artist unknown. Courtesy Yale Center for British Art.



causally independent but roughly self-governing substances that can't totally determine their future states. In the early modern period, there is a growing sense that there are self-effectuating, and so future-determining, states of entities that flow from what they're made out of and how fast they're going. This is the starting point for mechanical philosophy, and it leaves open the possibility of a supervising agent who uses foresight, arrangement, and plotting to bring about accidents indirectly. While this still looks like a providential God, there's a difference with someone like Spinoza, who I think understands the idea that the present state of a thing determines its future state. What I think he adds is the sense that it's not a supervisor or providential arranger or a kind of theater director. Instead, there is one substance, and so what Spinoza demolishes is both the Aristotelian system, which made accidents possible because there are numerically discrete independent actors, and the Calvinist model, which said that those independent actors had a script and God gives it to them. I think the last chapter of this history is the story of how accidents become really just a series of consequences that follow from what things are and where they are. It is the story of force rather than substances.

I think what's happening philosophically in the seventeenth century is that accidental efficient causes, causes that are severed from any single governing final cause in an Aristotelian model, are now becoming the forces of nature. And so the secret history of a natural cause in the early modern period leads back, I think, to the accidental efficient causes that Aristotle described in the *Metaphysics* and *Physics*.

CABINET: To go back to Bacon, it's often unclear what his conception of the value of accident harvesting really is. You really see this in the later institutionalization of Baconianism in the Royal Society, for example, where they send out queries about the nature of Iceland spar or the time of the sunset in the Arctic, and, in the other direction, people are sending in reports of two-headed calves. It really is a sort of structured, communal collection of one-time things. And in Bacon himself, it often seems like this is really an end in itself. He says that you need to "lay your notions by," to put away

your *a priori* framework for making hasty sense of these things. But then it never really gets anywhere, whereas in later, more programmatic explanations of the value of this sort of data collection, this focus on collecting accidents and singular events and objects, there is an idea that eventually what they are going to show you is the full and true order of nature. And you see how the early preoccupation with particularities ends up becoming a really programmatic search for laws. But Bacon's place in all this remains mysterious.

WITMORE: Two things. First, the early modern love of anomalies and accidents of nature. Take, for example, a monstrous birth, which for Aristotle is the product of an unusual crossing of causal lines in the womb. Even though the monstrous birth is a thing, it is also an event, and so I think we can include the history of monstrosity, including Bacon's interest in monsters, in this longer history of eventuality. When Bacon becomes interested in startling anomalies, it's a bit like Bertolt Brecht getting interested in moments when the actor steps out toward the audience. These are those moments where you are shocked as a spectator into realizing, "Oh, I've been observing this according to certain agreed-upon protocols, and maybe there's another way to look at things." So there's a kind of Brechtian *Entfremdung* that's being encouraged in Bacon's system. That kind of productive interruption is key for Bacon, although clearly he lacked a systematic way of producing and synthesizing the results. But what is different from earlier models is Bacon's faith in the idea that this one rare thing is actually the royal road to understanding what nature will always do (but only in certain circumstances). In the previous Aristotelian system, on the other hand, you are encouraged to look at things like acorns because for the most part they become oak trees: the other stuff that only happens rarely is really a dead end.

That's on the one side. On the other side, in my work I became more interested in statistics and I now study large collections of text with computers; so I am interested in the nature of variety in bounded entities that contain words. I would now situate Bacon in what we might call the long history of variety. That history is a history of the desire for, and fear of, variety. I think it begins in antiquity

with Plato's full attack on multiplicity, but in the early seventeenth century, the pursuit of variety changes with Baconian experimentalism. And it changes once again when variety becomes subject to a mathematical calculus of probabilities. By the twentieth century, our own struggles with fundamentalisms of various kinds—ethnocentrism, nationalisms, etc.—are essentially another episode in trying to understand whether we want variety or fear it. So I believe we need to have that continuous line in order to understand even now our interest in exhaustive algorithms that can handle the great variety of things that appear on the web, for example, or our sense that the varieties of experiences that people bring to any kind of cultural expression are intrinsically valuable: that variety-seeking view is quite modern, and not unrelated to the kind of leap that people took in the seventeenth century.

CABINET: Returning to the early modern period, we'd like to pick up your chapter on the Blackfriars accident of 1623. The event occurred when some three hundred Catholics and Protestants gathered on the third floor of a house in the Blackfriars district of London to hear a Jesuit preacher deliver a sermon. The floor suddenly collapsed and nearly one hundred people were killed. The accident was a sensation in London because it invited all kinds of sectarian interpretations in Protestant England. Interestingly, the chapter's titled "Wonders Taken for Signs." One way to understand the *longue durée* of this period—and this is something that Lorraine Daston and Katharine Park have written on—is that we are witnessing a transition from anomalous events as wonders to anomalous events as opportunities for learning. Daston and Park focus on the period in the history of teratology that witnessed the transition from monsters to birth defects, or, to put it differently, the transition from the idea of a creature as a sign, whether animal or human, to anomalies as simply those things that in their deviation from the ordinary course of development reveal something about what that ordinary course of development is. In this sense, everything becomes an opportunity for better understanding of the normal.

WITMORE: Yes, everything becomes pedagogical; you need to pay attention at every moment.

CABINET: And Peter Galison has written on airline disasters, and what's peculiar about these is that they are so paradigmatically accidental. There's something so particular about each one of them: there's too much grease here, or there's a spray can someone left there, and they result in hundreds of deaths. The great victory of airline safety over the past several decades is that they have managed to make disasters highly improbable by studying to death, each time they happen, the particular features of these accidents. This seems to be pushing to the very limit this transition that we are already seeing in the seventeenth century away from thinking of anomalous events as signs and instead taking them as lessons.

WITMORE: Yes, that's right. My way of saying it would be that knowledge in the seventeenth century involves turning accidental effects into natural effects, or accidents become effects and therefore become part of nature, which is a stunning development—this kind of passion to exhaust the cunning of the accident, to catch up with it. I think the mass study of airline accidents, the omnivorous examination of every single stray can of WD-40, seems to me to be very much an expression of the aims and ideas of the seventeenth century.

But as I tried to say in my analysis of the Blackfriars accident, just because you naturalize these things doesn't mean that they cease to signify. Of course I can understand that where I was standing in the room meant that it was I who survived the breaking of the timbers below, but that the person next to me died. That could be a complete causal description of why this person died and I didn't, but it could also be completely ineffective as a way of answering the question *why*, since this question is about why *I* was standing there at this moment and why the other person was standing next to me. The power of accidents to signify persists past the demystification of accidents as events, and I think the second fascinating outcome of this period is that while it launched us on the way to naturalizing accidents, in effect it sealed the deal in making these events permanently significant: as soon as they become accidental, the only way you can process them is to tell a story about them, and that story will always have meaning.

CABINET: What's really striking about your book is that you draw out how important the narrative dimension is for understanding the history of a concept like the accident, and that a history of the accident also needs to consider the history of narrative.

WITMORE: If you see the kind of theater created by an artist like Shakespeare, who was so self-aware about the artifice involved in his craft, it becomes clear that he understood very well that his charge as a creator of theater was to manufacture and manage events. And as soon as you realize that there's an art of manufacturing events, let's say, an art of disposition or arranging stuff, you are in the realm of maker's knowledge, which is one of the great and powerful ideas of the seventeenth century.

My own way into maker's knowledge was to say that there are certain kinds of events that are mere coincidences, and can only be understood and explained in the context of a larger story. To give you an example: say that I went to the theater and sat in a seat, and a sculpture above me fell on my head and I died. That is an exhaustive description, at least causally, of what happened. But suppose that just before I'd arrived, I had said something terribly heretical, and suppose that this falling sculpture was of a pagan god and that I lived in a Christian culture. This gets to the question we were talking about earlier: the only way to explain that something was an accident is to put it into a narrative—to say first this thing happened, and meanwhile, this other thing was happening, and then.... It's the under-determining sequence of narrative, the fact that two things can just sit there in a sequence or a place, that holds the accident together. Once you put an accident into a story, the circumstantial details are going to signify: of course I deserved to be hit on the head by a falling statue of Jupiter. The shift that occurs during this period guarantees the enduring signifying power of contingent events, since there is no way to even describe a contingent event without a narrative. (They don't have formulas, only descriptions.) And that keeps us within literary history and rhetoric.

CABINET: Of course, there was also the preoccupation with machines in this period, which could be seen as an attempt to dominate the accidental as

much as possible. We know that machines are prone to not perform the way we want them to, to deviate from the path that we carve for them, and so the project of technology becomes the minimization of accidents by our control of them.

WITMORE: Yes, and machines are contraptions that acquaint us with those limits over and over again, which excites the passion to control them even more. But the failures are inevitable. The wonderful thing about machines is that they break. I think the passion for simulating and therefore controlling accidents, while it does lead to safety, also unleashed a technological gaze on the world that is doomed to fail. The Aristotelian tradition's rendering of accidents was actually quite elegant and I think something was lost in the early modern period. If I wasn't a certain kind of Spinozist—if I didn't think, as I do, that we live in a dynamic universe whose parts are inseparable—I would place my bets on the plurality of independent things in the world and the possibility that they can always recombine. I think that Aristotle offered a very powerful theoretical account of why it's necessary to have those independent things. This account guaranteed that those unexpected combinations would be, from the point of view of science, irrelevant, but it also meant that they were off-limits to a certain kind of technological gaze.