

Fate's scales, quivering

Why the problem of free will is not going away

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When we make a choice, whether trivial or substantial, it seems to us that the choice makes the difference between two possible futures, and that there was nothing set in stone in advance that determined the outcome. But with the advent of classical mechanics in the seventeenth century it became possible in principle to write down equations that, in conjunction with a complete specification of the initial conditions of the universe, could allow us to predict everything that we will do – every movement we will ever make, every word we will ever speak.

These equations aren't speculations. They are the first equations students learn in physics courses, the equations that let us calculate the motion of a pendulum and the trajectories of the planets. They are the equations that describe the laws that keep planes in the air and bridges from collapsing under the weight of cars. These equations, tested and confirmed time and again, allow us (in principle) to calculate within measurable precision the movements of every body in the universe, given enough information about its past. There are some corrections to the equations that make a difference at velocities close to the speed of light, and when we look at how things move at a very small scale (a length between ten and twenty times the diameter of a proton), but those corrections are well understood and don't (except under very rare conditions) make a difference for the movements of things as big and slow as us.

This means that any universe that started in the same global state as ours 14 billion years ago (roughly the age of the observable universe), with all of the particles in the same positions, with the same momenta, would have eventually given rise to you and me. Moreover, we would have all the same experiences and all the same thoughts and feelings and make all of the same decisions. And it also means that as you toss and turn in the throes of a difficult decision, there is really only one possible outcome. You are no more free to choose otherwise, than water is to flow uphill. This is the problem of free will and determinism.

This problem has been around for millennia, but physics gives it a precise formulation and a concrete setting. It's a beautiful problem because it brings physics into contact with issues of central human concern and forces us to think hard, in concrete detail, about what a scientific view of the world really entails about ourselves. The problem confronts us with a vision of human action that appears to be irreconcilable with the way we experience the world.

What do I mean by "the way we experience the world"? It's hard to pin down. More basic than a belief but more articulate than a sensation, it's the sense you have when making a decision that it is open to you – open right up until the last second – to act in any one of a number of different ways. The best description I've read is from William James:

The great point is that the possibilities are really



here ... at those soul-trying moments when fate's scales seem to quiver, and good snatches the victory from evil or shrinks nerveless from the fight ... the issue is decided nowhere else than here and now.

The reality of the possibilities is what gives weight to our decisions. It is what keeps us up at night. It is what bestows urgency on sorting out what to do. It is what, in James's words, "gives the palpating reality to our moral life and makes it tingle ... with so strange and elaborate an excitement". But it is the reality of the possibilities that physics seems to contradict.

Some claim that the idea of human freedom is built on illusions about human specialness that are a holdover from a religious conception of the world, and that they should be swept aside with the advancing tides of science. This position has been trumpeted loudly by people who present themselves as brave defenders of science: by scientists such as Einstein, Stephen Hawking and Richard Dawkins, and by philosophers including Alexander Rosenberg and Sam Harris. To most people, however, it seems literally unbelievable that the scales of fate don't hang in the balance when making a difficult decision. And it is not just those dark nights of the soul where this matters. You think that you could cross the street here or there, pick these socks or those, go to bed at a reasonable hour or stay up, howl at the moon and eat donuts till dawn. Every choice is a juncture in history and it is up to you to determine which way to go.

Yet, if there is one foundational scientific fact, it is that things can't happen that the laws of physics don't allow. And the clash between these two things shows that there is something centrally important about ourselves and our position in the cosmos that we don't understand.

So far I've been speaking as though the problem of free will is the problem of how to reconcile our experience of our actions with what physics says. This aspect of the problem is one that many people latch onto, when they first encounter it. But there's a much more serious aspect of the problem that reveals itself when we consider the practice of holding people morally responsible for their actions. Consider the crime made famous by Truman Capote's *In Cold Blood*. On the night of November 14, 1959, Perry Smith and Richard Hickock entered the home of Herb Clutter and his family in Holcomb, Kansas, while they slept. Armed with a knife and a 12-gauge shotgun, and believing that Clutter kept large amounts of cash in a safe, the pair had driven 400 miles with the intention of robbing the family. In the house were Clutter, his wife and their teenage son and daughter. On discovering there was no safe, Smith and Hickock bound and gagged the family. They continued to search for money, but found little of value in the house. Smith then slit Herb Clutter's throat and shot him in the head. Kenyon and Nancy, the children, were killed with gunshots to the head. Mrs Clutter was killed last. Smith confessed to all the murders, and then refused to sign the confession, claiming that he only confessed because he felt sorry for Hickock's mother (though Capote himself believed that Smith pulled the trigger). From the crime the two netted a small portable radio, a pair of binoculars and less than \$50 in cash. The radio and binoculars, which remained in their possession, would later lead to their conviction.

These were methodical, personal killings, at close range, that would have been difficult to commit without looking into the faces of the victims. These weren't crimes committed in the heat of battle, or under any kind of threat.

Smith and Hickock weren't children, cognitively disabled, or frightened for their own lives. They were considered actions undertaken by grown men, calmly and without present danger. The events unfolded over the course of a night in which the criminals made deliberate decisions to perpetrate spectacular violence. On killing Herb Clutter, Smith later told Capote, "I didn't want to harm the man. I thought he was a very nice gentleman. Soft spoken. I thought so right up to the moment I cut his throat".

Capote portrays Smith's slow drift from troubled childhood to murder, in a manner that blurs the line between agency and circumstance. But the crime itself evokes anger and moral revulsion, and that's because we assume that even once all the external influences that made Smith who he was are taken into account, he still could have walked away that night without committing senseless murder. He chose not to, and he is to blame for that choice.

Determinism looks like it pulls the rug out from under the presumption that Smith could have walked away. The worry is that if the physical laws are deterministic, they leave no room whatsoever for any contingency about what will happen once the initial conditions of the universe are set. Smith and Hickock were products of a history that could only unfold in one way, as a matter of physical law, from its early origins. The facts of the early universe left no room for them to do anything but make the choices that they made. It's not that people's choices don't make a difference to what they do; it's that their choices are themselves fixed by facts that were in place 14 billion years ago, long before either of them was conceived. When the NRA says "Guns don't kill people; people kill people", they mean to be pointing to the person holding the gun as the real locus of control, and the one responsible for the damage caused by a bullet, because the gun has no choice about what to do. The worry raised by determinism is that the person – no less than the gun – is but one part of the landscape the causal chain passes through. Maybe people don't kill people either. Maybe the initial conditions of the universe do.

People sometimes wonder why the problem is still a live one, since our best current microphysical theories – quantum mechanics and quantum field theory – are not (on the standard interpretation) deterministic. But it is easy to revise the argument to make it work just as well in a quantum setting. For just as the past is not under our control, according to determinism, so chancy or probabilistic quantum departures from determinism are not under our control either. Hence, our actions are not under our control.

Considering quantum mechanics helps us focus on the kind of control that seems essential to human freedom. We don't want our actions to be controlled by the initial conditions of the universe, and we don't want them to be controlled by random sub-microscopic events in the brain either. We want to control our own actions ourselves, and we think we do. We want to get ourselves into the causal chain. We

want our decisions to come from us.

It is the question of moral responsibility that transforms the problem from the relatively shallow one of reconciling the rigid necessity of physics with the felt spontaneity of action into one that engages with deep human questions about what we are, both as individuals and as a species. It also moves the question outside of the simple setting of physics. The question “what am I? And how do I fit into the universe?” is one of the oldest in philosophy. Linking the question to moral responsibility gives us more traction because it forces us to think about what makes another human being an appropriate target for moral emotions like praise and blame, not to mention love, admiration, anger and contempt. Science won’t answer these questions, but it provides us with the right setting in which to address them, if we do not want to rely on magical thinking.

Three very different recent books by Paul Russell, Alfred R. Mele and Thomas Pink display the richness of the philosophical literature generated by reflection on the problem. Paul Russell’s book, *The Limits of Free Will: Selected essays*, consists of a set of papers written over three decades on questions related to moral responsibility. The papers engage a range of allied fields from law and moral psychology to theology and neuroscience. Russell’s theoretical attitude towards human freedom is neither black nor white. He rejects unqualified scepticism about moral responsibility but holds that our pre-theoretic view of ourselves as a free and ultimate source of action is severely tempered by what science is telling us about ourselves. One can dip into this book, reading the articles individually. They stand

alone quite well as treatments of particular topics.

Alfred R. Mele’s *Aspects of Agency* is very different. Where Russell’s book is rooted in history, and looks outward, actively engaging other fields, Mele’s has a narrow focus on one strand of argument in the contemporary discussion, and is best seen as a contribution to a wider literature. Mele has been one of the most important and best exemplars of the contemporary analytic discussion of free will, which has seen vigorous activity in the past two decades in no small part owing to his influence. This area is a forest of definitions, analysis and close examination of arguments that have been developed to distinguish positions in what has come to be a rather articulated landscape. Mele defends the view that moral responsibility is incompatible with free will and that an action is free just in case it is caused in the right way by an agent’s decision. This literature can be difficult to penetrate from the outside because of the baroque terminology, but if one has the patience, it holds its own rewards.

Thomas Pink rejects some of the terms that frame the contemporary debate in the literature. It is usually assumed that freedom involves the ability to act otherwise than we do. Pink argues that freedom need not involve the ability to act otherwise than we do. It comes instead from a more basic power to determine for ourselves what we do. *Self-Determination* is a sustained and careful meditation on what it means to determine for yourself what you do. This is a question that any thoughtful person has considered, and repays reflection quite independently of any worries about determinism.

Perennial problems like free will and determinism may prompt yawns in people impatient with a lack of progress. But the fact that such problems span cultures and eras, and that they immediately grip even those without training in physics or philosophy, suggests that they reveal tensions that lie deep in human thought. I remain convinced that there is a way of moving past the surface clash, and of bringing the sharp edges of our beliefs, concepts and practices into line.

That way involves not imposing notions of natural necessity too closely tied to our experience on the interpretation of science. The everyday notion of cause is a mix of different elements (subjective, phenomenological, heuristic). For most of us, it is rooted in the primitive experience of pushing and pulling, holding and yanking. It has taken science rather a long time to develop a mature concept that gets rid of these subjective elements; causes appear in a mature science not as necessary connections written into the fabric of nature, but robust pathways that can be used as strategic routes to bringing about ends. They function not as challenges to freedom, but handmaids to decision.

And it also involves understanding how the capacity for choices equips human beings with an internal locus of control over their behaviour. We are shaped by our native dispositions and endowments, but we do make choices, and our choices come from us to the extent that they are expressions of our hopes and dreams, values and priorities. These are things actively distilled out of a history of personal experience, and they make us who we are. Freedom is not a grandiose metaphysical ability to subvert the laws of physics. It is

the day-to-day business of making choices: choosing the country over the city, children over career, jazz over opera, choosing an occasional lie over a hurtful truth, hard work over leisure. It is choosing that friend, this hairstyle, maybe tiramisu over a tight physique, and pleasure over achievement. It is all of the little formative decisions that when all is said and done, make our lives our own creations.

Philosophy is at its best when it is digging around at corners in our world view that we don’t understand, forcing us to think hard about fundamental matters. In philosophy, as in science, it is by digging around at the places that we don’t understand that we are most likely to arrive at new insights. I will leave the last word to William James:

A common opinion prevails that the juice has ages ago been pressed out of the free-will controversy, and that no new champion can do more than warm up stale arguments which everyone has heard. This is a radical mistake. I know of no subject less worn out, or in which inventive genius has a better chance of breaking open new ground – not, perhaps, of forcing a conclusion or of coercing assent, but of deepening our sense of what the issue between the two parties really is, of what the ideas of fate and of free will imply.

Books consulted for this essay:

The Limits of Free Will: Selected essays by Paul Russell (2017, Oxford University Press).

Aspects of Agency: Decisions, abilities, explanations, and free will by Alfred R. Mele (2017, Oxford University Press).

Self-Determination: The ethics of action – Volume One by Thomas Pink (2016, Oxford University Press).

Making a mingle mangle

A new way of telling the story of philosophy

JONATHAN EGID

Jonathan Rée

WITCRAFT

The invention of philosophy in English
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The first philosophers to write in English were faced with a dilemma: should they import “terms of some other tongue ... and by a little change of pronouncing, to seeke to make them Englishe worded”, or should they coin “understandable termes, compounded of true and auncient English words”? That is to say, should English learn to philosophize, or should philosophy be made to learn English?

On the one side stood philosopher-translators like John Florio (1553–1625), who claimed that he could not “philosophate” and “fantastiquize” in English without borrowing “uncouth words” from French and Latin, and on the other, the irascible cleric Ralph Lever (1530–85) who accused the Latinates of “making a mingle mangle of their native speache” with their “inkhorne termes”. The battle raged for over a century, and eventually the foreign imports prevailed – the home-made “indwellers” and “yokefellows” (for *accidentes* and *relativa*) were forgotten, while “person”, “emotion”, “politics” and “nature” became integral parts of the language. Indeed, as Jonathan Rée argues in his ambitious and highly original book, one of the most significant (and neglected) strands of the history of philosophy in English was the symbiotic rela-

tion that developed between philosophical translation and the English language, in which philosophical translation enriched English at least as much as English-speaking writers enriched philosophy.

Witcraft departs from orthodox histories of philosophy in refreshing ways. Rée contrasts his approach with what he calls the “monolithic hegemony of the origins-to-the-present histories of philosophy”, exemplified by Bertrand Russell’s classic *History of Western Philosophy*. This “monolithic hegemony” serves to “reduce its classics to a handful of hackneyed quotations and stereotyped arguments, and package them as expressions of pre-existing ‘positions,’ ‘movements,’ and ‘systems’”, in which “individual idiosyncrasies are concealed behind post-hoc labels, and the great philosophers are commemorated not as creative pioneers but as cartoon characters

endlessly re-enacting the parts assigned to them in the histories”.

Rée’s alternative approach is to examine individual thinkers and the particular works they created, appreciating and unpicking idiosyncrasies rather than sorting them into tidy boxes labelled “empiricist” or “utilitarian”. To this end, *Witcraft* is presented not as a single continuous narrative but through a series of representative sketches of individual philosophers, with each chapter concentrating on what a particular thinker wrote, how and why they wrote it, and how they formed part of the broader philosophical landscape at a particular time. This alternative involves paying serious attention not only to canonical figures including Hobbes, Locke, Berkeley and Hume, but also to all sorts of apparently marginal and peripheral thinkers – from occultists, alchemists and eccentrics such as the Quixotic philosopher-courtier Thomas Urhart, to missionaries, theologians and poets, “perfective socialists” and Kantian goldsmiths.

Expanding the definition of “philosopher” to include those thinkers at the fringes of polite philosophical society serves to challenge what we think philosophy is, who might be doing it, and how they might be expressing

it, and Rée explores not only the diversity of the thinkers but also the variety of forms that philosophical writing took: biography, pamphlet, logic manual or satirical yarn, as well as the more traditional forms of philosophical argumentation: the treatise, essay, or scholastic disputation. Rée allows these philosophers to speak for themselves, quoting assiduously from primary sources and piecing together a collage of the philosopher’s original writings. This method allows readers to form their own opinions, encountering the ideas as they were originally expressed rather than as re-imagined according to contemporary norms.

In a work of this scope, omissions are inevitable. At times a little more critical engagement with the ideas themselves would be welcome – one feels that it is possible to adopt a respectful, even affectionate stance towards these works while remaining rather more critical than Jonathan Rée allows himself to be. But this should not detract from his fundamental achievement: *Witcraft* is the story of philosophy in English told in a new way, narrated with relish and considerable wit by an author evidently enamoured of his subject matter. It is also that rarest of philosophical writings: both appealing to lay readers and genuinely useful to academic philosophers.