New Books

*The Future of Human Nature*
By Jurgen Habermas

When the Human Genome project holds out the promise of providing man with the complete explanation for his behaviour, his choices and his values, what future for human thought? More to the point, what future for philosophy, the greatest of the human disciplines? Where will philosophy fit into the scheme which reduces the idea to the brain state, and the brain state to the genetic make-up of the individual? This is the precarious position in which philosophy today finds itself. Its premises appear to be further undermined by every new scientific discovery or technique.

In *The Future of Human Nature* Jurgen Habermas attempts to turn the tables on science by showing that the converse of this position is true, that the whole of man’s activity relies on him being an ethical creature. If genetic science undermines ethics, then it must also undermine the full range of man’s activity, including science itself. This attempt by Habermas to reassert the primacy of philosophy is understandable, when today’s world seems to have been abandoned by the kinds of ideas and values around which people can organize their lives. But his readers will need to ask themselves whether the values he asserts are truly human, or whether they are just as limited as the scientific values he is attempting to transcend.

*The Future of Human Nature* is split into three parts, and in the first of these Habermas admits that ethics has taken a bit of a knock since the days of Immanuel Kant, when the inner voice informing us of our duty was more or less identical to our neighbour’s. Over the course of the early nineteenth century, this objective view of ethics degenerated into a more subjective one. But even Kierkegaard’s relativist redoubt—that despite my neighbour and I not sharing the same values we can both at least be true to ourselves—is today difficult to hold. As Habermas points out, both Kant and Kierkegaard shared the view that the inner voice was a reliable source of information and guide to action. Not so today. Genetic engineering has undermined the trustworthiness of the inner voice. This voice might, after all, be a product of our genetic make-up, which might itself be a product of our parents’ whims as expressed to doctors several months before our birth. Habermas therefore asks ‘How can one be true to oneself when ‘oneself’ may not be the genuine article?

This question forms the basis of the second part of his book. It is interesting that Habermas does not regard the question as being susceptible to the day-to-day methods of morality, i.e. by ‘weighing up’. We cannot, for instance, adjudge of certain pre-programming dilemmas by considering...
the pros and cons to all those involved, since the pre-programmed child may not be *autonomous*, and his or her interests may not therefore be authentic. To ask a child ‘Are you pleased we made you a mathematical genius?’ could be a loaded question if the child’s parents had already decided to abort any non-mathematical foetus. This view leads Habermas to be suspicious even of genetic procedures that hold out the promise of improvements to health, for to promote such improvements is to unjustifiably pre-judge the values of future generations.

Parents being able to determine the characteristics of their child, down to say, his or her aptitude for mathematics might yet be the stuff of science fiction, but this matters not to Habermas. He has a point. Ethics cannot be limited just to what is happening today. It must consider matters of principle. ‘As long as we consider in time the more dramatic borderlines which the day after tomorrow might be crossed’, he writes, ‘we can approach today’s problems with more composure.’

However, there is more to Habermas’s ethical speculations than the desire for composure. As far as he is concerned, the ‘ethical self-understanding of the species’ is at stake. For Habermas, the aim of considering ‘the more dramatic borderlines’ is to allow ethical thinking to leapfrog science and act as a *humane limit* to science’s urge to dominate mother nature and determine human nature. He supposes the scientific urge to be driven by short-sighted market forces; it needs therefore to be externally regulated through the reassertion of far-sighted ethical values. By regulating scientific experimentation in this way we might, he believes, recapture a position from which human-centred thinking can operate. But is he right to counterpose ethical values to scientific ones?

Stepping back from the debate, we might admit that science displays a certain short-sightedness; a keenness to ask ‘How?’ and a reluctance to ask ‘Why?’. The scientific process, in coming to understand the reality of the physical world, is seldom concerned with the wider questions of existence. However, to see this as a shortcoming of science is to misunderstand it. Science and ethics look into the future in different ways. The apprehension of concrete reality requires the practical intervention of the scientist in the world: specific conditions need to be reproduced so that phenomena experienced accidentally at first can be experienced again in a controlled manner. So in setting up experiments to achieve this the scientist anticipates the behaviour of the world. The scientific process therefore contains a regulatory element which reaches beyond the immediately given and into the future.

Habermas gives no consideration to this, preferring instead to see science regulated solely through the super-imposition of ethical values, which would guide science in its experiments and pass judgment on the results. But in opting for this method of regulation we not only lose an important active element from science, but we also inject a sizable dose of passivity into ethics.

By their nature, ethics committees interpret the results of new scientific developments in terms of existing ethical norms. This means that,
Unlike the scientific knowledge of the scientist, the norms themselves get little chance to develop. But this is not to say that ethical principles are static. On the contrary, principles held in this way have a tendency to be moved on quite abruptly. For instance, the UK Human Fertilisation and Embryology Authority (HFEA) has recently been attacked for failing to move with the times, and for failing to deal adequately with the case of Jamie Walker, conceived as a so-called 'saviour sibling'. The HFEA ruled against Jamie’s conception and so his parents-to-be obtained their desired reproductive treatment in the United States. The HFEA must now review its own principles in response to what has happened.

This is not to say that scientists should be left to their own devices, without consideration of the wider issues. But neither is it to believe, as Habermas does, that the balance should be tipped wholly the other way. Habermas promotes his ethical considerations at the expense of man’s active side, resulting in a one-sided and somewhat passive idea of human nature.

This one-sidedness tells in Habermas’s description of what has become of society. Society, he claims, ‘is ready to swap sensitivity regarding the normative and natural foundations of its existence for the narcissistic indulgence of our own preferences’. Here he automatically assumes that ‘our own preferences’ are suspect. But cannot such preferences act as society’s normative foundations?

It may be possible to answer this question if we take a closer look at Habermas’s over-arching ethical principle: that it is wrong to instrumentalize human life (i.e. to see others as a means to an end rather than an end in themselves). Habermas sees instrumentalization as an affront to human subjectivity. We all, he believes, ‘belong to the universe of members who address intersubjectively accepted rules and orders to one another’. But in objecting to instrumentalization, Habermas appears not to accept that man must occasionally instrumentalize himself (as a labour-device to his employer, as a faulty machine to the surgeon, etc.).

It is through such objective relations that we are able to perceive the subjectivity of others. Indeed, intersubjectivity would never arise were it not for man’s dual nature as both a user of instruments and an instrument himself. This means that he can examine himself as an object, and ask himself how it is he arrived where he is. At the same time he can see himself as a subject and ask ‘Where now from here?’ And the greater the understanding in relation to the first of these questions, the better the understanding in relation to the second. For instance, the laws of physics initially placed man on the ground, but he looked at the birds and wanted to fly. Sooner or later he was able to do so through coming to understand the very same laws of physics. In other words, the cation of apprehending his objectivity was the first step along the road to liberating his subjectivity, allowing him to determine his own values.

Perhaps, then, science could be humanely regulated not by retreating from the instrumentalist view but by moving closer to it. If we accept this then maybe the problem is not that scientists see the world instrumentally,
but that the rest of society fails to see scientists instrumentally. That is, society itself is unsure of its 'narcissistic preferences' vis-à-vis science. Clearly this is not a problem that can be solved by scientists, nor even by ethics committees (who are just as unaccountable). It does, however, represent an area where philosophy can genuinely and actively reassert its primacy.

In the third part of the book, entitled ‘Faith ad Knowledge’, Habermas continues the anti-scientistic theme. He invokes the enormity of 9/11 to claim that science has (in the words of Max Weber) ‘disenchanted the world’. Science might be able to explain man’s situation, but it cannot provide a justification for his action that can have no possible justification (indeed, it might be added that not even the perpetrators of 9/11 attempted to justify their own actions).

To provide science with the meaning it requires Habermas would like to establish what he terms a ‘secular Messianism’, a system whereby the scientist must tip his hat to any religious values that have the potential to impart meaning. So, for example, he reminds us of the lesson of the Creation in which Adam was made free enough to commit original sin. ‘The other who has human form’, Habermas intones, ‘must be free in order to be return God’s affection’. The warning here for science is that the genetically engineered child, being pre-determined (and thereby unfree), cannot return our affection in the way we would hope, and therefore can never become our equal.

Is this really the way to save both science and society? Will any old values do, provided they give some sort of meaning to the scientific process? No. The human, ethical and philosophical values we need are those which understand man as an instrumentalizing animal, able to tinker with his own biology, and containing within himself the potential for even greater creativity. But Habermas’s *Future of Human Nature* will not even admit that man has a open-ended future. Towards the end of the book he refers to ‘the finite constitution of the human spirit’ which can be ‘overtaxed’ by considerations of what is best for future generations. Perhaps, therefore, Habermas central fault is this: that for all his lamentations for faith, he has very little faith in man.

Ciaran Guilfoyle

*Time and Space*

By Barry Dainton.


Suppose you are a physicist with a good working knowledge of relativity theory but wondering what its conceptual implications are. Where will you go for a clear discussion of this that does not presuppose previous acquaintance with philosophy? Or suppose you are running a third-year undergraduate or Master’s course in philosophy of space-time physics. What will you choose as your text? Or suppose you are neither a philosopher nor a physicist but want a hard-headed introduction to some of the trickiest
intellectual questions of space and time. Where would you start? Happily, there is now (for the first time, I would guess) a single answer to all of these questions. It is Barry Dainton’s clear, elegant, well-illustrated and remarkably comprehensive *Time and Space*, published in paperback at an attractive price.

Dainton structures the book around two fundamental problems: does time pass? does space exist? Although this brings an argumentative focus to the discussion, it certainly does not make it too narrow. The reader is taken through a wider range of issues than is covered by any other book on space and time that I know of: the reality of past and future, the duration of the present, the direction of time, backwards causation, time travel, the reality of tense, the relationist/absolutist debate, the nature of spatial relations, the significance of non-Euclidean geometries, the Special and General Theories of Relativity. There is even a chapter on a topic rarely broached by philosophers of time: the relationship between time and consciousness. How do we perceive temporal order and the passage of time? The reference to physics becomes more substantial as the book progresses, and the last five chapters are devoted to relativity, spacetime curvature, dimensionality, and even—possibly a first for a book of this kind—String Theory. Dainton has a knack of building up to a complex position or argument step by step, explaining technical terms, and displaying the motivation for controversial ideas on the way. The book is also full of striking pictures and diagrams that clearly and sometimes wittily illustrate different conceptions of space and time.

Let me pick out just a few ideas and suggestions in the book that I found particularly thought-provoking. It is now nearly a century since it first appeared in print, but J. E. McTaggart’s famous proof of the unreality of time is still a focus of argument in discussions of whether time passes. But it is a notoriously hard argument to formulate in terms that make it both accessible and plausible. McTaggart’s own formulation is neither the clearest nor, to my mind, the most compelling. Dainton’s formulation, as well as being clear, and I think entirely novel, makes the idea of time’s passage immediately puzzling. He calls it ‘the overdetermination problem’. If time flows, then events would appear to occupy ‘A-series’ positions (to use McTaggart’s term): that is, they are first future, then present, then past. This is in addition to their (unchanging) B-series position, such as occurring on 4th July, 1940. Now ordinary change involves having incompatible properties, but contradiction is avoided by their having these properties at different B-series times: the poker is hot at 4pm but cold at 6pm. But, if time passes, then events seem to have incompatible A-series properties (or occupy incompatible A-series positions) at the same B-series time. For if the poker’s being hot at 4 is first present, and then past, it is both the case that the poker’s being hot is present at 4, and past at 4. Is this not a contradiction? It would be harder to find a swifter and more elegant presentation of McTaggart’s paradox than that.

Two possible responses to the paradox suggest themselves: reject the reality of the A-series altogether and conceive of time as something akin to
(but still crucially disanalogous with) space—sometimes referred to as the ‘block universe’ view—or confine reality just to the present moment, a position now generally known as ‘presentism’. (Presentism offers itself as a solution since arguably McTaggart’s puzzle arises from the attempt to describe both present and past/future reality.) Both of these responses are given thorough scrutiny by Dainton. The challenge for defenders of the block universe view is to give an account of time’s (a) actual direction and (b) experienced direction. (Some answers to (a), it should be noted, leave (b) mysterious, such as the explanation of time’s direction in terms of increasing entropy.) It is often taken for granted that the direction of time is not a puzzle for believers in time’s flow, and it is further evidence of Dainton’s perceptiveness that he questions this assumption. Suppose, like C. D. Broad at one time, you think of the future as unreal, and the passage of time as ‘absolute becoming’: reality as a growing block of real events the leading edge of which is formed by present events. What, asks Dainton, determines the difference between absolute becoming, and absolute annihilation, with reality constituted by a shrinking block? All we have, in both cases, is different sizes of the block at different times. So what introduces the asymmetry?

Presentism, early statements of which can be found in Augustine’s *Confessions*, and articulated in recent times by Arthur Prior, has excited a great deal of recent interest. Defences and objections of considerable subtlety are now appearing frequently in print. Dainton provides a welcome guide to the issue. He clearly sets out the different forms of presentism, some of which are decidedly odd. ‘Solipsistic’ presentism, for instance, takes past existence to be illusory. ‘Many worlds’ presentism takes reality to consist of a timelessly existing collection of momentary worlds (one of the stranger responses to McTaggart’s argument). More plausible is ‘dynamic’ presentism, according to which, although reality is restricted to the present moment, each moment is succeeded by another, causally related moment. The difficulty with all these positions, as Dainton explains, is that it seems to be inconsistent with relations extending across time. We want to be able to say that one event comes before another, that one causes another (both of these absolutely crucial for the formulation of dynamic presentism), that something has shifted position in space, that I am taller now than Napoleon was in 1804, etc., etc. But how can these relations obtain if one of the relata (the past) does not exist? Dainton’s own proposal is ingenious. He proposes ‘compound’ presentism, according to which reality is restricted to (at least) two brief and non-simultaneous temporal slices. Whereas, on traditional formulations of presentism, reality is instantaneous, on Dainton’s proposal it is confined to a very small interval. This certainly offers to solve the problem of transtemporal relations. It also enables time to have a direction, since processes within the interval of the real can exhibit (as the contents of an instant cannot) causal and temporal asymmetry. Unfortunately, compound presentism does not offer a way out of McTaggart’s argument, and so forfeits one of the most significant sources of motivation for presentism.

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What of the consequences of the block universe view? These are perhaps harder to discern than one might think. Early on, Dainton asks us to keep two debates separate: the static-dynamic debate (over ‘how time is in and of itself’) and the tensed-tenseless debate (over ‘the terms needed to describe time and its contents’). The discussion of McTaggart aside, Dainton is more concerned with the first of these than with the second. There is very little in the book on the semantics of tensed statements, for example. This perhaps reflects a move in the literature on the metaphysics of time away from semantic issues (can we give tenseless truth-conditions for tensed statements?) and towards more purely ontological issues (are past and future real?). There is a feeling in some quarters, a feeling that perhaps Dainton shares, that the debate over truth-conditions has reached stalemate, and it is time to look at other ways of addressing time’s nature. In addition, some writers have suggested that even if the world can be completely described in purely tenseless terms (i.e. terms that do not pick out any time as past, present or future), it is still possible to conceive of the world as dynamic, the passage of time represented not by events receding into the past but rather reality being temporally more extensive at later times than at earlier times. These ‘tenseless dynamists’, as one might call them, receive some critical scrutiny in this volume.

One neglected route to time’s nature that Dainton explores in a detailed and valuable discussion is experience. If time does not pass in reality, what account can we give of temporal experience, from which the impression of passage arises? Dainton requires any account of temporal experience to accommodate the following facts: (a) the experience of change is as direct as the experience of colour or shape; (b) experience exhibits a phenomenal flow (i.e. it changes continuously). I have no quarrel with the second of these, but the first looks too theoretically charged just to be accepted as a datum. The phenomenology of change certainly suggests that we just see it rather than infer it (as Broad pointed out, there is a difference between seeing the second hand move around a clock face, and seeing that the hour hand has moved), but phenomenology may not be our best guide in these matters. The perception of colour is not all that direct, given the primary/secondary quality distinction, and the construction of colour by the brain on the basis of input from three basic kinds of receptor, each of which responds only to a single colour. Perhaps change is similarly constructed, rather than just directly perceived. Experiments on motion perception suggest exactly this. The simplest model of indirect perception of change holds that each conscious experience is simply of a state of affairs, but this is typically accompanied by a short-term memory of the previous, different state of affairs. Where memory and perception interact, there arises the perception of change, and indeed of the direction of change. A short-term memory of event A impinging on a current perception of B leads to the impression of B’s following A. But Dainton is suspicious of this tempting model. We do, after all, remember things changing, one event’s following another, and the movement of objects. But how can we remember (in the episodic sense)
something we have not directly experienced? Again, this principle seems to me to be questionable. Episodic memories may be reconstructed from stored information, whose contents do not necessarily directly correspond to the reconstruction.

The question ‘is space real?’ is very thoroughly explored from a number of angles in a historically-informed discussion. Space, as Dainton points out, cannot be nothing at all, for then there would be no explanation for the obvious spatial constraints on objects. Why, for example, objects can (apparently, at any rate!) move in only three dimensions. This notion of space as nothing Dainton calls the ‘void’ conception of space. This is fine as a piece of terminology, but I am a little worried by the suggestion that this view was prevalent among the presocratics. We do, undoubtedly, find the notion of a void (of ‘place deprived of body’, as Aristotle puts it) in ancient philosophy, but it tends to be represented as a something with its own properties. Granted, in any case, that space is not a nothing, what kind of something is it? Is it an object in its own right, that could exist independently of its contents? (This is the substantivalist conception, which arguably the presocratic conception of void anticipated.) Is it simply a network of spatial relations between objects? Or is it entirely mind-dependent? The traditional arguments for and against these conceptions are efficiently and clearly presented, and are later revisited in the light of developments in mathematics and physics, especially non-Euclidean geometry and the General Theory of Relativity. The overall moral of the discussion is that the relationist has the resources to meet the various substantivalist challenges, but only by appealing to increasingly outré relations and ad hoc explanations. This is plausible, but one could perhaps question the legitimacy of some of the challenges. For instance, the idea of a ‘non-Euclidean hole’, a limited region of tightly curved space, would be hard to translate into relationist terms in the first place, so it is hardly surprising that the relationist will struggle to explain the behaviour of objects in a thought experiment into which such a hole is introduced.

The book goes well beyond the confines of an introduction. The writing is exceptionally clear, but the complexity and sophistication of the ideas do sometimes pose an obstacle to accessibility. Even Dainton’s sympathetic and painstaking reconstruction did not dispel my bafflement over John Foster’s argument for spatial anti-realism, for example. I also found the later chapters on physics fairly tough going, and I felt that the explicitly philosophical content tended to diminish towards the end. But it is to Dainton’s credit that such an ambitious undertaking should have been so successful. Time and Space is an immensely rich and informative discussion, and should be on all space and time reading lists, both for philosophers and for physicists.

Robin Le Poidevin

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Philosophers need to take ontology seriously, Heil tells us. Not only is the development of a plausible ontology a worthy aim in itself, it can also cast light on issues which would otherwise be left perplexing. To substantiate this claim, he defends four key ontological theses—which I shall focus on here—and shows how they can inform debate on the nature of colour, intentionality and consciousness.

Heil’s main ontological theses are: (1) There are no levels of reality, only levels of description; (2) The object is the fundamental ontological category—property-bearers and properties are abstractions from objects; (3) Properties are tropes—or modes, as Heil prefers to call them; and (4) Properties are both dispositional and qualitative in nature. Throughout the development of these claims, a significant intellectual debt to C. B. Martin is acknowledged.

Though the ‘no-levels’ conception of reality is gestured towards in the work of others—especially Armstrong—Heil is perhaps the first to set it out in so much detail. A ‘levels’ conception, he contends, is borne of the Picture Theory of representation, according to which the nature of reality can be ‘read off’ from linguistic representations of reality. From this we get Principle J: ‘When a predicate truly applies to an object, it does so in virtue of designating a property possessed by that object and by every object to which the predicate truly applies (or would apply).’ (p. 26) Principle J is stronger than the claim that each time the same predicate truly applies, it designates some property; it is the claim that there is some one property designated whenever the predicate is truly applied.

Heil thinks the Picture Theory lurks implicitly in much current thinking. Take, for example, higher-level properties—properties possessed by objects in virtue of their possession of certain properties at a lower level. These are posited by philosophers in a variety of contexts (e.g. psychology, social science, ethics, aesthetics), but why? Answer: Because these philosophers implicitly assume that the same predicate can only apply to distinct objects if they have a property in common, and that if that shared property is not a discernible first-level property, then there must be a shared higher-level property. For example, two particular states with completely different physical properties could nevertheless, it seems, both be instances of pain. Conclusion drawn: that both states instantiate the higher-level property being a pain.

Heil rejects this inference. Two distinct states, with no relevant properties (of any level) in common, can both be pain states. The truthmaker, in each case, is a different property, one to which the predicate ‘being a pain’ on that occasion refers. What leads us to apply the same predicate to both properties? The fact that each state—each instantiation of the property—causes the person to display pain behaviour in certain circumstances. This is not to say that being in pain is a functional
property, or a disjunctive property, or a disjunction of properties. There is no property that is being in pain. There are just lots of truths about pain. It is true, for example, that there are pains. The truthmaker for this will be any state with a physical property which bestows powers that lead it to fall within our pain concept. In this way, the no-level theorist can claim to be realist about pains.

Heil thinks higher-order properties (i.e. properties of properties) may also be unnecessary (p. 126). The truthmakers for claims about ways properties are may be the properties themselves, rather than those properties having certain higher-order properties.

The no-level account has clear benefits. One well-known problem for the levels account is how higher-level properties can be causally relevant (p. 32). We want to say that my being in pain causes me to wince—but it seems that it is my being in physical state P (not identical to the higher-level being in pain) which causes this. On the no-levels account, this problem evaporates. Since there is no separate property of being in pain, only the predicate ‘being in pain’, it can be true that my being in pain caused me to wince. What makes it true is that the bearer of the physical property my pain-predicate picks out on this occasion is causally responsible for my wincing.

Heil does an excellent job of showing how various problems evaporate once this bold and compelling thesis is adopted. One might think some second-level properties will be needed (as they are by Armstrong) to serve as part of the truthmakers for certain higher-level law-statements (e.g. if it is a law that F=ma, and not all mass values are instantiated). But Heil takes properties to be irreducibly dispositional, and so to make true various counterfactuals involving instantiated and uninstantiated properties. If the instantiated values of a higher-level law are connected via these counterfactuals to the law’s uninstantiated values, then they themselves are enough to make true the law-statement.

The next two these—though also well argued for—are less compelling. First, objects are taken to be the basic ontological entities, with property-bearer, and properties inseparable elements of any object. Once God created objects, he didn’t (as a separate act) have to create properties for those objects: one cannot have one without the other (p. 174). Heil argues persuasively that this is an improvement on the ‘substratum’ view of objects. But it is not clear that it improves on Armstrong’s recent view that states of affairs are basic and that objects are abstractions from these.

Consider, for example, the truthmakers for spatiotemporal truths between distinct objects. If ‘a is a metre away from b’ is true, Armstrong can take the truthmaker to be the state of affairs of a being a metre from b. What can the object theorist say? The spatial relation is not an intrinsic property of either a or b. Someone who accepted modes might be tempted to posit a relational mode: the particular relation of a being a metre from b. But that would surely mean (contra an object ontology) that objects and relational modes are both basic ontological entities. Heil could address the problem by construing space-time as a single object, with what we take to
be objects as its modes—and indeed, he mentions this as a possibility on more than one occasion. But perhaps the most plausible option is to take space-time as a complex object, and \( a \) and \( b \) as two of its parts. The truthmaker would then be an intrinsic relational mode. But still, it seems odd to think of space-time as itself an object, rather than something objects are in; and without other considerations in favour of the view, its adoption in response to this truthmaker problem appears *ad hoc*.

Second, properties are taken to be modes. When we say truly that two distinct objects have the ‘same’ property, \( F \), this is a matter of their having something qualitatively similar in common, two *modes*, rather than something numerically identical, one *universal*—just as when I say that you and I are wearing the ‘same’ tie, what I mean is that we are wearing similar (perhaps exactly similar) ties, not that there is one particular tie, \( x \), that we are both wearing. Modes are also non-transferable—they are essential to the particular object which has them (p. 141).

It is hard to ascertain the strength of Heil’s case against universals, and fortunately much of the discussion involving properties does not depend on them being taken as modes. His main reason for preferring modes to immanent universals is that ‘wholly’ seems to mean ‘being present at one place and in no other place (at the same time)’, and that is less than clear how immanent universals can be (as they by definition can be) wholly present in more than one location at the same time. But it is not obvious why Heil should have quite the aversion he does to taking ‘wholly’ as an undefined primitive when characterizing universals (p. 133). He also claims the advocate of universals will probably have to accept brute similarity between *some* properties and so the mode theorist—who takes similarity to be brute between *all* objects and between *all* properties—is not at a disadvantage. But it is not clear why admitting brute similarity sometimes is quite as theoretically damaging as admitting it at all times; why, in other words, only *types* of brute facts should be counted, and not tokens.

That said, the dispute between a universals/state of affairs theorist and the tropes/object theorist is probably fairly evenly matched. It is Heil’s last thesis—that properties have a dual nature (the ‘Identity Theory’, as he puts it)—which I find problematic.

Heil’s contention is this: all properties, from those of complex objects to those of the most fundamental particles, are both qualitative (Heil prefers this term to ‘categorical’) and dispositional (p. 114). Take the Necker Cube. We needn’t think that this has distinct properties to which we attend when we discern its dispositionality or its qualitativity. Each aspect can be taken as simply ‘the selfsame property differently considered’ (p. 112). And given the irreducible dispositionality, the laws a property is part of are essential to it. Laws are truths derived from the nature of properties; therefore in any possible world containing objects with the same (i.e. exactly similar) properties, the same laws concerning those properties will hold.

There seem to be two problems with this thesis.

First, it is introduced via the consideration and rejection, in chapter 10,
of an alternative account of properties—that they are pure powers. But the position described is one in which pure powers bestow powers upon an object but are nothing in themselves (p. 98, 109). If this were the only way to construe pure powers, then he would be right to criticize the position on the grounds that ‘a non-qualitative world is a world devoid of concrete objects’ (p. 102) and ‘a rejection of intrinsic qualities looks like a rejection of a substance-attribute model of objects.’ (p. 108) But it is certainly not the only way to construe powers. It is especially not the way of construing powers that a realist about properties should find appealing. Powers should be taken as something in themselves—entities which ensure that their bearers behave in certain ways in certain circumstances. Molnar takes such a view in his recent book Powers (2003). And taking powers in this way, there is no reason to think it leads to either a world devoid of objects or a rejection of the substance-attribute model of objects. With this account of powers on the table, Heil’s claim that the Identity Theory is ‘the simplest account imaginable … of the connection between an object’s powers and its qualities’ (p. 117) is questionable.

The second problem concerns the idea that properties are ‘both’ dispositional and qualitative. It seems more accurate to say they are neither—with the Necker Cube that Heil takes as his model, one is tempted to conclude that the cube drawing is of neither perspective in itself. But then if a property, in itself, is not dispositional, why does it lead its bearer to behave in certain ways in certain circumstances? The advocate of Pure Powers can answer this: properties are dispositional in nature—dispositionality resides with the property. Someone taking all properties to be qualitative can also answer the question: relations of nomic necessitation link the property with others. The Identity Theorist, however, is unable to answer either way without their position collapsing into it, and it’s unclear what else they could do apart from take as inexplicable the connection between any property of an object and that object’s behaviour. This strikes me as the wrong place to accept brute fact.

There is no doubt, however, that with this book Heil both demonstrates the fundamental importance of ontological enquiry and gives us a shining example of how it should be conducted. It is packed with interesting arguments and insightful discussion, and presented in a wonderfully clear and user-friendly way. Whether you are a general reader wanting an introduction to ontology, or a well-read metaphysician seeking new ideas, it is to be recommended.

Simon Bostock