Minima

0

Zeroth – Time intervals are numbered like this: The first begins at 0 and ends at 1, and the whole epoch is numbered 0. Your first year of life, for example, started when you were born, ended on your first birthday, and throughout that year your age was 0. The first hour of the day is from midnight (0) to 1. Similarly, the *N*th epoch begins at time *N-1* and ends at time *N*. In your second year, you were 1, and the years of the twentieth century were all numbered in the nineteen hundreds[1].

Time isn't the only thing that can be numbered from zero. Other intervals on a continuum, like kilometers on the Trans-Canada Highway, can be counted in the same way. In a computer program that manipulates a contiguous array of numbers in computer memory, the first element has no offset from the start of the array so its index is 0. The second element is element 1, and so on. Unsurprisingly, computer scientists are pioneers in numbering their textbook chapters from zero. For what are chapters and sections but intervals of text between delimiters? The problem is, once something has been labelled "*N*", it's difficult not to call it the "*N*th". Indeed, programmers often call the element at the start of an array the *zeroth*, just as this section is labelled *0* and I call it the *Zeroth*. But it isn't. It's the *first* section, lying, as first sections should, between 0 and 1. Numbering from zero is all very well, but ordinary mortals map cardinal numbers (one, two, three) to ordinal numbers (first, second, third) in a way that leaves no room for "zeroth". You will rarely hear a computer scientist talk about the "first" element of an array, because what she means (if she's consistent) is the element that is offset 1 from the beginning of the array, whereas what you and I mean is the element right at the beginning. She realizes this, or at least is vaguely discomforted about what "first" means, now she's used "zeroth". But she should bite the bullet and call the second thing "first", the third thing "second", and so on. Her way is better, because our way is confusing. For us, the year 3258 is in the 4th millenium, the 33rd century and the 3258th year[2]. Who knows how often a student essay on thirteenth century philosophy has been jeopardized or delayed by reading twelfth not thirteenth for "1225-1274" (Thomas Aquinas)? And according to our numbering scheme an "eleventh hour rescue" isn't the late event we think it is: it happens between 10 and 11 o'clock.

The problem that we're stuck with is the late invention of zero. It came along in time to save mathematics, but not before ordinal numbers had been derived from the wrong

---

[1] Similarly the very first year of the calendar should have started at 0 and finished at 1. It didn't – it started at 1 – and that's why there's so much arguing about when the twentieth century and the second millenium finish. But it should have started at zero so everything would be nice and consistent.

[2] Because years are counted from 1 (see footnote 1).

cardinal numbers. If only we had called the year from 0 to 1 the zeroth, the year from 1 to 2 the first, and so on, we'd have the easy and consistent naming system that would put 3258 in the third millenium and the 32nd century. We'd have to remember that our "first" child was the one that came after we'd got one and brought us up to two, but this is just a reassignment of signs to things signified that would make everything much more consistent. Unfortunately "first", "second" and all the rest of the ordinal numbers are irretrievably wrongly assigned, leaving us with a maladaptive legacy almost as inconvenient as the decimal system, the QWERTY keyboard and VHS video recorders.

The poor mapping from cardinal to ordinal numbers is a mistake most people don't even know about, even though it inconveniences them. Yet everyone would be a tiny bit better off if it were fixed. We'd "merely" be replacing one linguistic construct with another, but the new one would save us thinking time. Such a change is not likely to happen though: its benefit isn't sufficient to overcome the inertia of existing practice. What's more, as mistakes go, it's fairly inconsequential. Weighing all the pros and cons, I think we'd be happy to say that we're best off leaving things as they are. Thus a first example – or, for those not convinced, a zeroth example – of the best answer being the wrong one.

1

Philosophy – A N Whitehead famously summed up Western Philosophy as "footnotes to Plato". He was wrong. Until recently, philosophy included natural science in which Plato was so mistaken that his only contemporary value is to offer bizarre examples of theory overstepping evidence. Aristotle's science was even kookier, but only because he attempted more. This is easy to say in retrospect, because we see science in its cumulative aspect – that is, as progress. We know that aerofoils produce lift, fire consumes oxygen, blood flows around the body, because these ideas have been tested and they work. Alternatives have been thought about, tried, and don't work. Science has embraced the empiricist, sceptical programme that Aristotle himself saw dimly, the Enlightenment illumined, and modern writers like Popper and Einstein codified as falsifiable hypothesis and test[3]. Science has been so prolific as a method for gaining knowledge that it has detached from philosophy, split into subdisciplines and, in the academic context, formed a "faculty". In the greatest of ironies, philosophy now finds its home in a different faculty! Indeed, it is only one "discipline" in that faculty. Vestiges of its glory – like "Doctors of Philosophy" – remain, yet the pursuit of knowledge is no longer part of philosophy; philosophy is but a facet of the pursuit of knowledge. How is the mighty fallen!

My Journal, though, may be seen as a set of philosophical footnotes. Not to Plato, of whom I've read much in the Humanities programme, and who is always handy for a quotation. Not even to Aristotle, who is easy to love even when he writes baloney. This, my Journal, can be summed up as "footnotes to the Scottish Enlightenment", a rather more restricted point of view than Western Philosophy as a whole, and one that betrays

---

[3] Of course, science is done by people in cultures and cliques behaving socially. Later I'll consider how this affects scientific claims.

my prejudices more obviously than Whitehead betrayed his. It's worth saying though, because I've come by those prejudices, or been able to label them, through the Humanities programme. I don't believe we read any Hume or Smith during the formal courses (except indirectly through Baier's *Hume, the women's moral theorist?*), but the virtue of having a tutor is being pointed to the right sources. Phil Rose pointed me to David Hume to help me understand Rorty. I've despaired of getting a line on Rorty – he's too slippery a fish[4], but Hume makes sense. So does Adam Smith, whom I encountered via a *Hume Studies* article analysing their shared lines of thought about moral sentiment.

The title page of Hume's most famous work reads: "A Treatise of Human Nature: Being An Attempt to introduce the experimental Method of Reasoning into Moral Subjects". The extent of my sympathy with this attempt is illustrated in almost every paper included in this journal. Like Hume, I'm a thorough-going empiricist. Like him and like Smith, I believe morality rests on emotion and imagination rather than reason. Having read little by either author before beginning the Humanities programme, I view my encounter with them as one of its most valuable outcomes.

Hume's influence is widely recognized. His fame as the prod that jolted Kant out of lethargy marks him as an irritant. Isaiah Berlin wrote of him: "No man has influenced the history of philosophy to a deeper and more disturbing degree." But he is disturbing only of theoretical complacency, and he irritates by sceptism, not destructiveness or superiority. He provides an analysis of the human condition, based on observation, experiment and tolerance, that argues for liberalism just as cogently as the deductions of Locke and Mill.

As for Adam Smith, when I formerly read a little of *The Wealth of Nations*, I filtered it through jaundiced eyes, mistrusting its status as an icon of capitalism. But having now read *The Theory of Moral Sentiments* and then turned back to *The Wealth of Nations*, I can understand why Amartya Sen, for example, looks to Smith as the progenitor of ethical economic theory[5]. Smith has the twin virtues of having his heart in the right place and being open to the corrections of evidence. These are always welcome traits in a theorist, and I, for one, see them more evidently in Smith than in Ricardo or Marx. Of course, I speak as a non-economist: my opinions are provisional, but more informed than they used to be.

So I contextualize my papers by form as footnotes, and by content as Humean and Smithian. But what are they really?

In this opening chapter of my journal, I move from subject to subject, and from voice to voice to introduce the various papers revised and collected as the other chapters. This chapter is also a response to Adorno's *Minima Moralia*, the central text of the final Humanities course. Adorno moved freely between ideas, to the extent that any concept of "theme" for *Minima Moralia* emerges *gestalt*-like in the reader's subconscious. Though

---

[4] My first Humanities essay, a critique of Rorty's *Contingency, Irony and Solidarity* is not included here, for just this reason. But see Section 9.

[5] See Sen's *Development as Freedom*, Alfred Knopf, New York, 1999.

I've let my Enlightenment predisposition out of the bag, my hope in so doing is to trigger reactions in my readers to put you in a particular stance relative to the rest of what I have to say. I don't just want to show you things; I want you to react to them. Adorno himself does this, leading us to underrate his subtlety. I do not have his finesse, but I do have themes, and I hope these will emerge in a kind of dialectic between my advertised prejudices and your own views. The themes do indeed link back to the insights of the Scottish Enlightenment, but they also link forward to an empiricist view of the humanities in the twenty-first century.

2

Journal – But can this really be dialectic? You and me in a Socratic spiral, chasing each other round tightening circles, swirling up to the infinitesimal point of Platonic essence? It's hard to believe, really. You, after all, are just scratched marks or squirted inkdrops or glowing phosphors forming words on my page. Not that I underestimate you, but, after all, I'm the writer, which does put me on a different plane, don't you think? You are … a product. *My* product. The product of language too, I admit. And perhaps so am I. When I write, I change, just as I do when I read. You change too, but only at my will (having none of your own). So what's the point of asking you questions? Do I expect some kind of answer?! (That was just rhetorical, by the way.) Words, words, words, you talk without thinking. So I'll close our conversation. I convert this page into a single paragraph. Off with its head. So much for Book-keeping.

3

Words – But you, the human being who reads me now, do *you* suppose this is dialectic? Me, I'm not sure. Maybe, because I'm not really here, or rather, not really there, you're in dialectic with my words but not with me. They are *my* words, because they're just objects, whereas you (the reader) and I are subjects. (I was just mentioning that to them.) But they connect us. It's because of them that you and I share a present subjectivity with respect to something (them). It is through them that you know I think you are a subject. Yet, you may counter, my previous paragraph did not treat you as a subject. It excluded you, jabbering on as if you weren't even there. That was my journal getting the better of me. And even now, you see, I can't quite let it go. Those words labelled *Journal* are still there, rude and insolent. But not thoughtless. I planned them. Or the words and I planned them together – they just pushed their way up without my intention. I say what I mean, but I don't know what I mean until I say it.

Saying "it" is being sophisticated. R. M Hare comments in *Freedom and Reason* that deciding what sort of statement would constitute a misuse of the word "it" is a very difficult question (p 10). That's because "it" refers to something rather than describing it. I wonder, does the "it" at the end of the previous paragraph refer to anything? Perhaps it's a misuse (or at best a tautology). But agonizing over a miniscule word can't be worth it.

I never liked my paragraphs to drop an orphan word on their last line, especially not a tiny one. When it happened, I used to remedy their ugliness by trawling back through the paragraph, looking for loose letters to cut, and pruning to fit. But that meant the accidents of line length, font size and proportion determined which words were out and which were in.

So I learned that you mustn't give your words up to get out of accidents. Words matter, and they're fragile. However much they scream "Don't touch", they can't defend themselves. Look at what happens when you go for the vowels. I wrote a paper called "A Doubtful Utopia". With its vowels down it's just: "Dbtfl Tp". Poor vowelless title.

Few words are new, though "vowelless" may be. We string old words into patterns to say things personal and different. Our phrases are sometimes hackneyed; whole sentences get recycled; even a paragraph can be shop-soiled. But through the welter of words an idea or two might be newly made.

Words focus percepts into concepts. Though culture and society and genetics and physicality constrain our thoughts, language is their medium. It's transparent, and when we exchange ideas it seems like we show and see them through clear plate glass. But when we look sideways at language we sense its complicated, intricate optics, with thoughts bouncing between linguistic prisms, mirrors and lenses. We wonder at how words diffract and interfere, multiplying meanings, at how the turning of a reasoned phrase catches a glint of emotion, at how pleas masquerade as imperatives and cries as jokes. The colour, subtlety, and, above all, the complexity, of language mean that questions like "Do you suppose this is dialectic?" have many answers. I tried to explore this multiplicity in *Overhearing* [Language II paper, Winter 1998, Chapter 2 here], an imagined conversation on the nature of rhetoric and dialectic. My characters reached no conclusion, but I hoped the reader would, through overhearing their dialectic exchange.

4

Judgement – It is not surprising that at the end of the Humanities programme I return to language (its starting point) to admit that what I thought I was doing was not what I did. I thought I was refracting the programme into a study of applied ethics. But the ethical has become the epistemological. Where I saw lines of duty, utility and virtue, and tried to trace their patterns, I now see a linguistic net. The patterns make a different kind of sense now. The difficulties are magnified, but that makes them easier to see.

Take, for example, judgement, a word we often use in a moral or aesthetic context. When we make a judgement we either make a *classification* or a *comparison*. A classification says that a thing *A is* another thing *B*. A comparison says that a thing *A* can be put into a relation (called *C*) with some other thing *D*. *A* is the thing about which we are making a judgement. *B* is a set description, which we can think of as a property. It is therefore a different type of thing to *A*. *C* is also a property, but one by which things are ordered

rather than divided, so it is a different type of thing to B. D is another thing of the same type as A, so far as it can be related via C to A. D may be a measurement norm for C. The statement "Red is a colour" is a classification with red corresponding to A and colour corresponding to B. In "This apple is red", the apple is A, and red now corresponds to B. In "This apple is redder than that apple", this apple is A, that apple is D, but redness is now C. In these three statements red has acted as an object for judgement, a classification property (type B), and a comparison property (type C). That an object for judgement can also be a property of other objects is unproblematic. But what about properties that can function as type B or type C? We can call such properties *ambiguous*. I argue that any ambiguous property, because it is capable of functioning as a comparison property, is underdetermined when used as a classification property. (To give a hint of where all this is going, I will point out, parenthetically, that "good" is such a property. Also, I will later argue that the properties used to judge other properties are ambiguous. This is a disquieting result.) In the above example, the possibility of comparison in terms of redness means the statement "This apple is red" is underdetermined, because it does not say how, when we lay down apples is order of redness, we draw the line between the "red" ones and the "not red" ones. We might argue that "redness" is an unambiguous property of type C, and that "red" is a derived property of type B that depends on both redness and a threshold E. But now we have to consider how we *know* that "red" is of this type, rather than being a pure classification independent of a comparison. Perhaps, after all, "red" has some independence of "redness". This is a difficult question.

Without loss of generality, we can consider all classifications to be binary (classification into many classes being done by successive binary subdivision). A particularly important type of binary classification is to assert that something is correct or incorrect. Correctness admits no comparisons, for nothing can be correcter than merely correct. "Correct" connotes truth in the logical sense, with no excluded middle. Some pairs of statements are mutually exclusive – if we hold one we will reject the other; if one is right the other is wrong. Let us call such statement pairs, *binary reflexive*.

When we make a comparison, we assume that two things are commensurate. To assert that something is superior to another is to say that a discriminating property can and has been measured and the measurement difference is in favour of the superior. To ask which of two statements is closer to the truth or more coherent is to say that the two are commensurate and that truth or coherence is a variable and measurable property of the statements. The language trap that hides variability inside superficially discrete classes like truth and coherence is established through common usage. "Truer" and "truest" are living terms: they mean something, and so undermine the role of truth as a binary-valued quality. Truth is an ambiguous property. Indeed, on reflection, we may admit that we often allow the idea of "more correct". In this section, I will avoid use of "true" because of its ambiguity; I will accept that coherence has degrees, so things can be compared according to it; but I will insist that "correct" is a binary classification, rejecting "more correct" and "less correct".

Consider the statements "A is better than B" and "B is better than A". These statements are binary reflexive provided "better" has been defined to admit no middle case. "Better"

satisfies the requirement if it refers to a single comparison of measurements on a discriminating property. Then we can say that one of the statements is correct – that is, we can classify the result of a comparison. If better is *not* well defined, we may not be able to say which statement is correct, but we may be able to say which is better. That is, we may say, " 'A is better than B' is better than 'B is better than A'" if the higher-level "better" is well defined.

It is often open to us to choose whether a judgement is to be a classification or a comparison. Consider the statements "Good precedes right" and "Right precedes good". We may ask either (a) which statement is "correct", or (b) which statement is "closer to the truth" (or, perhaps, "more coherent"). Question (a) asks for a classification, (b) asks for a comparison. The choice between the two questions itself demands judgement, and we may ask whether *this* choice is classification or comparison: is (a) (or (b)) the *correct* question to ask, or is one merely *better* than the other? (I use "merely" not to undermine the possibility of the correct approach being a comparison, but to emphasize the difference between the two cases.)

Our choice of (a) or (b) is bound up both with our understanding of the terms in the statement, and with the answers we are likely to get. If right (or justice) is a binary quality, it will be favoured if we ask questions that are themselves binary (like which is correct); if good is a continuous quality (which it appears to be, having a comparative and a superlative in better and best), then it will be favoured by a question that assumes commensurability.

The term "precede" in this example may help in deciding which question to ask. As with truth and coherence, precedence looks like a binary relationship. A precedes B excludes B precedes A. But consider the statements, "A monarch precedes her mother", and "A monarch's mother precedes the monarch". "Precede" is ambiguous. Let us therefore clarify that when we are talking about royal status, "precedes" means "has higher rank in a monarchy than", but when we are talking about time, "precedes" means "happens before". Are we now willing to say it is absolutely correct that a monarch precedes her mother according to the first meaning? Are there no imaginable contingent circumstances that would make this incorrect? For example, what if the mother were herself a monarch? Or perhaps the constitution is not all we think it is; perhaps there is the possibility of change that undermines the statement in its time-independent form. So again we have to augment our statements with clarifications, provisos and limitations. This could go on for a long time – perhaps to the point of tautology. We believe that with the complete and full definition of "precede" the statements would be binary reflexive, yet finding that definition is slippery. We are gradually pushed towards a judgement of the comparative kind – deciding on a definition that is better than others, though perhaps not completely correct. Thus, in practice, a pair of statements we want to make binary reflexive (because we feel we ought to be able to make a classification judgement on them) becomes seeded with a comparison judgement.

In the relationship between "Right precedes good" and "Good precedes right", the burden that "precedes" has to carry is greater. What does it mean? If we believe that right

precedes good, we also believe that "Right precedes good" is correct and "Good precedes right" is incorrect, and, moreover, that there is a definition of "precedes" that makes the statements binary reflexive and is fully consistent with the correct answer. This definition may be tautological, but that would at least help to clarify what we mean by Right and Good. On the other hand, if we believe that good precedes right, we believe that "Good precedes right" is a *better* statement of the state of things than "Right precedes good" and that this accords more coherently with a definition of "precedes" that itself rests on judgements about goodness. Thus on the one side our presuppositions, our reasons and our conclusions are all classifications, while on the other side they are all comparisons.

We're left with a kind of self-referential paradox: Is the choice between a classification judgement and a comparison judgement, a classification judgement or a comparison judgement? This paradox stymies us when we try to synthesize moral or aesthetic views. In ethics, deontologists are more concerned with classification judgements, such as the nature of a person, a duty, or a rule, while consequentialists are concerned with comparison judgements, such as maximizing utility. The two views are irreconcilable because we cannot decide which is correct/better without first deciding which of "correct" or "better" is the correct/better basis on which to make the decision.

Much of the later part of this journal is concerned with ethical systems and the decisions they yield. The classification/comparison paradox prevents us making much headway in deducing which systems are correct or better. Instead we must turn to empirical study, through actual experiments and thought experiments, to understand the nature of the ethical principles and choices that various systems offer.

But first we will see how classification and comparison interact in our judgements of art and beauty.

5

Art – The Judgement of Paris [Aesthetics paper, Spring 1999, Chapter 3 here] is an essay on the relationship between human beauty and artistic representation. It includes discussion of myth, morals, sexuality and power. But it also provides a demonstration of the tension between comparison judgements and classification judgements. Paris is asked to decide which of three goddesses is the most beautiful – a comparison judgement. My paper looks at several literary and visual depictions of this event. There is no getting away from the idea the goddesses are commensurate: Hera might be a brunette, Athena a redhead and Aphrodite a blonde, but they are all beautiful and one more so than the others. Even if Paris tried to hedge his bets: "Well…Aphrodite's eyes are most beautiful, whereas Athena's chin is most beautiful", or even "Hera has an inner beauty of character", there is one apple to give and in the end classifications (eye-beauty, chin-beauty, etc.) must give way to the ultimate comparison. But what makes renderings of this myth artistic? As I explain when discussing Watteau, it is not that the artist achieves maximum beauty – or maximum *anything* – in their representation, it is that they skillfully and subtly reorient the viewer's attitude towards the subject matter. They

realign perceptions and categories in the viewer's mind; in other words, they evoke a response at the level of a classification judgement. It is this manipulation of categories that counts aesthetically. And yet, it must be done well – carefully, skillfully – else it becomes mere cleverness. Art's manipulation of categories means that two great works are truly incommensurate – they are separated by a classification judgement, yet the conventions and meanings that persist allow us to make the comparative judgement that both are great, because they both greatly (skillfully, beautifully, artfully) embody those enduring conventions and meanings.

6

Beauty – Beauty may be in the eye of the beholder, but it is a comparison judgement, and, as I discuss in *The Judgement of Paris*, there is evidence that many of us think alike about human beauty. What then of the idea that everyone is beautiful in their own way? In the terms I've been using, this would amount to saying that beauty is really a matter of making a classification judgement about the kind of beauty being observed. I include a short paper on physiognomy, inspired by Montaigne's [*On Physiognomy*, Short submission during Biography course, Winter 1999, Chapter 4 here]. It gives my reaction to the use of facial looks to make classification judgements.

Physiognomy is a kind of folk psychology. It's relatively benign, considering the damage that has been done through the ages by other kinds of speculative psychology. Philosophy, theology, literature have all had things to say about the mind and its reasons, often without evidence. But most disturbing have been the speculations of those who claimed to be able to repair minds, using insights based on their own introversions or unscientific generalization from isolated cases. One of the great intellectual advances of the twentieth century has been the transformation of psychology into an empirical science. Despite the poverty of behaviourism's theoretical framework, it provided the sceptical, systematic framework for rigorous experimental psychology. Today the frontiers of understanding about human nature, its nurture and conditioning, are in experimental psychology. The Humanities must watch these developments carefully, for they will map out the future contours of knowledge, culture, art and ethics.

7

Theories – What sort of theories are worth having?

Adam entered the house, flipped a switch, and nothing happened. He flipped another switch and that too had no effect. Grabbing a flashlight, he headed for the basement, trying switches on the way. He checked the breaker panel – everything OK. He shrugged. Then he heard the television. Hooding the pale beam of the flashlight, Adam crept back up the stairs to the den. And there on the sofa was the Lightbulb Fairy. "A dime a bulb," she smiled coyly.

Actions are driven by theories. Adam's actions embody a sequence of theories: Maybe the bulb has blown…unlikely for two to go at the same time… perhaps a power surge?… a tripped breaker?…no… an outage?… At this point mundane theories give way to uncertainty. Perhaps Adam's stealthy behaviour is more instinctive than theory-driven, but we all have theories about investigating strange circumstances, and his cautiousness is theoretically sound. But both theory and instinct are upended when the "truth" comes out.

We expect characters in narratives to behave a certain way, because we expect them, like us, to be full-time theorizers. We are constantly interpreting our perceptions as patterns, forming them into structures, making inferences about causes and consequences. And, when it counts, which means during our everyday lives, we take an empirical approach to our theories. We test them with experiments and revise them accordingly. Similarly, we expect characters in stories to act according to their theories. Actors think the thoughts of their characters to give their speeches and actions the authenticity of being theory-motivated. Writers provide theories for their characters (knowing their thought patterns and histories), though they often tell only the actions that result. But we readers also expect narrative moments where theories are negated, overturned, and transcended. We enjoy these moments, because they brim with uncertainty and tension, and they remind us of the complexity of life and art.

Barry entered the house, flipped a switch, and nothing happened. Quietly, he reached for the flashlight and pointed it at the fixture. Through the thin shade he saw the grey form of the single lifeless bulb, but no fairy. He sighed sadly.

Although we theorize all the time, our theories are often wrong. Barry comes across the same circumstances as Adam but with different theories. He was expecting, or at least hoping for, a visit from the Lightbulb Fairy. Perhaps he'd been talking to Adam. So Barry starts with an unusual theory, but he tests it and now must move on to alternatives. Presumably he will now follow a theory sequence like Adam's.

Being visited by a Lightbulb Fairy is an unusual occurrence. Even if both Adam and Barry believed in the Fairy at the beginning of their stories, Adam's ordering of theories is more realistic than Barry's. Barry might be more of an optimist, but he's also likely to be disappointed more often.

In general people are pretty good with theories. That's why challenges to the intuitive have an uphill battle. Naïve theories of reasoning, physics, psychology help us interpret our world, so we're protective of them when their weaknesses are exposed. Intuitions about meanings are increasingly treasured as they become more universal and profound. Through communication, humans collectively develop "high order" folk theories about reasons, meanings and causes. In the end, though, many of our intuitions and our folk beliefs are wrong, and we're better off trying to understand their weaknesses than hiding them from the demands of coherence.

Two of science's most famous challenges to folk theories are the Copernican model of the solar system and Darwinian evolution. These are institutionalized theories now, and deeply embedded in modern thinking. Science allows that they can be modified (and, of course, Copernicus's sun-centric universe has been modified), but they are theories that have withstood many tests, and their fame is deserved, for each displaced an earlier folk theory of great significance. They each devalued our place in the universe, undermining beliefs that link human existence to human importance.

In writing *The Timoshenka Document* [History I course, Fall 1998, Chapter 5 here], I explored, through speculative fiction, the implication of these cornerstone scientific theories being overturned. Theory formation is interlaced with history, and I was intrigued to know how modern and postmodern secular culture would reshape to cope with the possibility that we are, after all, the centre of the universe.

Of course, it is extremely unlikely that Copernican or Darwinian theory would be overturned in such a way as to put us right back where we started. Much more likely is that these theories will be refined or superseded by something that matches their explanatory power and then exceeds it. Science is concerned with matching theories to evidence, and though it contains many false starts, wrong turns, and widely-held misconceptions, in the end it makes progress by insisting on empirical testing. The answer to the question "What sort of theories are worth having?" is "Theories that fit the facts". The scientific method is constantly pitting theories against facts, and those that survive are the best we have to go on.

Here again there is a contrast between "best" and "right". Our naïve theory-making – like Adam's and Barry's above – implicitly assumes that there is a right answer. While there may be many wrong answers, science – or, more accurately, empiricism – doesn't assume that the right answer has ever been found, merely the current answer is the best so far, according to the facts. Empiricism encourages scepticism and seeking out new facts that will put strain on existing theories. To seek for refutations is not our natural drive: we look instead for confirmation of our theories. But the absolutism of "right" gives way in science to the relativism of "good, better and best". As Hume puts it:

> We must in every reasoning form a new judgment, as a check or control on our first judgment or belief; and must enlarge our view to comprehend a kind of history of all the instances, wherein our understanding has deceived us, compared with those, wherein its testimony was just and true. ..By this means all knowledge degenerates into probability; and this probability is greater or less, according to our experience of the veracity or deceitfulness of our understanding, and according to the simplicity or intricacy of the question.[6]

---

[6] D Hume, *A Treatise of Human Nature*, Book 1, Part 4, Section 1.

8

Rights, Right and Good

One folk theory that has considerable momentum is that "Rights" have something to do with "Right". Where does this belief come from and is it a good thing? *Rights, morals and history* [History paper, Fall 1999, Chapter 6 here] examines this question. It also serves as the first of a series of papers, included as the later chapters of this journal, dealing with ethics. Lurking behind all of these is the classification/comparison paradox that makes different ethical systems immiscible. In *Rights, Morals and History*, I conclude that rights-talk has indeed been a good thing. At the same time, I disavow that a rights formulation for ethics is correct. So the mode of judgement I advocate gives "good" precedence over "right". This puts me beyond the Kantian pale. In a multiplied irony, my judgement of the goodness of deontological motivation probably puts me beyond the teleological pale too. But that's what happens when you discover a paradox and don't want to spoil it by coming down on one side or the other.

9

Ethics –Utilitarians are optimizers and deontologists are satisficers[7]. If choosing between them puts us into deductive infinite regression, as I argued in section 4, how can we develop an ethical system for living? The empiricist has an answer: When deduction fails, we must do experiments. *The Moral Prisoner* [Technology paper, winter 1999, Chapter 7 here] applies six ethical systems to a famous game theoretic problem in a kind of controlled thought experiment. Sometimes the responses are surprisingly similar, sometimes vitally different. *Luck, Duty and Benevolence* [Ethics paper, summer 1998, Chapter 8 here] moves out of the thought laboratory to consider the real problem of the responsibility of the lucky rich to the unlucky poor. Again, alternative ethical positions lead to different responses and actions. It was particularly through this latter paper, that I arrived at the moral position I described in section 1 as Humean and Smithian. That position nods at duty and consequences, but it's really about sentiment and imagination. The central idea is not an imperative or an ends assessment but the question "What if it were me?"[8]. The upshot is a pragmatic, imaginative, comparative evaluation of alternatives, illustrated in this paraphrase of part of Chapter 6:

---

[7] This statement does not mean that satisficing deontology is less demanding than optimizing utilitarianism. Rather it re-emphasizes the earlier point that deontologists are concerned with classifications (e.g. between persons and not-persons), and the implications of class membership (being a person) irrespective of other criteria (e.g. intelligence, status, capacity for happiness), whereas utilitarians are concerned with comparison judgements on global criteria like pleasure and pain.

[8] Walter Okshevsky pointed out that this begs the question of why one should feel obligated to consider "What if it were me?" in the first place. A proper response to this would need a footnote longer than the rest of the paper. Which makes it tempting just to give a Rorty-esque shrug and say, "Why not?". But, as the rest of this section shows, I'm distrustful of dialectic insouciance. Perhaps I can respond, "Doesn't the idea of 'feel obligated' beg a question too?" This kind of rhetoric doesn't get us much further, but it does have the virtue of limiting footnote length.

> Coming from a sentimentalist point of view, I do not have a vested interest in whether a higher-order theory about deal-making, duty, utility or virtue is validated or vindicated. It seems to me, by observation, that we must recognize that the moral vocabulary of politics, law and social action is rights-oriented. We can ask, empirically, whether this is a good thing.
>
> But without a higher-order theory, what in the world is "good"? Empirical sentimentalists see that human psychology is oriented towards certain values, and that human thinking about morality (e.g. by Aristotle, Kant and Bentham) may start from different premises, but often comes to similar conclusions. So it is consistent to call human cruelty bad, even without a complete definition of "bad". Cruelty is not bad just because I say it is, *a la* Moore, but because there seems to be a lot of empirical evidence – including the conclusions of rival ethicists - that it is.

Calling upon moral imagination isn't truly establishing a system; it's more inviting us to recognize our solidarity with others. Which returns us to Rorty and his *Contingency, Irony and Solidarity*.

Rorty is a postmodernist, but a much more upbeat one than his continental predecessors and contemporaries. He thinks we should celebrate the disappearance of notions of "knowledge" and "objectivity" by inventing our own private ethics of taste. Romantically self-creating, we can playfully ironize about moral "truth" and, indeed, about our own ideas. What we are left with is a kind of sentimental solidarity with each other.

But irony is a two-edged sword. On the one hand its vigour is a validation of the liberal, skeptical society that allows it to flourish; it is a powerful mechanism for undermining absolutist ideas, it is a leveller and a sign of democracy and education. On the other hand, it has never contained an epidemic, increased the yield of a rice field, or caught a rapist. Rorty's playful postmodernism (together with much of the deadly earnest postmodernism of Lyotard and Derrida) is an academic luxury that leaves little room to *do* anything that solidarity might indicate. We should, indeed, treat irony itself with scepticism, because so often it disguises dangerous irrationality in clever wit.

Instead we need to put rationality in its proper place relative to morality. First it has an instrumental role to play in achieving ethical ends. Those who deny this effectively deny the instrumentality of rationality itself, and presumably are already lining up for their lobotomies. Second, rationality is the only way to *explain* how sentiment fits at the centre of moral action. In other words, we should not be afraid of treating sympathy and imagination as empirical phenomena, and rationally examining how they link to ethics. Such an effort will give us a genuine moral theory.

Postmodernism labels a diverse web of ideas and ways of thinking. Critique is difficult because core unbeliefs are elusive. But I suggest that, underneath it all, many postmodernists are disillusioned deontologists. Once they believed in classification judgements ("Right precedes good", for example), but now they've recognized that for

most important things it's impossible to say what's right. So they conclude there is no right and wrong – just constructions. They offer up alternative constructions – or "theories" – and proclaim that no classification judgement can rule between them. My argument is that many important questions do not call for classifications but comparisons. We may never be sure which are which, but even if right and wrong are abolished, only classification judgements are undermined. We can still do comparisons. We can still say "This is better than that", empirically and imaginatively.

10

Politics – Things happen objectively, but they don't happen for an ultimate purpose. Morals are invented, not discovered. Some are better than others, where "better" relates to something – good – that also is invented. If we can understand more of what makes us value things (like pleasure over pain and autonomy over slavery), then we can improve our idea of the good to take more account of the way nature's made us. We need to study, research and understand to know ourselves. This intellectual pursuit depends on the generation and evaluation of evidence.

The sorts of data that are important in understanding ourselves so that we may better design morality are psychological, historical and political.

Experimental psychology has many camps competing for insight. Social, cognitive, and developmental psychologists are devising experiments to challenge each other's presuppositions (and sometimes, in humble moments, their own). Some of these experiments begin to explain why we think and behave as we do, and, in particular, why we value what we value. For example, regardless of nature and nurture, most humans can be persuaded to cruelty by an authority figure[9]. Machiavelli's advice seems to work[10]. Meanwhile anthropologists and historians provide fact-based comparisons of societies at different times and places. For example, in every case where there is adequate anthropological and archeological evidence, the homicide rates in hunter-gatherer societies was/is roughly thirty times that of contemporary America[11]. Probably Hobbes was right and Rousseau was wrong. Average life expectancy and rates of completion of primary education are dropping in Africa and rising in the rest of the world[12]. Why? Amid the clamour of opposing views, it's reassuring to find some, such as Sen in *Development as Freedom*, that argue in terms of testability and the reliability of evidence.

---

[9] See Lee Ross, Richard Nisbett, *The Person and the Situation*, Temple University Press, Philadelphia, 1991 for many demonstrations of this in the experiments of social psychology.

[10] "Men are ungrateful, fickle, simulators and decievers, avoiders of danger, greedy for gain; and while you work for their good they are completely yours, offering you their blood, their property, their lives, and their sons…. They are less hesitant about harming someone who makes himself loved than one who makes himself feared because love is held together by a chain of obligation which, since men are wretched creatures, is broken on every occasion in which their own interests are concerned; but fear is sustained by a dread of punishment which will never abandon you". *The Prince*, Chapter 17.

[11] The most famous example is the study of the Yanomano people by Napolean Chagnon. For a description of this work, together with a review of complementary evidence, see Chagnon's contribution to, *The Genetics of Criminal and Antisocial Behaviour*, ed Gregoy Bock, Jamie Good, CIBA Foundation, 1995.

[12] See, for example the statistical data on the UNICEF web site, www.unicef.org.

Remarkably the classical view of the market as the *best* answer to a question that has no *right* answer[13] survives his empiricist analysis fairly well. The social controls on the market that he sees as leading to freedom from hunger, premature mortality, and oppression, are those envisaged by Adam Smith.

I conclude with the final paper I wrote for the Humanities programme. *A Doubtful Utopia* [Utopia course, Winter 2000, Chapter 9 here] is a rationalist experiment in deriving "oughts" from "is"s, and one of its major conclusions is the advocacy of education. In real life I am more concerned with deriving "is"s from "oughts". It seems from the best evidence I know of that education is a very good predictor of future health, tolerance and democracy. This may be because education bootstraps people's abilities, through reading, writing and numeracy, to understand and challenge the status quo. Education leads to protest which leads to freedom. Freedom is highly correlated with some kinds of welfare. For example, famines never occur in democracies (though chronic food shortage does)[14].

In *The Outline of History*, H G Wells wrote, "Human history becomes more and more a race between education and catastrophe" (Chapter 15). The latest data show that catastrophe still stalks the world, but today education is winning. The Humanities are not the heart of education, nor even its soul. They are the guardian of imagination's vitality. The world, human desires, and contingency put boundaries around imagination. The Humanities fail when they take no account of those boundaries but float in their own unworldly dimension. They enrich when their theories engage with the world as experienced, tested and measured, when imagination acknowledges the boundaries, exposes them and pushes them outwards.

---

[13] Classical economists give priority to comparison judgements ("good") over classification judgements ("right").

[14] See Jean Dreze, Amartya Sen, (eds.) *The Political Economy of Hunger*, Oxford University Press, 1990.