

A comment on Temkin's trade-offs

John Broome

When people first built bridges, they managed without much theory. They could judge a log by eye, relying on their intuition. Their intuitions were reliable, being built on long experience with handling wood and stone. But when people started spanning great arms of the sea with steel and concrete, their intuition failed them, and they had to resort to engineering theory and careful mathematical calculations. The cables that support suspension bridges are unintuitively slender.

Our moral intuitions are formed and polished in our homely interactions with the few people we have to deal with in ordinary life. But nowadays the scale of our societies and the power of our technologies raise moral problems that involve huge numbers of people. We cannot expect our naive intuitions to cope with problems of this sort. No doubt our homely intuitive morality gives us a starting point, but we have to project our morality beyond the homely to the vast new arenas. To do this properly, we have to engage all the care and accuracy we can, and develop a wide-ranging moral theory.

Indeed, we are more dependent on theory than engineers are, because moral conclusion cannot be tested in the way engineers' conclusions are. If an engineer gets her calculations wrong, her mistake will be revealed when the bridge falls down. But a mistake in moral theory is never revealed like that. If we do something wrong, we do not later see the error written in the sky; we can only know it is an error by means of theory too. Moreover, our mistakes can be far more damaging and kill far more people than the collapse of a bridge. Mistakes in allocating health-care resources may do great harm to millions. So we have to be exceptionally careful in developing our moral theory.

How can we possibly project moral theory beyond the scope of our intuitions? What means do we have for that? We have the ordinary materials of reason: logic and the other instruments of argument. One thing we must not do is rely on our intuitions outside the domain where we have good reason to think they are reliable. No bridge-builder has the right to rely on intuition. No doubt her experienced intuition as an engineer may give her good ideas, but these ideas have to be checked by calculation. Similarly, no moral philosopher has the right to rely on intuitions in domains where we have no reason to think they are reliable. At the very least, they must be checked by argument.

One domain where we cannot trust our intuitions is in dealing with very big numbers. In our homely lives, we do not encounter problems involving very big numbers. We have no experience that could give any basis to whatever intuitions we might have about them. Our ancestors did not encounter problems of this sort, so we cannot expect any wisdom concerning them to be implanted in our genes. Indeed, we have no reason to take any notice of people's intuitions about very big numbers.

On the contrary, we have good reason to mistrust them. The evidence is that they are often wrong, because our imagination is not able to grasp just how big numbers can be. For example, many people's intuition tells them that the process of natural selection, however many billions of years it continued for, could not lead from primordial slime to creatures with intelligence and consciousness. But they are wrong. Five billion years will do it.

Larry Temkin's 'second standard view' depends on large numbers in a similar way. It says that, for some pairs of illnesses, curing a small number of people of one is better than curing any number of people, however large, of the other. Examples he gives are aids and slight colds. Temkin believes that curing a few people of aids is better than curing any number of people of slight colds, however many billions it might be. He offers us no argument. His belief is founded only on intuition, which we have no more reason to trust than any other

intuition about large numbers. Temkin has no intuitive grasp of billions of colds, any more than we have an intuitive grasp of billions of years. He tells us that several other famous philosophers think the same as him. If their beliefs too are founded on intuition only, we have no better reason to trust them.

It will be helpful to express Temkin's second standard view a little more formally. One preliminary is to settle what he means by 'a small number'. It does not matter, but for the sake of definiteness, I shall assume he means a number less than 10. Then the second standard view is:

SV2 There are two illnesses I_1 and I_k and a number n_1 less than 10 such that, for any number n_k , curing n_1 people of I_1 is better than curing n_k people of I_k .

This principle is not amenable to intuition because of the universal quantifier 'for any number' attached to n_k . It asserts something of every number, however big. To affirm the principle intuitively, we would have to have an intuitive grasp of every number, however big, and we do not.

How can we test this view, then? We can apply theoretical argument, as I suggested. Indeed, Temkin himself supplies an argument against it. It goes like this. Start with I_1 . Suppose it is possible to find an illness I_2 , slightly less bad than I_1 , such that, for some sufficiently big number n_2 , curing n_2 people of I_2 is better than curing n_1 people of I_1 . Then suppose it is also possible to find an illness I_3 , slightly less bad than I_2 , such that, for some sufficiently big number n_3 , curing n_3 people of I_3 is better than curing n_2 people of I_2 . And so on: suppose it is possible to find a sequence of illnesses like this, and the last one is I_k . Then curing n_k people of I_k is better than curing n_{k-1} people of I_{k-1} , which is better than curing n_{k-2} people of I_{k-2} , which is better than . . . and so on till we get to curing n_1 people of I_1 . Consequently, curing n_k people of I_k is better than curing n_1 people of I_1 . This contradicts SV2.

This argument only works if it is indeed possible to construct a sequence of illnesses as I supposed from I_1 to I_k . The claim that it is, slightly formalized, is:

SV1* For every pair of illnesses I_1 and I_k and every number n_1 less than 10, there is a sequence of illnesses $I_1 . . . I_k$ and a sequence of numbers $n_1, . . . n_k$ such that for every I_j in the sequence, curing n_{j+1} people of I_{j+1} is better than curing n_j people of I_j .

Should we believe this? It is stronger than what Temkin calls 'the first standard view', which is, once more slightly formalized:

SV1 For every illness I_j and every number n_j , there is an illness I_{j+1} and a number n_{j+1} such that I_{j+1} is less severe than I_j and curing n_{j+1} people of I_{j+1} is better than curing n_j people of I_j .

SV1 says that we can take each individual step in constructing the sequence we need. But it does not guarantee that a sequence of steps like this will eventually lead from I_1 as far as I_k . SV1* adds that extra guarantee.

Should we believe SV1*? Temkin thinks we should. He helps us with examples of sequences of illnesses that should work the trick, and then casts us on our intuition again. This is more acceptable for SV1* than it was for SV2. SV1* is a better subject for intuition. It has no universal quantifier on numbers, apart from the limited quantifier on n_1 . It has only existential quantifiers on the numbers n_2, n_3 , and so on, as far as n_k . To affirm it intuitively, we only need to convince ourselves that there are numbers that work the desired trick; we do not have to scan imaginatively across every number, however big.

However, it is true that some of the numbers in the sequence $n_2, n_3 . . . n_k$ may have to be very big. I would not myself rely on intuition to support SV1*. Even so, I believe SV1*

because I believe there are good theoretical grounds for it (which I shall not rehearse here). One way or another, then, I think there are good grounds for SV1*. It follows by Temkin's argument there are good grounds for rejecting SV2. Temkin ought therefore to reject it.

True, the argument against SV2 relies on the transitivity of betterness, which Temkin suggests we might doubt. But to doubt that is to give up the possibility of sound argument in ethics. The transitivity of betterness is exactly the sort of principle we can rely on when we project our moral thinking into new domains. It is an incontrovertible principle that we can trust absolutely, and build our theory on. It is an instance of the general principle that, for any predicate F , if A is more F than B and B more F than C , then A is more F than C ; the transitivity of betterness is obtained by substituting 'good' for ' F '.

The grammatical construction 'more . . . than' is part of the logical framework of our language, akin to the logical constants such as 'and' and 'if', and the identity sign 'is'. It is a logical operator that converts a monadic predicate into a dyadic relation, and this relation is transitive. Denying its transitivity is as futile as denying the principle of modus tollens (which Temkin's argument also relies on) that if a statement implies a falsehood, then the statement is false. It leaves us without a framework for thought.

To be sure, our ordinary language is loose, and ordinary-language words such as 'if' and 'is' do not always behave in the way they are supposed to behave in, in logic. The sentence 'if you want a beer, there's one in the fridge' does not conform to the rules, for example. No doubt there are also instances where 'more . . . than' does not behave in the way it is supposed to. These quirks of ordinary language are why, when we do theory, we must regiment our language. We do not argue on the basis of idioms. Sometimes we formalize a bit, as I have done, or a lot. Otherwise we cannot be sure we are arguing correctly. Since we have to be particularly careful with moral theory, we must be ready to take the step of regimenting and formalizing. That is why I did it.

Temkin's argument against SV2 is an example of good argument in ethics. It starts by offering reasonably good grounds for the claim SV1*. Then it uses valid principles of reasoning to derive a implication from this claim. We then have a reasonably well grounded conclusion. We must not give it up simply on the basis of an intuition that we have no reason to trust.

I think I should protest against two of Temkin's rhetorical devices. Temkin calls the denial of SV2 an 'extreme' view. This is like a Trotskyite calling a social democrat 'extreme'. Hardly anyone in the world of practical health-care believes SV2. Take an example. If you are in a hospital run by the UK National Health Service, and you get a headache, you will be given an analgesic. The cost of the analgesics handed out this way will in time add up to enough to cure a few people of severe illnesses. So the health service, with its limited budget, is willing to leave a few people uncured of their severe illnesses, for the sake of curing a very large number of headaches. Anyone in the health service can work out that this is happening, but I have never heard anyone objecting to this use of analgesics.

Second, Temkin creates the impression that, if you deny SV2, you will find yourself committed to what Derek Parfit calls the 'repugnant conclusion'. Since this conclusion is supposed to be repugnant, he hopes to scare you off from denying SV2. But the impression is false: as Temkin knows, denying SV2 does not commit you to the repugnant conclusion. Most versions of utilitarianism imply that SV2 is false, but few versions imply the repugnant conclusion.