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The Ethics Forum

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Article abstract

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RICHNESS THEORY: FROM VALUE TO ACTION[1]

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ABSTRACT:

Richness theory offers a promising axiology. In this paper, I discuss how to translate it into a deontology. To do so, I recruit the concept of moral distance from a recently developed epistemology, and construe it in terms of causal power. Finally, I apply the resulting decision-theoretic framework to the question of how best to avert ecological disaster over the next 36 years and achieve ecological harmony over the next 986.

RÉSUMÉ :

La théorie de la richesse représente une axiologie prometteuse. Dans le présent article, nous explorons comment la traduire en déontologie. Pour ce faire, nous mobilisons le concept de distance morale tiré d'une épistémologie récemment développée et l'interprétons en termes de pouvoir causal. Pour terminer, nous appliquons le cadre théorique-décisionnel qui en résulte à la question de comment mieux éviter la catastrophe écologique au cours des 36 prochaines années et atteindre une harmonie écologique d'ici 986 ans.

How can a man be satisfied to entertain an opinion merely, and enjoy it? […] Action from principle – the perception and the performance of right – changes things and relations; it is essentially revolutionary, and does not consist wholly with anything which was. (Thoreau 1849)

DEEP SPACE, DEEP TIME, DEEP VALUE

Ethics, finally, has its Copernicus, its Darwin. What those scientists achieved in 1543 and 1859, Kelly attained in 2003: a comprehensive inference to the best explanation that put to rest one long-standing theory, and replaced it with one clearly more accurate. Though it took decades for many to acknowledge it, heliocentrism replaced geocentrism in 1543. The same goes for evolution *via* natural selection vs. creation *via* intelligent design in 1859. In 2003, richness theory (RT) superseded sentientism as the truest theory of value[2] .

One thing RT explains especially well is the failure – despite repeated attempts by many ethicists – to draw a defensible line between that which has intrinsic value and that which lacks it (see Routley and Routley 1980, Davison 2012, and Mikkelson, forthcoming). RT tells us no such line exists, since everything has intrinsic value. How much intrinsic value anything has depends on how internally varied and internally harmonious it is. RT also resolves the long-standing debate over individualism vs. holism in environmental ethics, in favour of holism (Mikkelson and Chapman, forthcoming). And it thereby squares the idea that an individual human being has greater intrinsic value than just about any other organism, with the merits of a global economy seriously down-sized for the sake of our fellow species (Mikkelson 2011b).

All of the above virtues lie within the domain of value. In this paper, I extend the discussion to the realm of action. I do so through a meta-ethical framework that co-evolved in mutualistic association with RT: robust moral realism (Oddie 2005). I relate one of that framework's most interesting features – its concept of moral distance – to decision-theoretic consequentialism (cf. Jackson 1991). Furthermore, I apply the latter to the question of how best to avert ecological disaster over the next 36 years, and achieve ecological harmony over the next 986.

VALUE, POWER, AND DESIRE

Our whole life is startlingly moral. There is never an instant's truce between virtue and vice. (Thoreau 1854)

Oddie (2005) offers a compelling defense of "robust moral realism": the idea that the good – i.e., richness – is an objective, causally efficacious, knowable feature of the world[3]. Much of the book concerns epistemology: how we come to know richness. But its last chapter sows the seed of an action theory, i.e., how we should respond to richness. Here, after sketching the epistemic story – in

particular, the prominent role of desire in that story – I shall critique its action-theoretic implications and argue that decision-theoretic consequentialism addresses the main concern with them.

Like other moral realists (e.g., Boyd 1988), Oddie draws upon an analogy with scientific realism. Science aims to discover various aspects of "reality: the way things really are" (Oddie, 2005, p. 214). "Appearances: the way things seem" provide evidence about reality. Though an individual appearance may be an illusion, other appearances, combined with logical reasoning, expose many such illusions as such. Often enough, this results in "beliefs: the way [one]… believe[s] things to be" that more closely match reality. Likewise, ethics aims to discover "value: how good things really are" (Oddie, 2005, p. 219). And as the moral analogue of appearances in science Oddie identifies desires: "how good things seem". As with appearances in science, in ethics systematic reflection on desires yields, often enough, "judgements: how good [one]… judge[s] things to be" that more closely match real value.

So far, so good. But one major dis-analogy between science and ethics complicates the picture, and segues the present discussion from value to action. As Oddie points out, in many cases our perceptual experiences ("appearances") resist any substantial modification in light of our scientific knowledge. For example, coming to know that the sun is in fact much larger than the moon does not change the visual impression, from Earth, that the two are about the same size. But in ethics, we do expect our desires to change as we develop more accurate knowledge of value. This is because desire plays a crucial role not only in coming to know the good but also in responding to it. In order to promote the good, one must first summon the desire to do so.

Oddie seems to acknowledge this obligation to change our desires in light of what we know about value:

> "[O]ur value judgments […] can and often do track value […]" "Those judgments in turn can play an important […] role in shaping […] desires […] An accurate theory of the good may correct for, or eliminate, a wayward desire." (Oddie, 2005, p. 218)

But he insists that considerable gaps between value and desire should nevertheless often remain. Rather than tracking just the real value of things, our desires should also reflect how close we are, in moral space, to those things. Oddie provides a few hints about what moral distance might involve, yet they fall short of dispelling the worry that the value-desire gaps he endorses are moral failings rather than virtues.

Facts about relative power can dispel that worry. Each of us stands in a better position to promote certain goods than other goods. To follow up on one of Oddie's own examples, you plausibly stand in a better position to promote the recovery of your own spouse from "a very serious, life-threatening illness" than to help out a total stranger "in a village in some far-flung country" whom "[y]ou know nothing about […] and have no connection with […] other than that they share your spouse's illness" (Oddie, 2005, p. 221). More generally, given a choice

between two goods with equal objective value, but greater power to promote the first one than the second, a person should prefer the first good to the second one – i.e., desire the former more strongly than the latter. I submit that this – and only this – construal of moral distance can justify Oddie's claim that even after coming to know that "two states of affairs […] are of equal value, the one that is closer to you should [nevertheless still] exert greater motivational force on you" (Oddie, 2005, p. 223).

The idea that relative power, as well as value, should affect our desires and thus our actions fits well with decision-theoretic consequentialism (DTC; see Jackson 1991). According to DTC, an agent should choose the course of action with the highest expected value. The expected value of an act is a function of not just the values, but also the probabilities, of that act's potential outcomes. I propose to interpret the kind of power discussed in the previous paragraph as *the probability of success in achieving an intended outcome*. If this outcome has greater value than the probability-weighted mean value of the alternative and unintended outcomes of the action, then the greater the chance of succeeding, the greater the expected value of trying. (See the appendix for a proof.) This brings the idea of moral proximity espoused by Oddie into rough alignment with the concept of expected value propounded by Jackson. And it supports the above analysis of moral distance in terms of causal power.

HUMANITY'S ECOLOGICAL FOOTPRINT

All human agents, together, face a real choice now between futures with vastly different richness, and thus value. Overwhelming scientific evidence shows that the current path of ever-increasing depletion and pollution of nature will lead inexorably to planetary social and ecological collapse. This is not news. Already in 1972 the authors of *The Limits to Growth* demonstrated the disturbing implications of sustained exponential growth, such as the sixteenfold expansion undergone by the global economy in the twentieth century (Meadows *et al*. 1972). But so far the ruling class, who require such absolute growth to augment their relative power, have stymied environmentalists' efforts to put us on a better course[4] [5].

The expected number of premature human deaths from global warming alone – just one of the "interacting travesties" resulting from this business-as-usual (BU) approach (Mikkelson 2011a) – runs to the billions (Broome 2012). Orders of magnitude more untimely non-human deaths – and perhaps millions of premature extinctions – are also expected (Thomas *et al*. 2004, Mikkelson and Chapman, forthcoming). Species extinction ties in closely with richness theory, since it reduces both the variety and the harmony of the living world (Mikkelson 2011b). But so does the death of individuals, since organisms, and especially humans, are also prime examples of richness (Kelly 2003).

The Global Footprint Network (GFN) call their preferred alternative to BU the rapid-reduction scenario (RR; GFN 2014). In it, humanity immediately begins "climbing down" from its current demand for 1.5 Earths' worth of renewable resource supply and pollution assimilation to reach one Earths' worth by 2050. Even this measure would provide no guarantee against global ecological havoc.

For one thing, it would be crazy and evil for humanity to use even "just" one Earth's worth of "biocapacity" for very long: crazy, because it would leave zero margin for error; and evil, because it would leave little or nothing to the ten million wild species who contribute the lion's share of the global ecosystem's overall richness (Mikkelson 2011b)[6]. For these reasons, it will be imperative to continue relaxing the human footprint after 2050 – for example, by slowly reducing it to around 10% of biocapacity by the year 3000 (Nash 2011).

Nonetheless, the GFN's RR scenario would surely be a good start. It would make human die-offs and non-human extinctions much less likely to occur, and much less severe if they do occur, than the GFN's BU projection, which entails a global ecological footprint of between two and three Earths' worth by 2050.

I hope the above comments suffice to establish that the value (i.e., the richness) of RR vastly exceeds the richness of BU. But what about the probabilities? BU is, by definition, the path we're already on. Thus, if we aimed to stay this course, we would arguably have a greater chance of success than if we dug in our heels and fought instead for RR. To use Oddie's (2005) language, RR lies further away from us in moral space than does BU.

However, causal analysis of the global ecological footprint (EF) – perhaps the most comprehensive measure of environmental damage currently available – shows that RR is not as improbable, and hence distant, as it might seem. The relative EF per unit of economic output has already been declining – by some 64% from 1961 to 2008 (data from the GFN, United Nations, and World Bank)[7]. Projecting forward this rate of improvement in socio-technical efficiency means that humanity could reach a one-Earth EF by 2050 – if growth in human population size and per-capita production and consumption slowed down enough. Jointly sufficient conditions would be for population growth to ease up from its recent rate of 1.7%/year to around 0.6%/year and for growth in per-capita production/consumption to slacken from 1.9%/year to 0.6%/year. In other words, global economic growth need not stop altogether – though it must slow down tremendously.

What – or, more to the point, who – stands in the way of realizing the RR scenario? Many academics suppose that the general public are too blinkered to appreciate such esoterica as the intrinsic value of richness in nature. But surveys refute this all-too-common form of condescension. For example, Leiserowitz *et al*. (2005) report that overwhelming majorities of Americans agree with such statements as "Nature has value within itself regardless of any value humans place on it" and "Humans have moral duties and obligations to plants and trees". On the other hand, the wealthiest minority do have great trouble understanding ecological values and duties. Studies show very consistently that the proportion of a person's own income that he or she is willing to pay for environmental protection declines precipitously with increasing income (Jacobsen and Hanley 2009)[8].

I conclude that although it will certainly be harder to achieve RR than BU, the far greater value of RR greatly outweighs this difference in difficulty. The expect-

ed value of aiming for RR greatly exceeds the expected value of settling for BU, despite the lower probability of success in achieving RR, because the richness of RR so vastly exceeds that of BU. We should thus strongly prefer RR to BU – i.e., desire the former much more strongly than the latter, despite the fact that RR lies further away from us in moral space than does BU – because, again, the value of RR so vastly surpasses that of BU. To act on this preference, as we should, calls for direct efforts to reduce growth in human population size and per-capita production and consumption[9]. Given the intransigence, alluded to above, of those who currently hold the most wealth and power, the transition to a just and sustainable future also requires a massive shift of "power to the people".

APPENDIX

The expected value (E) of an action is the sum (Σ), over all n possible outcomes of that action, of the probability (p) of the outcome, given the action, multiplied by the outcome's value (G):

$$E = \Sigma_{i=1 \text{ to } n} p_i G_i$$

If we identify one of those outcomes as the intended one (I), and the others as unintended, then the formula becomes

$$E = p_I G_I + \Sigma_{u=1 \text{ to } n-1} p_u G_u$$

The probability-weighted mean value of the alternative, unintended outcomes (V_F, i.e., the expected value of failing to achieve the intended outcome) is

$$V_F = (\Sigma_{u=1 \text{ to } n-1} p_u G_u)/(1 - p_I)$$

Thus,

$$E = p_I G_I + (1 - p_I)V_F$$

Consider two possible actions A and B, the intended outcomes of which have equal value ($G_{IA} = G_{IB}$), and the unintended outcomes of which have equal probability-weighted mean value ($V_{FA} = V_{FB}$), but of which A has the greater probability of success in achieving its intended outcome ($p_{IA} > p_{IB}$).

Ex hypothesi (see discussion in main text above),

$$G_{IA} > V_{FA}$$

I need to prove that, given the foregoing assumptions,

$$E_A > E_B$$

Or equivalently, that

$$E_A - E_B > 0$$

Proof:

By definition,
$$E_A = p_{IA}G_{IA} + (1 - p_{IA})V_{FA}$$

By substitution,
$$E_B = p_{IB}G_{IA} + (1 - p_{IB})V_{FA}$$

Therefore, after re-arrangement of terms,
$$E_A - E_B = (G_{IA} - V_{FA})(p_{IA} - p_{IB})$$

Since, by assumption, $G_{IA} > V_{FA}$ and $p_{IA} > p_{IB}$, both factors on the right-hand side of this equation are positive. Their product is therefore also positive and thus,

$$E_A - E_B > 0$$

NOTES

[1] I thank Peter Caines, Jeff Mikkelson, Jean-Philippe Royer, Christine Tappolet, Adam Westra, Tiger Zheng, two anonymous reviewers for feedback on this paper. For helpful questions and comments on the talk the paper is based on, I thank fellow attendees of the workshop on "Attitudes, Values, and Environment" held at the University of Montreal on February 21, 2014; and especially Graham Oddie for pointing out again to me the affinity between my construal of moral distance and decision-theoretic consequentialism.

[2] Of course, just as Copernican heliocentrism and Darwinian evolution had antecedents reaching far back into history, so too does RT, e.g., with Leibniz (1686) and Hutcheson (1725).

[3] Though one need not accept richness theory in order to accept robust moral realism, pp. 130, 132, and 140 make clear that Oddie himself does subscribe to the former view.

[4] Zinn (2003) and Schweickart (2011) ascertain the ruling class in the US as roughly the wealthiest 1% of the population – the same 1% whose domination the 2011-2012 Occupy movement explicitly challenged.

[5] Powell (1971) laid out the blueprint for this anti-environmental counter-movement, shortly before his appointment to the US Supreme Court, where he personally helped advance one important means for thwarting socio-ecological progress, namely new rights for corporations as "persons" under the Constitution. See Schweickart (2009) for an explanation of why the 1% have so far locked us into our ecocidal growth-at-all-costs trajectory.

[6] Many wildlife populations are already collapsing due to humanity's excessive demands on nature. For example, tiger populations fell by an average of 70% from 1980 to 2010 (WWF 2012).

[7] By the "relative" EF I mean the raw global EF, divided by global biocapacity. See GFN (2014) for details.

[8] This fact is a special case of a much broader and very well established pattern: As a proportion of income, the wealthy are stingier donors toward not only environmental quality, but also charitable causes in general; and this, both in terms of their stated willingness to pay as well as their actual donations (Piff *et al*. 2012).

[9] The best ways to achieve these goals are to greatly improve, respectively, world-wide access to birth control (Engelman 2011), and workers' freedom to scale back their work hours – and thereby income and consumption – without losing their jobs or benefits (Knight *et al*. 2013).

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