The Principle of Goodness and Reality
Situating a fundamental ethical principle

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Abstract

This paper describes an ethical theory provisionally called the Principle of Goodness.Before doing so, however, it is necessary to discuss the nature of human beliefs in general, in order to correctly situate the theory. It is not a theory of preferences, nor is it merely definitional with regard to ethical terminology such as "good" or "evil", nor is it an investigation into the "good life" or practical reasonableness; although it touches on aspects of all of these. The theme is developed by demonstration of another way of thinking about reality available to us in development of ethical (or any other) philosophy, and we show that this way of thinking is possible and practical by production of an example: the theory of quantum mechanics.

Introduction

This paper and another (House, 2005) introduce the Principle of Goodness, a universal, realist ethical theory. The Principle consists of one short statement each, describing *good* and *evil*. The other paper explores practical questions and wider connections, whilst the matter addressed here is the basic foundation of the Principle, which necessarily involves us in larger grounding questions that might seem to be taking us far afield. Our point of departure is what we mean when we take a word to stand for something real. The author rejects suggestions that language is merely a self-reflexive system of symbols, but this immediately imposes the burden of saying in what sense it can be something else; that is, to what, and how, does a word refer when we think of it as applying to something real?

The theory of quantum mechanics (QM) provides us with a proof by example that it is possible and consistent to think of most words, not as directly denoting realities, but as *summaries* of some aspects of reality, or as approximate abridgments of other, perhaps unspoken or unknown, more complete and accurate statements. Our first task, then, is to describe quantum mechanics from this perspective, highlighting the aspects that provide our example. We are not at all concerned with real-world physics here, in the sense that it matters for our present discussion whether QM is true or false (although the spectacular success of the theory does show that this kind of intellectual structure is viable and productive) but rather with its logical properties in so far as they provide a metaphor for the kind of intellectual sentiment needed to appreciate the Principle of Goodness. Having produced our example, the second task is to describe and explore the

Principle itself.

QM: It's certainly not "spooky"!

It is no exaggeration to say that misunderstandings about quantum mechanics are rampant outside physics departments, even amongst intellectuals. I refrain from providing philosophical references to illustrate this. It is nigh impossible to find in any but straight physics books, articles about the theory that can resist words like "spooky", "ghostly", or "weird"; but in fact, the theory (a) uses strictly classical logic (a fact that follows immediately from the fact that it uses ordinary mathematical formalism) and (b) is susceptible to a strictly realist interpretation. The following is intended mainly to illustrate point (b).

Omnes (1999b, pp. 20-29) shows that, under the Heisenberg formalism of QM, an observable (for example, the position of an atom), which is represented by a single number in classical physics, is represented by a special kind of matrix of complex numbers in the quantum formalism. The formalism itself was designed historically such that a *correspondence principle* holds: for sufficiently large quantum numbers n, the equations of QM look more and more like the normal equations of classical mechanics. For example, in Newtonian physics we may write that

$$E = p^2/2m$$

where E is energy, p momentum, and m the mass. The correspondence principle in this case suggests replacing this scalar equation with a matrix equation:

$$H = P^2/2m$$

where H (for Hamilton) is a matrix corresponding to energy, and P similarly a matrix representing momentum. The critical point is that this is not a single-valued equation, but a matrix equation equivalent to a (possibly infinite) set of scalar equations, each of which is itself counter-intuitive to the extent that its values are complex numbers rather than real numbers. Further mathematical development from this point results in formulae with even less resemblance to the old classical ones, especially as matrices introduce additional considerations such as non-commutativity, which do not exist in the 'intuitive' world of scalar numbers. Thus the quantum theory was developed by an educated intuition seeking out formulae in a mathematics of matrices that is inherently less 'intuitive' than the 'old' mathematics of scalars.

The philosophical point here is that, as a human mind tied to a brain designed to manipulate information about the classical world, I understand a single datum for a position ("It is *there*."). But I do not understand (except in the sense of following the mathematics and educating myself to develop an 'unnatural' intuition) how an observable can be a matrix. But the matrix contains information that the 'intuitive' scalar number does not, and that is why, assuming QM to be a more-or-less correct theory, a QM calculation in the regime where it matters (usually but not always the atomic and subatomic realms) will give a better fit to experimental data than a classical calculation.

It is important here to dispel some common misconceptions. Firstly, it is often said that QM is the physics of the 'small' (the domain of atoms), whereas classical mechanics is physics of the 'large' (from the human scale to the astronomical). This is incorrect. Quantum theory works on every scale. The fact that typical and well-known quantum phenomena such as self-interference of a particle are not observed for 'large' objects is not due to any failure of QM on the large scale, but rather to a process called *decoherence* (Omnes, 1999a, pp. 199-208), (Omnes, 1999b, pp. 73-76), which is at root a statistical principle that explains the lack of these phenomena in terms of the large numbers of particles in macroscopic objects. The quantum equations work correctly at all scales; quantum mechanics is a strictly more comprehensive theory than classical mechanics. Further, the theory makes correct predictions in this wider realm, even where the predictions are wildly counter-intuitive. Secondly, this and other considerations arising from the theory have been taken by many as proof of various kinds of anti-realism, but Feynman et al (1965, p. 2-8) deny the idea at the source of such thinking:

"Another thing that people have emphasised since quantum mechanics was developed is the idea that we should not speak about those things which we cannot measure. ... The idea that this is what was wrong with classical theory *is a false position*. It is a careless analysis of the situation. Just because we cannot *measure* position and momentum precisely does not *a priori* mean we *cannot* talk about them. It only means we *need* not talk about them. The situation in the sciences is this: A concept or an idea which cannot be measured or cannot be referred directly to experiment may or may not be useful. It need not exist in a theory." (Emphases in original.)

The problem, of course, is that these particular concepts (simultaneously-known precise position and momentum) not only need not be talked about, but lead to inconsistencies with observed facts in certain realms. This is why QM can work in those realms whereas classical mechanics can not. But QM *does* talk about certain other concepts inaccessible to observation, and the above is intended to show that it is philosophically invalid to suggest that, just because these concepts themselves cannot be measured, it must *of necessity* be taboo to talk about them or consider them as candidates for the real.

To illustrate this latter point, it is useful now to consider the second of the two equivalent formalisms of QM, the wave mechanics developed by Schroedinger (Feynman et al 1965, pp. 16-11 - 16-14). This formalism centres upon the wave function, ψ, and our metaphysical question here is: What *is* it? To address that, we need to inspect its place in telling us about observables (or else this would not be a scientific theory); but we need not stop there, wrongly silenced by mistaken ideas already disposed of by Feynman (see above).

The observational utility of ψ in QM is easy to state: It is a complex function which, when multiplied by its complex conjugate (written ψ^*), yields a probability density; that is, when integrated over a region, it yields the probability of finding a particle in that region. (This is still a simplification, but good enough for our purposes.) In other words, the value $\psi\psi^*$ has a directly intuitive meaning: the probability of finding a particle. But what of the particle whose likelihood of observation $\psi\psi^*$ predicts? Much of the reason for the odd ways noted above in which people talk about QM is precisely because the particle itself (the atom, or photon, or electron etc.) seems like something we *should* be able to grasp with our ordinary intuition, but which, upon closer inspection, seemingly 'dissolves away' into a fog that our brains, tutored by everyday experience,

cannot accommodate. Every educated person knows that QM predicts that a photon, say, can behave sometimes like a particle, sometimes like a wave, depending on what kind of test one subjects it to. Natural intuition can just about accept that, but it is another matter when the theory predicts that the choice can depend on what we do elsewhere, or what we do to another separate photon, or what we do to the same photon at another time, even a time in the future!

A way out was proposed as part of the Copenhagen interpretation of QM, the first significant systematic attempt to understand the meaning of the theory. Pauli deeply analysed Kant's (1990, p62) categories of understanding and found at least one of them, causality, wanting and others severely problematic, such as absolute space. (Omnes, 1999b, p48.) Bohr suggested a principle of *complementarity*: there are complementary, but mutually incompatible, languages (such as particle-talk, wave-talk etc.) for speaking of reality, and we must choose an appropriate one for the circumstances and prohibit talk at the same time in the others. It is obvious why this suggestion generated widespread anti-realistic world views, both popular and scholarly.

But we need not accept such an attitude. Reminding ourselves again of Feynman's clarification above, we may ask: of what does the theory speak, which is simultaneously realistic and a candidate for a single, universal language covering all phenomena? And the answer is: the wave function. It is counterintuitive in some senses (a complex function in an indeterminately large number of dimensions); but a tutored intuition can easily *grasp* this, although acknowledging that it cannot *imagine* it. And when it does, it will then admit that the wave function is as realistic as one could want: it obeys a linear equation of a similar nature to that governing every wave familiar to everyday experience; it sloshes around deterministically in its multidimensional space in a fashion not unlike the sloshing of water around one's feet down at the beach.

To summarise: from the paradoxical phenomena in the atomic realm, a theory (QM) was developed that contains an entity (the wave function) behaving in accordance with classical logic in a familiar realistic fashion, but in a regime (the complex-valued multidimensional space) beyond our imagination. We note that the theory has been confirmed by passing every experimental test ever thrown at it (noting in passing that Stove (1998) has penned the definitive refutation of all deductivist objections to the reasonableness of confirmation). We are therefore justified, if we wish (again recall Feynman) in proposing that the element of this theory that behaves realistically is in fact real: that is, the wave function. (For completeness, note that one cannot simultaneously and consistently believe in both a real quantum wave function and Einstein's theories of relativity.)

At last we reach the point of this development. Let us reverse the argument developed above. If the reality behind the appearances of our universe is the wave function, then what are the everyday appearances, the particles, the waves, with which we are familiar?

In brief, they are *summaries*, or perhaps *approximations*, of certain parts of the total reality of the universe. When the wave function behaves in a certain way, we can make sense of a statement like "the particle went through the first slit." And when it behaves in another way, we can make sense of the statement "the wave went through both slits." But both these linguistic conveniences are in fact summaries; each says (in exceedingly abridged fashion) that the wave function possessed certain properties, 'sloshed around' in a certain way. We thus see how reality can be

one, and yet require us (limited by our brains to thinking within certain paradigms and possessing words that only 'work' in certain ways) to use mutually inconsistent and incommensurable languages on different occasions.

The Principle of Goodness

We are now ready to introduce the Principle, which consists in descriptions of good and evil:

> G: *Goodness* is to attempt to benefit everyone;
> E: *evil* is to attempt to harm even a single innocent one.

This Principle describes a state of mind: the willed intention. Although the intention has an object (a desired outcome), this is not a consequentialist rule. We may see this by comparing it with a statement of utilitarianism written in comparable terminology:

> U: Goodness is to maximise the balance of benefit over harm.

One might ask whether utilitarianism can be written in words more closely resembling the Principle, perhaps as follows:

> U': Goodness is to attempt to maximise the balance of benefit over harm.

But U' is not sensible. "Maximise" here means "achieve the maximum possible." But anyone attempting to achieve the maximum possible will always achieve it, given a wide enough definition of "possible". If we take a person's full capabilities into account (physical strength, emotional stamina, intellect, knowledge, etc.), and all exigent circumstances affecting the scenario, then these capabilities are accounted for twice in the phrase "attempt to maximise"; once in "attempt", which itself allows that factors may impact upon achievement, and once in "maximise", which similarly allows that some desirable states may be impossible, for the very same reasons already accounted for. We can always maximise something, provided that all relevant limitations are included in determining the "maximum possible". To say that we are obliged, not to do what we can do, but to *attempt* to do what we can do, is to talk nonsense.

We are thus cast back upon U as a model consequentialist ethic, and we compare it with G. The difference between them is clear if we imagine an ideal world in which all limitations upon our capacity to achieve outcomes is removed. What, in that ideal world, is the clearly correct ethic? Certainly, in such a world,

> P: Goodness in an ideal (paradisiacal) world is to benefit everyone.

Why should we, unless wilfully malicious, choose otherwise? For we ourselves are included in the "everyone" who benefit. One might ask whether, at this point, we should, in our ideal world, choose to *maximally* benefit everyone (meaning to benefit each and every one maximally); but one cannot do this mischievously, suggesting that we have not broken free of the limits of the possible inherent in the talk of maximising in the previous paragraph. For in an ideal world, the

limits to enjoying benefit would be the limitations imposed by the logic of our capacities for enjoyment, and not limitations upon our capacity to obtain the enjoyment of such a state for every being. Clearly, provided "maximally" is understood properly, we can allow it to be inserted into P; I choose to omit it, understanding that there is no objection to its insertion, purely for clarity so that the similarity of word form does not introduce confusion into a comparison with G and U. Indeed, with the same provisos, we can even allow it into G as well.

So let us now compare P, G, and U. G and U are both asserted (G by me, U by utilitarians) as ways to be ethical in the real world. P is a statement of ethical behaviour in an ideal world free of limitation, and I would hope we would all agree upon it. For anyone who would not, I note in passing that this paper makes no attempt to persuade anyone to be good; if anyone chooses to advocate (for example) that evil is actually good, whether they do so seriously or as a devil's advocate, I fall back upon P, G, and U, and merely assert certain relationships amongst these statements.

And the obvious relations are that G and U are both modifications of P to accommodate the real-world fact that we cannot always achieve our objectives. U does so by modifying the objective: do, not the ideal thing, but the best thing you can do. G does so by modifying the strength of the injunction: perhaps you can't *do* it, but you can *try* to do it.

It is in this sense that I assert that an ethic of pursuing G and avoiding E is *not* a consequentialist ethic. As we saw above, the way in which limitations of the world are accounted for is fundamentally different.

In introducing a new ethic, one might be forgiven for having reasons why one thinks the ethic is a good idea, and it is here that we see the connection with the previous section. I believe statements G and E above describe realities in the same sense as talk of tennis balls and symphonies. We all know we can't point to a symphony; that, for all its 'noun-ness', the word, "symphony" is a summary of some features of a vast realm of human culture and experience. Those of us who thought "tennis ball" was language of a more concrete kind should have been cured of that notion by the dissolution, in the experiments of modern physics (which have always confirmed the theory of quantum mechanics), of the solidity of concepts such as "atom" or "electron". But the human culture and experience is real; and (we are entitled to believe) the Schroedinger wave function is real. In the same sense, I assert that there is a reality to ethics, and that G and E are statements, approximations, summaries, of parts of that reality. Human culture is real, and so (provided we understand the approximations and summaries involved) symphonies are real; the wave function (related in a mathematically simple yet hard-to-visualise way to the probability of undergoing certain experiences) is real, and so a tennis ball is real; and the web of interactions, relationships, feelings, thoughts, consequences, and so on underlying ethical language is real, for which reason Good and evil, as described by G and E, are real.

Science

G and E are real; that is the claim. We must now ask two questions. Firstly, is this a legitimate claim, as opposed to something sounding like a claim but not (for example, the disproof by Kant

(1990 pp. 331-337) of the idea that existence is a predicate). Secondly, if it is a sensible claim, can we gain confidence that it is correct or, failing that, that it is likely?

It is the job of philosophy to help us gain insight into the first of these, and of science to do similarly with the second. In fact, whether science can help with the second question is the philosophical answer to answer to the first one, so let us talk about science. In view of our investigation above into quantum mechanics, we can confidently assert that the simple idea that "Science concerns the material world, whereas religion concerns ..., philosophy concerns ...", as if the distinction amongst these fields is their subject matter, is too crude to help us here. For we have just seen how the "material world" has its basis, not in little blocks of subatomic concrete, but in something much more elusive, much more akin to process and pattern, information and knowledge, than to any kind of fundamental material substance. For our present purposes, I shall use the following definition:

> *Science* is the invention and testing of unifying theories connecting disparate observables.

Now G and E are descriptions involving observables. Unfortunately at least one of them, "trying to", is only partly a public property; we might at times be confident that someone else is trying or not trying to do something, but in general we only know for ourselves if we are trying, and even there the question of self-delusion arises. Then, other terms are still undefined. What is "innocent"? "benefit"?

One reason for the extended prologue investigating the interpretation of quantum mechanics was to show by example that such questions as these need not be fatal to an enquiry. Anyone throwing a brick at a thin glass window may be confident of soon experiencing a shattering sound, flying glass, etc., whether or not they have everyday doubts as to whether the object thrown was a brick or a large rock, or educated doubts as to whether bricks are made of any substance, or uncertainties about the ultimate laws of physics. Such questions might be fatal in a particular case, but it is a matter that must be investigated further, not one for a cursory judgement.

The reason why I believe progress has been made in the formulation of G and E, despite the reservations above, is that further questions can be answered. The original questions "What is Good?" "What is evil?" involve words of less precision, more ambiguity, than the terms in the statements Q and E. A person confronted with a moral dilemma might, at the outset, be quite uncertain whether to use utilitarianism or the Principle of Goodness as the rule for decision; and yet they may very well be entirely sure who is innocent, who is the "everyone" applicable to the situation, and whether or not they personally are really trying. Possessing good definitions of all these terms will certainly add precision and reliability to their actual choices, but progress has been made already simply by choosing the Principle over utilitarianism.

If, therefore, we take it that we have a statement of a Principle that is more precise than the undissected "raw" intuitions of good and evil, we may now ask what it would mean to investigate it scientifically. The Principle, in effect, is saying "There are patterns of observables in the world, and, just as 'electron' usefully summarises attributes of certain patterns and relations amongst observables, so 'Good' and 'evil' summarise others." We need not here be concerned with side

issues like "You can't derive an 'ought' from an 'is'." We have already agreed above that there shall be no attempt here to persuade anyone that they 'ought' to be Good. But anyone who chooses to be Good will define 'ought' suitably by reference to G and E.

The unadorned reality around us, then, does not lead automatically to an 'ought'. But if one *chooses* to be Good, or at least to avoid evil, and if one accepts G and E, then one knows, given any concrete circumstances, how to reason to derive an 'ought'.

The question, then, fall back once more upon the credibility of G and E, and I assert that this will be in part a scientific question, given our wider, not-necessarily-physicalist, definition of science. The claim is that there is a huge network of relations, causations, correlations, systems, consequences, and so on, in reality that operate according to fundamental laws that are perhaps (or probably) still unknown to us, but that G and E summarise and approximate certain aspects of these laws, and whether this is likely is in part a scientific question.

For one example: persistently, reports arrive of "moral" behaviour in animals. I am compelled to insert the quotes around "moral" because normal academic and philosophical assumptions (prejudices?) distinguish between human and animal behaviour. And yet the well-known rule, Occam's razor ("Do not multiply entities unnecessarily."), clearly tells us to use a single explanatory framework wherever we can. (Occam's razor is easily shown to be a sound principle by quite simple statistical methods.) Such a framework is evolutionary psychology (for example, see Wright (1994)). One result from that field is to show that ethical behaviour (friendship, altruism, love, etc.) can arise as a result of evolution: genes that favour these attitudes tend to get propagated. Thus a mother bird may show every bit as much love and self-sacrifice for her chicks as a human mother for her babies. Evolutionary psychology provides a scientific explanation.

Let us review the factors being juggled here. We have an ethical theory ("Promote G and avoid E.") which purports to be a better candidate for a sound ethics than utilitarianism (U or any related variant). We have the claim that G and E are aspects of reality, which in turn is characterised by relationships, processes, and patterns rather than by substance. And now we have a genuinely scientific theory, evolutionary psychology, which purports to 'explain' morality in evolutionary terms.

In one sense it is obviously true that the Principle of Goodness is an ethics (a candidate arguing for selection as the way to live one's life), whereas evolutionary psychology is quite another beast, an explanatory theory; and this is a distinction that must not be overlooked, for one cannot ever argue that something is right simply because it is. But, given our analogy with the structure of reality revealed through QM, we have another intriguing speculation available: evolutionary psychology is showing us another aspect of the very same deeper pattern to which ethical theories appeal in "making their pitch" to us as free moral agents. There are reasons why people believe in ethical principles, and there are reasons why ethical behaviour arises time and again in the animal kingdom. Might not ethical beliefs be appealing, at a perhaps unconscious level, to the very same deep laws (most likely yet undiscovered?) that underlie evolutionary influences? Further, just as it has been repeatedly noted that bad things happen in nature as well as good, so our Principle identifies two realities, G and E. In other words, might evolutionary psychology be a glimpse at the deeper consistencies and laws that make the entire field of ethical philosophy meaningful?

Arguing for the Principle of Goodness

Having troubled to set up the Principle as an alternative to other ethical philosophies and having situated by a discussion of scientific process and reality, it would be remiss to omit a few words as to why I believe that this Principle is a useful first approach to the reality underlying ethical consideration.

We begin with a brief comparison against the main landmarks of Kant's *Metaphysic of Morals* (2nd section). Firstly, as to the categorical imperative : since "Seek G and avoid E" *is* a universal law, any act in accord with it must be something that one can will should become a universal law. Therefore the Principle is in accord with the categorical imperative. But, as it is stronger (more specific) than the imperative, it is equivalent to an assertion that the imperative alone is too weak. I think this is commonly acknowledged today.

Secondly, it is clearly in agreement with Kant's maxim that a good will is good by virtue of its volition, not its effects (*Metaphysic* 1st section). This is despite the apparently paradoxical fact that the Principle recommends that one strive to attain a certain effect.

There is some disagreement with Kant's maxim, that one regard all rational beings as ends in themselves; for, if one examines P above, the ideal goal in an ideal world without limitations, one sees immediately that no sensible principle limits one's omnipotence in that ideal world to obtaining only the benefit of *rational* beings, but rather that one has no reason whatever to desire anything less than the benefit of all *sentient* beings. The nature of the modification that transforms P into G, as we move from the ideal world to the real one, does not alter that the goal applies to all sentient beings; anything capable of suffering or flourishing is included in "everyone". Of course, only rational beings are capable of cogitating about ethics and making rational choices, but their duty is to do so on behalf of all.

Lastly, we find complete disagreement with Kant's principle, that acts are only ethical if done for duty's sake. Accepting G and avoiding E introduce duties, but nothing whatever introduces duty as a validator of moral worth. Any reason for striving for the benefit of all is as good as any other. Perhaps the motivator for Kant's precept was the fact that some reasons are 'flimsy'; for example, if one normally seeks the benefit of all because it is coincident with one's own best interest, one might be tempted to do otherwise when this situation does not obtain; whereas someone who practises G as a duty will probably obey G even when it is likely that the attempt will fail in one's own case. This is a reason for education and practice in morals, not a reason to regard moral acts as being tainted unless motivated by duty.

This brief comparison shows that the Principle is for all intents and purposes a stronger ethic than Kant's philosophy; the disagreements indicated above regard matters that may be seen more as personal preferences or biases of Kant himself than as consequences of the main ideas in his philosophy. But the disagreements do show one thing: the Principle is not an ethic of duty any more than it is a consequentialist ethic. It is, in fact, exactly what we would expect of a candidate for an approximation to a more general ethical reality: it is simply a description of good and bad states of mind: the state of striving for the benefit of all, and the state of attempting to harm an

innocent. For after all, it is precisely these states of mind, unaffected by outcome or by censorious judgements of worthiness, which will arise from aspects of reality (genes, parental care, etc.) such as are identified by evolutionary psychology, and will in turn play their parts in the mechanisms described by more general laws, of which evolutionary psychology is our first glimpse.

The Principle of Goodness may be applied both on the personal level and as a guide for structuring society, but how does it do this? That is, what approach will take us from the bare statements G and E to ethical guidance for particular situations? Our clue comes from the structure of reality supposed in developing the Principle. The assumption is that G and E are summaries, approximations, to a reality of wider interactions and patterns. Clearly, we should use other information about the particular patterns in which we find ourselves embedded. For example, G and E refer to any sentient beings with terms such as 'benefit' and 'harm'. But we can only concern ourselves with actual sentient beings situated, like ourselves, in particular physical, environmental, and cultural settings, and with particular tendencies and preferences shaped by individual choices, upbringing, and genetic predispositions. These are the other 'windows' into the wider system of laws presupposed by the analysis. Every law has both rules and boundary conditions. We apparently do not know the wider laws as yet, but the repeated appearance in nature of similar tendencies and dispositions, through many human cultures and in other species, should lead the scientific mind to suspect that they do exist.

It would seem, therefore, that we are more likely to make progress with the empiricism of a Locke than with the deductivism of a Descartes. G and E are our pictures of certain aspects of reality; particular circumstances are the boundary conditions. Therefore we should not expect to find that G and E lead to a list of inviolable virtues, such as "You must always tell the truth", but rather to contingent virtues, such as "Always tell the truth, unless you suspect that an unusual situation has arisen; in which case make a full analysis in terms of G and E". We will never obey a formulaic dictum merely as a matter of 'duty', but only because general analysis leads us to believe that a rule is likely to be compatible with G or to help avoid E, and because particular circumstances are of the kind that were considered when the rule was formulated.

In this regard further contrasts with consequentialisms arise. Suppose we suspect that a rule ("Always tell the truth.") has run up against circumstances where re-analysis is required. As Finnis (1983, pp80-108) has persuasively shown, utilitarianism, in just these difficult situations, requires what amounts to mere rationalisation. For example, Finnis considers the sherif who is required to frame and execute an innocent rather than have a vigilante crowd do much worse damage to others, and he considers the victims of the Roman colosseum. Arguments about supposed ongoing damage to the institution of justice, or about corruption of the morals of the onlookers, etc., are transparent rationalisations; either the reasoner already has other (that is, other than utilitarian) reasons for forcing the arguments to these conclusions, or the reasoner is incredibly clever, seeing these long-term consequences and accurately evaluating their respective merits and quantities, and correctly quantifying incommensurables (torture of a sentient being versus damage to public morals, or murder versus harm to the institution of justice).

None of these problems arise in the case of the Principle of Goodness. The activities in the colosseum are evil, for they directly conform to E. The sherif cannot intentionally murder an innocent, and that is that. (*After* having made that choice, he may then ask what acts he finds

within his power to save from harm other innocents who are to be made victims by the actions of the crowd - not by his own actions!)

Lastly, we return to our hypothesis that G and E are glimpses of a larger reality. Is this something we could say about any ethical theory? It would seem not. For example, G and E refer to mental states which, we reasonably posit, come from the range of genetic, environmental, and personal factors discussed above. But our statement U of the utilitarian position has no such 'hooks'. U says "achieve this state of affairs." The achieving of it is a bare fact, and nothing but the state of affairs itself comes into it (except by rationalisation). Moral terms such as "justice" are nothing but summaries for other states of affairs. Perhaps consistencies of some kinds exist on that basis, but they would be 'thin' statements: "Achieving this state of affairs leads to that state of affairs" - without any reference to the higher qualities (love, care, generosity, etc.) that motivate anyone to pursue the question of ethics in the first place.

Conclusion

Practical development of the Principle has not been considered here, yet clearly a serious ethical Principle must be practical and must lead to solid guidance for both individuals and societies. Also, one other family of ethical theories, consequentialisms, have been almost exclusively used as our comparison to situate the Principle of Goodness. This was done, firstly, because this writer believes that utilitarian kinds of theories (often in 'pop' half-understood form) are the actual theories that predominate in society today, and they are very wrong and often lead to damaging actions that conform to E by governments, social organisations, and individuals. Secondly because, for the purpose of setting out the 'world view' in which I understand the Principle, it led to the clearest contrast and exposition. But other, non-consequentialist, theories have contributed immeasurably, from at least the time of Socrates onwards, to human understanding of ethics, and the Principle echoes many of the themes from that long discussion. In that sense it would be wrong to claim that this new statement is actually a new principle. It is more akin to clarification of impulses and understandings that have arisen repeatedly in religion and philosophy, and which have motivated some of our greatest souls.

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