3 Ecological complexity and the ethics of disorder

Jonathan Paul Marshall

Introduction

In many parts of the world, climate change poses an existential or ontological crisis. If people and organisations recognise the challenge, then they know that they have to change their lives, social priorities and values. Even if people deny climate change, they know that others are working to change the ways everyone should live. In both cases climate change confronts modes of being and cosmological certainties. It brings ethical issues to the fore as it is hard to make choices about the future without engaging with ethics. Ethics expresses our 'knowledge', imaginings and myths about others and the world and how they work or *should* work, as well as our ideal ontological orientation towards those others, the world and the future we are attempting to make.

Ethical systems that arise from traditional Western philosophies and religions tend to assume, as their foundational myth, that order and harmony are themselves good and, as such, the true basis of ethics. This chapter argues that human and ecological worlds are ontologically complex, conflicted, unpredictable and continually in flux. Consequently, by focusing on order, traditional ethical myths construct an abstract and ideal world that disrupts the possibility of relationship with the world we belong to. Such ontological alienation from the world is likely to be intensified when people face, and produce, ecological disruption, and may in turn increase the likelihood of our generating unexpected and ecologically harmful consequences in a deteriorating future; consequences which may also be framed as 'unethical'.

While it is impossible in the space available to discuss established ethical systems in detail, I suggest that the ethical philosophy of Albert Schweitzer (1875–1965) is particularly apt in the quest to find a mode of ethical thinking that makes complexity and uncertainty ontologically fundamental to an approach to futures. Schweitzer's ethical thought raises awareness of these issues by: consciously expressing the paradoxes of ethics; challenging the idea of easy boundaries and classifications; insisting that we are part of the world; recognising the inevitable lack of harmony in the world; and appreciating the impossibility of complete ethical resolution. I am not suggesting this is the only possible such ethical system. However, Schweitzer's thought has (until recently) been ignored

by professional philosophers and social scientists, and this essay aims to briefly sketch his position while emphasising its recognition of fundamental ethical uncertainty and conflict, and its ecological and mythic basis.

Complexity and order/disorder

In general, chaos theory has become a search for the 'deep simplicity' (to use the title of John Gribbin's 2004 book), or hidden order of the world. While this search is completely legitimate, I shall attempt to demonstrate that complexity theory and ecosystems theory also show that the world escapes human order and predictability.

Scientists have generally assumed that better data would give better and better approximations towards a limit. This assumption was undermined by Edward Lorenz's discovery, often known as the 'butterfly effect', which shows that in a *complex interactive system* more accurate data may not move us closer to a predictable limit; it may give us massively divergent results (Lorenz 1993: 130ff.). Furthermore, although it is generally agreed that 'initial conditions' are important in determining end results (Eigenauer 1993; Gribbin 2004: 54ff.), in the ongoing flux of reality all conditions depend on innumerably many prior conditions, and so any choice marking some conditions as 'initial' is arbitrary and likely to be inadequate. As a result, complex interactive systems (human, ecological and physical) are unpredictable, and possibly indeterminate, in detail, in the long term; 'the future is no longer determined by the present' (Prigogene 1997: 6).

This unpredictability does not mean we cannot predict likely trends. If a wooden house is attacked by termites and not 'defended' then it will likely be eaten, but we cannot predict the exact pattern of destruction. Similarly, if we keep burning coal and oil at our current rates we can expect severe and disruptive climate change, even though exact weather patterns and temperatures cannot be predicted. Indeed the presence of disruptive change further lessens the chances of accurate prediction. However, this potentially catastrophic, human-generated unpredictability does not mean that ecological systems are normally harmonious or stable.

Disorder and order in ecosystems

There is a growing body of ecological theory which recognises that ecosystems are not only extremely complex, interactive systems in the sense described above, but that they are also self-modifying.

Most functional ecosystems are 'internally' variable, with many different individuals and relationships, including many local, or micro, ecosystems. For example, a field is essentially messy and not equally hospitable to all the lifeforms which inhabit it. It has pockets, furrows, damper and dryer parts, with differing populations, and most of the creatures in it are not genetically identical. It likely holds changing billions of small creatures and bacteria (beyond the possibility of enumeration at any particular time), all of which are evolving in various ways in

response to the environment and each other. Furthermore the field can be affected by events that appear external to it. Ecosystems are never completely observable, uniform, or internally controlled, and this is part of their makeup (Reice 2003: 6).

Furthermore, ecological boundaries are unclear. Environments overlap, spill into each other, are discontinuous, and the higher 'levels' can depend upon the 'lower' as much as the other way around. This overlapping can include variations in temporal processes ranging from microseconds to millennia, with spatial processes varying in spread from a few micrometres to the entire globe and out into space (Brown et al. 2002: 619; Holling and Meffe 1996: 332). Any ordering is irredeemably complicated, and enmeshed in other complex interactive systems. While Brown et al. point out that fractal and power law regularities can exist in ecological relationships (2002: 623), it is not clear precisely how much *specific* predictability, stability or patterning these regularities present.

To take one example, over eight years Beninca et al. studied a complex micro-scale food web from the Baltic Sea (bacteria, several phytoplankton species, herbivorous and predatory zooplankton species, and detritivores). While this is an artificial situation, in a laboratory under constant environmental conditions, it is informative. The team concluded:

> species abundances showed striking fluctuations over several orders of magnitude . . . Predictability was limited to a time horizon of 15–30 days, only slightly longer than the local weather forecast. Hence, our results demonstrate that species interactions in food webs can generate chaos. This implies that stability is not required for the persistence of complex food webs, and that the long-term prediction of species abundances can be fundamentally impossible.
>
> (2008: 822)

Doak et al. (2008) argue that 'ecological surprises', these substantial and unanticipated changes in the abundance of one or more species that result from previously unsuspected processes, are a common outcome of both experiments and observations in 'the wild'. These surprises occur in the context of people's knowledge and subsequent expectations.

> Truly surprising results are common enough to require their consideration in any reasonable effort to characterize nature and manage natural resources . . . the frequency and nature of ecological surprises imply that uncertainty cannot be easily tamed through improved analytical procedures.
>
> (2008: 953)

The authors emphasise that ecological surprise is under-documented because of 'the nature of the peer-reviewed literature, which does not encourage the discussion, or even admission, of clearly unanticipated results' (ibid.: 955). Ninety per cent of ecologists they surveyed reported observing such a surprise. Those

surveyed also agreed that these surprises 'had not been reported in the scientific write-ups of their research' (ibid.: 956). Western ontological predilections hide normal uncertainty and surprise.

As well as generating surprises, ecologies are always on the edge of crisis and subject to ongoing disruption from external events. Ecologist Joseph Connell was the first to draw attention to crisis as an inherent part of ecologies, writing:

> the frequency of natural disturbance and the rate of environmental change are often much faster than the rates of recovery from perturbations . . . [F]orces, often abrupt and unpredictable set back, deflect or slow the process of return to equilibrium. If such forces are the norm we may question the usefulness of the application of equilibrium theory to much of community ecology.

High species diversity is usually considered the mark of a healthy system and Connell suggests that 'high diversity is a consequence of continually changing conditions' (1978: 1302). He argues that the highest diversity is maintained with a moderate degree of calamity, rather than with continual, overwhelming calamity, or absence of calamity. Over periods with no calamities, the 'fittest' set of species come to dominate to the exclusion of all others and the system is likely to reach equilibrium. However, this leads to a higher risk of ecological depletion when crisis eventuates, as the number of species declines and genetic similarities lead to vulnerability. Paradoxically, 'stable' systems become potentially fragile and unstable.

Given these environmental and population fluctuations, long lasting equilibrium states may be uncommon. As evolutionary geophysicist David Jablonski points out, 'few, if any, modern terrestrial communities existed in their present form 10,000 years ago' (1991: 756). Reice remarks: 'We generally expect things to be constant, to continue in the same way, making a tacit assumption that nature is unchanging, constant, forever. W[hile] we may want it to be true . . . that's not the way nature works' (2003: 5).

In Reice's view 'the normal state of the [ecological] community can be thought of as recovering from the last disturbance, with the only constant being change' (ibid.: 16). Like Connell, he suggests disturbances are 'vital to maintaining the integrity and health of natural ecosystems, upon which all life depends' (ibid.: 22–23). However, it appears that these natural variations can 'flip a system into another regime of behavior – to another stability domain' (Holling and Meffe 1996: 330). Rather than manifesting constancy,

> ecosystems do not have single equilibria, with functions controlled to remain near them. Rather, multiple equilibria, destabilizing forces far from equilibria, and absence of equilibria define functionally different stable states, and movement between states maintains an overall structure and diversity.
>
> (Ibid.: 332)

More recently, Hastings and Wysham suggest that non-linear systems 'in combination with environmental variability, lead to model descriptions that will not have smooth potentials . . . and thus will not show typical leading indicators of regime shifts' (2010: 464). In other words, ecosystems are naturally open to abrupt change without showing advance warning.

Over millennia, life forms and systems on Earth have faced all kinds of disturbances, from regular seasonal fluctuations to massive extinction events, and the basic 'building blocks' of life have developed to deal with these constantly changing conditions, even though most lifeforms become organised and limitedly adaptable, and eventually pass away. Ecological variation, flux, instability and crisis should be expected.

In summary, it appears that ecological systems are inherently: in flux, self-modifying, uneven, rarely having definite boundaries, subject to external events, surprising in their developments and open to abrupt change. Overly stable ecological systems may lose resilience and health.

Human complexity

Living systems are unstable and unpredictable, and the more 'alive' some creature is, then the more unpredictable it appears or becomes. This is especially true of humans. Although people may have a good idea of how other people will behave, they cannot predict how they will behave on every occasion, and the further into the future their prediction ventures (or the more different the cultural milieu, or the larger the numbers of people involved) the less likely it is to be correct. Very few people predicted the timing of the financial crash of 2008 or the fall of the Soviet Union, however obvious these may seem in hindsight. Experts are routinely wrong in most of their predictions about social and political events (Tetlock 2005). Furthermore, humans live in the intersection of many massively complex interactive and unpredictable ecological systems. It is no wonder that human life is radically uncertain, and that our plans are often disordered.

In terms of ecological and social upheaval, contemporary human societies face multiple complicated or 'wicked problems' (Rittel and Webber 1973) and, as a result, are facing complex and uncertain possible futures. The problems and the data needed to solve these problems are hard to understand or even to agree upon, and it is difficult to know if a solution has been reached before it is tried out. Wicked problems, as occurring in complex interactive systems, inherently imply the likelihood of unforeseen consequences. The wickedness of these problems is further intensified as the problems appear to be brought about by the over-extension of previously successful and apparently helpful social processes; they are not just brought about by failures. One such problematic and entrenched solution is the 'fossil fuel system'. Large-scale social systems throughout the contemporary world depend upon coal, oil and gas. Fossil fuels are the drivers of industrialisation and underpin the productivity and profitability of globalised economies and their abilities to sustain large populations. Without those fuels, it seems possible that contemporary ways of life and population would collapse,

which makes it hard to curtail their use. Making such decisions for the future proposes ethical dilemmas, and implies there could be value in an ethics which admits ecological complexity, uncertainty and conflict.

The problems of ethics and order

Western traditions of thought typically praise order and consider disorder an evil to be eliminated. The prime mythical and ontological act of God in Genesis is to bring order to the creation; separating out the day from the night, the waters of the above from the water of the below and so on. The disobedient and disorderly 'immorality' of humans disrupts that divine order, and Western religions aim to regenerate that order; often by providing moral guidelines. Perhaps as a result, it seems natural to postulate that the moral basis of being is orderly and that philosophy, ethics and justice should aim to reflect and reproduce order.

Valuing order implies that ethics should be codifiable, systematic and universal. However, if complexity is taken seriously and the world seems to resist any simple order or plan, this reality disrupts these ethical systems. For example, ethics aiming at *universal harmony* are fraught, as although creatures are collections of largely cooperating cells, they survive at the expense of others, and what is beneficial for one organism is not necessarily beneficial for another. Furthermore, when we conflate ethics with a general social or personal *benefit* or by its results, then ontological unpredictability opens the ongoing possibility that our actions may have unforeseen and unbeneficial consequences. Similarly, the variety of circumstances and events, the ongoing unpredictable flux, and the context-dependency of meaning, undermines arguments that applying the same behaviour in the same circumstances is either possible or desirable. The Kantian categorical imperative, for example, admits no fundamental difficulty in specifying the similarities between situations or in specifying order in general, and implies that ethical decisions do not conflict or have unexpected, or undermining, consequences. But in a world of flux this is not possible. Situations and contexts *do* differ and may need to be considered (and known) individually, to diminish the possibility of generating consequences that those acting in them might define as immoral. The same behaviour in different situations (and all situations are different) may have different values and consequences. While it is possible to argue that an act is moral irrespective of its consequences, such consequences would not seem irrelevant to judging that act's effectiveness.

Furthermore, ethics in action almost always involves social events, with people (even with shared ethical positions) arguing about what is good in a particular situation, and how the situation and people involved should be categorised and compared to other situations and other people. Given the variety of the world, the reality that no two situations are absolutely identical, and the unpredictable consequences of actions, this differential and dispute is an essential part of the actuality of ethics. Furthermore, ethics easily becomes contextual, argumentative and embedded in power and status relations. Roger Scruton's remark that 'as soon as we set our own interests aside and look on human relations with the eye of an

impartial judge, we find ourselves agreeing over the rights and wrongs in any conflict' (2000: 69), may express an ethical hope but is surely rare in practice. It is a fantasy about natural order that removes the normal importance of differences of opinion, position and relationship. It also suppresses recognition of partiality or emotion as inherent in conflictual situations.

A desire for unchanging principles of codified ethical being effectively creates myths of another world, often timeless and abstract, while the world of our lives becomes thought of as secondary, imperfect or degraded, and to be overcome or transcended (Eisendrath 2003). Perhaps this is best illustrated by Plato's allegory of the cave, in which the things we observe are shadows of a reality that can only be observed in the mind, and we are urged to live with that perfect reality before us, ignoring the messy world of experience (*Republic*: 514a–520a).

If our morality aims at, and is vindicated in, a (fantasised) transcendent world then we are not fully relating to the beings we are trying to be ethical towards, in the situations we are trying to be ethical in. This could, in itself, be considered unethical. Furthermore, quests to impose perfect order may be hostile to the essential unpredictability of life itself, and hence destructive of that life.

An ethical system geared at dealing with ecological problems must be able to take complexity and unpredictability as fundamental ontological axioms. While recognising that any understanding is a simplification, it needs to avoid the harmful reductionism (or myths) of isolated atomism and controllability, and situate human action within what is known of the working of social and 'natural' ecologies, recognising that humans can only exist well within a particular set of ecological conditions. It also needs to accept that humans are not separate from the world they live within, and that they have obligations towards that world.

Schweitzer and the extension of ethics

One of the first Westerners to attempt what might be called an 'ecological ethic' was Albert Schweitzer. Schweitzer's primary fame relies upon his work as a missionary doctor, unorthodox theologian (who argued Jesus was mistaken in his prophecies about the end of the World), reformer of organ playing and commentator on Johann Sebastian Bach. A concern with ethics and spirituality was vital to Schweitzer's own life, leading him to abandon his successful career in Europe and setting up, at his own expense, a hospital in Lambaréné in Gabon, where he spent most of the rest of his life. During his life Schweitzer was both famous and sometimes idolised; however, his writings were largely ignored by professional philosophers, probably because they could not be turned into a traditional ethical system or 'ordering project', which is precisely what makes them interesting. By elucidating his work, I am not intending to suggest that Schweitzer was a moral paragon without failings, as the idea that only perfectly virtuous people should have their ethical ideas considered is an example of an over-enthusiastic ordering that diminishes ethics itself. Schweitzer was, after all, human and humans are complex and failing systems.

Schweitzer's ecological ethic is generally summarised in the phrase 'reverence for life'. This phrase immediately opens the kind of problems we have just discussed. Life feeds on other life. Life forms have different interests. There is no apparent harmony in being, nor is there an easy formula which will tell us what to do in any particular situation. If we accept his position, then we have a guide, but we have to decide for ourselves, in the situation/context, according to our knowledge and myths about the world, and expect argument with others.

Schweitzer thought that ethics needed to be active and contain an 'affirmation of the world and of life' (Schweitzer 1954: 177). Without this affirmation of the world, he thought we would end up psychologically withdrawn, refusing entanglement with the world, or even hoping for the cessation of life (ibid.: 178). Whether this is good or bad is another question. As with all ethical systems, he starts with an ethical position, a statement of what he believes to be 'good'. There is no position beyond ethics from which ethics can be derived. This is another reason why ethics always involves argument.

Schweitzer recognises the split between 'the ideal' and 'the less ideal real', arguing that while 'the heart' speaks to us of the eternal, of care for ourselves and the world, our knowledge of the world shows that human existence is contingent and that we are not nature's goal or concern. There is not just one purpose but 'cross currents that interfere with and frustrate one another' (Bixler 1955: 6). However, Schweitzer suggests that our internal drives for perfection and development need to be manifested in the world, even if they cannot be completed, otherwise we lose aspiration and aliveness, and fail in empathy. With this awareness of bifurcation at its heart, ethics becomes an inherently uneasy project with no guarantee of success.

These difficulties, plus recognition of flux and unpredictability, mean that ethical aliveness calls for constant meditation on our ontological positioning; that is, meditation on ourselves and our relation to the world and others (Schweitzer 1954: 263). Ethics requires constant correction. Schweitzer believed that 'all permanently valuable ideas [must] be continually born again in thought' (ibid.: 259), and not formulated just once as if stable and caught forever. He wanted people to think continually about the problems of existence and the relation of ethics to life. Schweitzer suggests that when people are pondering such questions of being, then 'reason' and 'feeling' are not necessarily separated.

> When reason truly plumbs the depths of questions, it ceases to be cool reason and begins willy-nilly to speak with the melodies of the heart. And the heart, when it seeks to fathom itself, discovers that its realm reaches over into that of reason.
>
> (Schweitzer 1988: 7)

Therefore, while he recognises that existential problems may not be solvable in neat order, Schweitzer calls for the whole person to be involved in the ethical and exploratory process. He is asking us not to stop with ordered explanations, but to realise and perceive our incomplete understanding and ignorance, and the

resulting mystery as *mystery* and be awed. 'The highest knowledge is to know that we are surrounded by mystery' (Schweitzer 1923: 80). Humans cannot pretend they know how ecologies work, or how their actions will turn out in advance; consequently we should embrace humility. This process of recognising ignorance renders any division between 'facts' and 'values' complicated: ethical 'thought' includes the emotional responses that are also part of the observations, knowledge and experience in that situation. His form of ethics is never closed.

Questions about life affirmation and ethics preoccupied Schweitzer during his first journey to Africa, after the start of the First World War. Famously, one day, during a journey upriver to make a medical call, when he was pondering the problem of how to join ethics, life affirmation and worldview, he encountered a herd of hippos. At that moment the phrase 'reverence for life' (*Ehrfurcht vor dem Leben*, where *Ehrfurcht* has overtones of 'awe') came into his head, and he felt that this phrase automatically unified world and life affirmation with ethics (Schweitzer 1954: 185). Schweitzer claims it brings about a spiritual relation to life and world which is in tune with both an inward life and an active ethic (ibid.: 265). 'Ethics consist, therefore, in my experiencing the compulsion to show to all will-to-live the same reverence as I do to my own' (Schweitzer 1946: 242). Without the one there is no fullness in the other. Schweitzer's leap into reverence for life arises out of an imaginative extension of empathy and awe, without insisting on previously defined boundaries.

To Schweitzer, while this experience is primary, it is not inevitable. Usually, when Western philosophers reflect on their consciousness, they tend to become abstract, wanting consciousness to be unchanging and ordered (or good) and so ignore the fact that consciousness changes from childhood to old age and always 'has some content. To think means to think something'. Similarly, we are always situated in a context, and are not alone in our thinking; we interpret the spoken, written or imagistic thoughts of others. A still more ecological reflection shows that we are living in the midst of life, with a will to live, and experiencing the rest of life as equally having a will to live (Schweitzer 1954: 186). We are in relationship to other lives. Furthermore this experience displays a mystery 'so inexplicable that it renders the difference between knowledge and ignorance relative' (Schweitzer 1988: 9). The deeper the realisation, the more it becomes a form of astonishment.

> [I]f you see with perceptive eyes into this enormous animated chaos of creation, it suddenly seizes you with vertigo. In everything you recognise yourself again. The beetle that lies dead in your path – it was something that lived, that struggled for its existence like you, that rejoiced in the sun like you, that knew anxiety and pain like you. And now it is nothing more than decomposing material – as you, too, shall be sooner or later.
>
> (Schweitzer 1988: 10)

Of course the beetle is also very different from humans, but the relationship immediately expresses ethics, however it is formulated, even if relationship is

denied. This 'experiencing' is not of an unchanging order; it expresses the complex flux of life and the entangled experience of mystery, awe and reverence, of identity or placement in the world (despite or because of its chaos), of our relatedness and estrangement; of surrender, conflict, and uncertainty. It is embedded in beings and events, not in an abstract Being (or oneness) which has no specific *relational* content. Langfeldt suggests that Schweitzer claims we cannot relate to idealised 'being', or God, as such, only to beings (1960: 46ff., 83–6). It is the experience of beings (as only partially understood) that opens us to others.

> The great fault of all ethics hitherto has been that they believed themselves to have to deal only with the relations of man to man. In reality, however, the question is what is his attitude to the world and all life that comes within his reach. A man is ethical only when life, as such, is sacred to him, that of plants and animals as that of his fellow-men, and when he devotes himself helpfully to all life that is in need of help . . . The ethic of the relation of man to man is not something apart by itself: it is only a particular relation which results from the universal one.
>
> (Schweitzer 1954: 188)

In these passages Schweitzer is suggesting both that a person's ethical orientation to the world they find themselves within shapes the world they perceive, and that ethical orientation is fundamental to their sense of being in the world.

Schweitzer suggests that in modern Western societies there is a primary repression of this empathy and the involving chaos it generates. Most people have this empathy as children, and suppress it to be like others, to get on with social life, to make an island of manageable order or simplicity, or to take out their frustrations (Schweitzer 1988: 14–15, 19). However, recognising, and accepting, both awe and the pain of interconnectedness is, he thinks, the only way to live with psychological balance and resilience.

Schweitzer also argued that the distinction between higher and lower life forms is purely subjective. We do not know the significance of other life forms in the world or the cosmos (Schweitzer 1954: 270–271). Humans may assume they are important, but we do not actually know. He further suggests that life blurs into non-life so there is no sharp duality between the two. 'Is not every life process, right down to the uniting of two elements, bound up with something like feeling and sensitivity?' (Schweitzer 1988: 25). He can consider crystals and snowflakes as examples of will-to-life (Schweitzer 1946: 213; 1988: 10). Life depends on non-life and this generates complicated relationships. Although this extended compassion may be beneficial to its holders, it is not simple and has costs.

This lack of definite boundaries and constant interactions reinforces the unavoidable problem mentioned earlier: will-to-life is divided against itself. 'One existence holds its own at the cost of another: one destroys another' (1954: 188). We cannot bring about complete harmony, or make a unified ethics in all situations, as we live at the cost of other life. For some this realisation may lead to suicidal feelings as nature seems eternally cruel, but Schweitzer argues that

these depressed feelings can be overcome by reverence for the life within us, as it is. We can attempt to minimise harm and release others as much as possible from their suffering, even if we fail (Schweitzer 1988: 189). Sometimes it may be more empathetic to kill a creature quickly than to watch it die slowly. Saving one creature may mean killing others to keep it alive. At all times humans are faced with ethical dilemmas and this is central. Ease is not possible, and realisation of this releases people from the idea that they are already 'civilised' or superior, and helps the realisation that with technological and other progress changing the boundaries of what is possible, ethical civilisation becomes even harder (Schweitzer 1954: 189–90). 'We are living in truth, when we experience these conflicts more profoundly. The good conscience is an invention of the devil' (Schweitzer 1946: 252).

In Schweitzer's terms there is no orderly, pure, or perfect way in which we can be specially 'good', and someone else, or something else, can be 'all bad'. It is easily possible to do evil and good at the same time. Such a realisation may mitigate those projective processes whereby we see others as evil to make ourselves good by comparison; what psychoanalyst Carl Jung calls 'shadow projection'. Jung argues that dealing with shadow projection makes the highest demands on an individual's morality, for the acceptance of our own necessary 'evil' 'means nothing less than that [our] whole moral existence is put into question' (Jung 1977: §1414). Schweitzer may go further than Jung by implying that projection can exist in our relations to everything that lives; that is, in the whole uncertainties of the ecological and social system, which challenge cultural and personal ordering. There is always more work to be done in self-awareness and more to learn about the internal and external effects of our actions and their unintended consequences as they spread through complex systems. What might be as correct as we can get at one time, may not be at another. We need to be constantly open to the possibilities of change and modification, and thus guard against social, and other, institutions which hide the harmful consequences of acting within their 'ethical' understandings.

As implied, Schweitzer's ethics removes humanity from the absolute centre of ethical life as 'humanity may not conceive of itself as the purpose of the infinite world' (Schweitzer 1988: 39). In Africa this 'decentering' was even further borne out by his experience:

> Whether we will or no, all of us here live under the influence of the daily repeated experience that nature is everything and man is nothing. This brings into our general view of life . . . something which makes us conscious of the feverishness and vanity of the life of Europe; it seems almost something abnormal that over a portion of the Earth's surface nature should be nothing and man everything!
>
> (Schweitzer 1948: 101)

With this ethic, we aim to relate to life not just in terms of its purpose for us, but as a participant within it, being affected and affecting. By his focus on

ultimate irresolvability, Schweitzer changes the contrast between virtue and benefit. An ideal virtuous act may indeed be beneficial, but in practice there will often be conflict, and this is the nature of morals. While holders of classical ethical systems seem to recognise that there will occasionally, or artificially, be ethical dilemmas but hope that these dilemmas can be solved by proper application of their formula or an imagined complete knowledge, Schweitzer suggests that such dilemmas are normal and fundamental, part of ethical being, and cannot be escaped. Disorder, conflict and unpredictability are inherent in ethics and in life.

Challenge of ethical complexity

The main problems with this philosophy, from the traditional point of view, are clear. It represents an ethical attitude rather than an ethical code. It gives no practical guide as to what to do, and claims there can be no such guide. There is little reduction to order, or orderly virtue; while it foregrounds connection, the philosophy is sceptical of harmony in connection. Yet, at the same time, if we look at the patterns of life, the interconnections of life, and the mutual dependencies of life, then it seems clear we must strive to maintain those working patterns, connections and balances we know of to protect life, while being careful not to add unexpected changes. Schweitzer objects not to microbes as such but to an imbalance of microbes, he objects not to locusts but to plagues of locusts, he objects to action which disrupts the patterns of survival and adaptation of other creatures. He objects to that which threatens the complex of life itself.

Some may think Schweitzer asks too much. Ethicist Mary Warnock, although not mentioning him by name in her review of ethical thought, argues against extension of moral responsibility to all life on the grounds that a bias towards making humans superior is the basis of morality. Only humans have morality and should consequently value humans over animals (1988: 68–69). However, even if other life forms cannot make moral decisions, it is not unimaginable that, as moral creatures, humans have responsibilities to them, and that we might want to 'harm' a human (by preventing the fulfilment of their desires) when their actions generate suffering in another creature. We might, at that instance, value the non-human more than the human, even if this decision is difficult. Indeed, if we recognise our interdependence, and that the actions of humans are likely to destroy the environment in which humans and 'others' live, then we might well regard it as moral to prevent these actions, so that 'we' can all live. There is no certain, or guiltless, place from which to act. Warnock is simply closing ethics off by erecting boundaries to make decisions easier. This may not always be considered ethical either.

Correctly, Warnock alleges that 'generalised benevolence' might lead to people changing their minds and being unreliable (ibid.: 88–89). This latter point can only become an objection if someone refuses to accept that current certainties may be disordered by further experience and considerations. It is not necessarily moral to keep a promise once we discover that the promise will lead to unexpected harm or immorality, or that greater good may arise if we act differently. We might

prevent people from harming the ecosystem as best we can, but if our actions have unexpected consequences, then we should perhaps change them. We may, indeed, despite Warnock, wish to acquit someone from a crime if we can understand and excuse their motives (ibid.: 88) because that could change our perception of the nature of the 'crime'.

However, the weaknesses of Schweitzer's position are also its strengths. While providing a *unified* guide (of the kind we might need), it recognises chaos, flux, difficulty and the ongoing complexity of ethics. It recognises that an ethical decision may not be beneficial towards all; that every decision carries a possible burden; that the repercussions of a decision may not be what we expect and that we may need to be open to the world to change our mind. Although we are more likely to regard our friends and family above other humans, other humans above animals, animals above plants and possibly plants above rocks, there is no inevitability about this in all situations. Sometimes we might act differently and ethically. Schweitzer's position implies that that we should try and learn about situations and the beings within them, about complex ecological systems (even if such learning is always provisional), so that we can discover what acts are likely to be beneficial towards others and ourselves, and to realise that ethics is exploratory, and not finalised. We can easily disrupt processes by our virtue as much as our evil. With different myths and knowledges we might behave differently. Schweitzer's view accepts mystery and flux as fundamental features of ontology, rather than positing a myth of unchanging ideality. It embraces thinking, imagining, feeling and empathy and encourages attempts to overcome the repression of empathy and consciousness. Such 'ethical reason' is not transcendent or purely intellectual but involves all bodily faculties. As such, this ethics seems able to posit a 'mode of being' in complexity, of immersion within unpredictable interacting fields without desiring to control them completely. It is not based in a special mystical insight, but it is based in a set of thoughts which can occur to anyone who pursues them, and those thoughts accept the being of the world as we find it; in order, conflict, uncertainty and chaos. It accepts that ethics, at best, is a pool of order-making which can never be complete, and may indeed be contradictory.

Conclusions

In taking decisions that lead to our future we are fundamentally influenced by ethical concerns. If ecological relationships are complex, unpredictable and in constant upheaval, then many traditional ethical approaches to the future will not work. If we attempt to enforce ideas of harmony and stability they will fail. If we think we can control events, easily recognise similarities, or not suffer from unintended consequences, then we are also likely to fail. By challenging ethical myths about the ordered nature of being, Schweitzer allows us to recognise the complexity, uncertainty and mystery of ecological processes and allows us to attend gently to what may appear as disorder. We may then see that what we perceive as disorder does not always require suppression, or more of the order that we are

already attempting. Perhaps we can attend to life and learn from it and perhaps revise our ethics, so that it becomes more attentive of the complex and confusing nature of reality and of the others we share the world with. This view allows the world to *be*, rather than demanding we sacrifice it to an ideal of order. If the world was ordered and determined, then there could be no ethical life. It is the disorder, the complexity and the uncertainty that makes ethics possible, even as it undermines any particular ethical rules we develop. Facing the future ethically involves a process of constant attention, learning, debate, adjustment and expectation that our actions will have unintended consequences, and that we live in an uncontrollable system.

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