ETHICS AFTER NEW MATERIALISM: A MODEST UNDERTAKING

John Reader and Adrian Evans

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A Modest Undertaking

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Chapter 1

Introduction

1.1 Introduction

In *Theology and New Materialism* (Reader, 2017), John Reader argued that uncritical theological appropriations of New Materialism needed to be counter-balanced by what is termed Relational Christian Realism, building particularly upon the work of the philosophers Bruno Latour and Bernard Stiegler. Particular weaknesses of such uncritical interpretations are to be found in the areas of transcendence, human agency and political implementation. In this publication, the discussion is extended to the sphere of ethics; although much attention will be given to the contributions of some new materialists and particularly their forerunner in Gilles Deleuze, the objective is to show how work needs to go beyond this. What will emerge from the flow of the debate in this publication is that ethics, along with both science and religion, needs to learn to exercise a degree of modesty. What we mean by this is that their respective claims to establish truth in some exclusive manner, and therefore at the cost of an open engagement with other contributions, need to be tempered by the recognition that no one approach has the monopoly of truth. Some years ago, one of

us (John Reader) coined the disrespectful phrase 'string vest theory' to illustrate the tension between the structures and institutions through which we operate and the need for gaps and spaces in which creative thought and activity can flourish (Goodall and Reader, 1992, p.152). String vests function to provide warmth only by achieving an optimum balance between string and holes. Too much string and the vital gaps disappear; but none at all and everything falls apart. The danger with all of our institutions and indeed our academic disciplines is that they become so dominant and all-consuming that they begin to make inflated claims for their importance and significance. The creative spaces get squeezed out and the processes by which we move forward and develop are so diminished that the life and vitality is frozen out. In each of the areas to be discussed in this text we will see the need for a certain modesty: in ethics, in science and indeed in religion.

1.2 Background Ideas

Some of the ideas which support this approach are worth a quick mention. In the 1990s, when all the talk was of postmodernity and the breakdown of metanarratives—in other words, those frameworks which claimed to represent exclusive truth claims—I proposed that, rather than being grand narratives, or the alternative of simply local narratives, we should view these frameworks as major narratives (Reader, 1997, pp.74-8). Hence, still important and of value, but open enough to the challenge of other frameworks to be able to engage in critical debate. In most areas of our lives we are prepared to admit that we might be wrong when faced with new experiences or fresh evidence. Latour talks about truth as the process of keeping the references circulating, which seems a similar approach. When we prevent the references from circulating, and stop potential participants contributing to a process of continued discovery and discernment, that is when dogmatic truth claims emerge and the few attempt to impose their interpretations or 'truths' upon the rest. Power takes over. Established frameworks become frozen in aspic and provide only a false sense of security. A dimension which will play out as this exploration progresses is that of the *performative*, or what we have called in the theological world, material religious practices. If attention is given to what people actually do rather than what they say or claim, then it is much easier to identify the process of change and development in action and to become aware of the differences that shape our lives on all levels. That is the dimension of practice. But we must also acknowledge our engagement with the material, which is both ourselves and also the artefacts or technologies through which we exercise our capacities to order and create. Modesty in truth claims then, but also modesty in recognising the day to day realities of our lives, the others on whom we depend, whether human or non-human, and the complexities which we all too often reduce to convenient generalities in order to manipulate and control. In ethics there is a tendency to construct ethical frameworks in order to cope with that complexity and produce criteria by which we can evaluate human action and make decisions about the right way forward, but, as we shall see, one of the contributions of New Materialism is to challenge this way of working on the grounds that it oversimplifies the complexity and underestimates the uncertainties and contingencies of our lives. We need to become more comfortable with that which we cannot control and is constantly moving beyond us. Modesty may demand that we move more slowly and carefully rather than dashing ahead in ways that our culture and digital technology encourages us to do. This is a modest undertaking, then, and asks a certain patience and willingness to explore. To undertake this task, we have identified five principles and underlying frameworks that bring to the surface some of the dimensions and impacts associated with modest ethics.

Chapter 2

Modest Ethics

2.1 The Ethics of Information

As an example of how this new modesty might play out in context we examine the ethics of information. The initial task is to establish links between the material and, in this case, media and information, and to recognise the ethical dimensions of this debate. Both areas of concern return us to discussions about technology, as already pursued in an earlier publication in this series (Reader and Savin-Baden, 2018). The challenge is to steer between, on the one hand, forms of technological determinism, and, on the other, the notion that humans are fully in control of and capable of shaping technologies for their own purposes and use. Neither does justice to the complexity of the engagements and interactions between humans are always already themselves material, embedded and networked creatures, not totally transparent to ourselves. How and where to locate an accurate description of human agency remains an open question to be examined in detail in specific instances. As John Durham Peters says, things can be alive, and people can be machines (Peters, 2016,

p.89). He quotes Saint Augustine: 'We however, who enjoy and use other things, are things ourselves'. Any philosophy of media needs to acknowledge that the barriers between subject and object, between the human and the non-human are porous and negotiable, and an understanding of this is essential when one comes to consider the ethical implications of new developments in this area. Media are already material, but then so are the humans employing them, who are themselves subject to the influences of all forms of communication. The question is whether this now demands a different conceptuality given this understanding and the new challenges evident, particularly with digital technology. Perhaps an 'ethics' derived in part from New Materialism might be a valuable contribution to this debate. As we register our awareness of other ethical frameworks it will become clear that they no longer meet the requirements of a new and appropriate conceptuality.

An important intervention in the field of information ethics is that of Luciano Floridi and a brief examination of his work will illustrate both how he draws upon more traditional ethical frameworks and also how he begins to move beyond them (Floridi, 2010). He begins by comparing information ethics to environmental ethics (itself of interest given the trajectory of this series on Ethical Futures and the parallel concern with environmental matters). The latter, he argues, grounds its analysis upon the intrinsic worthiness of life and the intrinsically negative value of suffering (Floridi, 2010, p.111). From this biocentric approach he wants to extend these principles to all forms of existence and replace biocentrism with what he calls 'ontocentrism'. So 'being' is more fundamental than life, and entropy (or randomness) more so than suffering. The existence and flourishing of all entities and their global environment on the one hand, and entropy as destruction, corruption, pollution and depletion of informational objects on the other hand, should be the guidelines of this ontocentrism. Being/information has an intrinsic value, and any informational entity has a right to persist, and indeed a right to flourish, in its own state. Floridi writes: As a consequence of such 'rights', information ethics evaluates the duty of any moral agent in terms of contribution to the growth of the infosphere and any process, action or event that negatively affects the whole infosphere—not just an informational entity—as an increase in its level of entropy and hence an instance of evil (Floridi, 2010, pp.112-13).

Not only is such an approach rights based, but it also requires an impartial and universal interpretation which he calls an ontological equality principle (Floridi, 2010, p.113), so any form of reality, by virtue of existing, should be acknowledged as having the right to exist and flourish. The application of this could be achieved whenever actions are impartial, universal and 'caring'. Floridi also employs the concept of the social contract in this context, although this would have to be expanded beyond its more normal anthropocentric interpretation.

Perhaps most significantly, Floridi argues that both bioethics and environmental ethics fail to achieve a level of complete impartiality as they are still biased against what is inanimate, lifeless and intangible, whereas information ethics breaks through this barrier and lowers the condition for the attribution of ethical value with the result that all entities, as being informational objects, have an intrinsic moral value, although possibly quite minimal and overridable, and therefore count as moral patients, subject to some equally minimal degree of moral respect understood as a disinterested, appreciative and careful attention (Floridi, 2010, p.116). As some will realise, this comes close to a deep ecology approach, which may seem quite surprising from a more analytically oriented thinker such as Floridi.

We have presented his approach at some length as it is really important to recognise how far this goes towards a radical understanding of ethics. For those familiar with current philosophical movements it may seem adjacent to the Object Oriented Ontology associated with Harman and Bryant, although it does not enter into the complexity of this position in any detail. The question, however, is whether what is basically a Kantian, rights-based, social contract approach goes far enough in achieving Floridi's objective of attributing moral value to entities which are non-human and indeed inanimate. We note that there are some neo-Kantian approaches that extend concern to other animate beings. But Floridi is pushing the boundaries beyond what may be convincing and runs the risk of building a radically new approach on an understanding of human agency which is still too individualistic. It is also essentially a rationalist approach which assumes that humans are detached from and thereby capable of exercising universal and impartial moral judgements on what is simply a greater range of entities than hitherto acknowledged. One of the classic critiques of a Kantian approach is that it is unable to establish motives for right action. Why be moral at all? What needs to be argued is that Floridi's objectives are more appropriately achieved by an ethics developed through and beyond New Materialism, building specifically upon the work of Deleuze. So, it is to this that we now turn.

2.2 Deleuze and Ethics

Since so many of the New Materialist theorists draw upon Deleuze it would not make sense to begin to present their thought without at least some reference to his work (see Baker, James and Reader, 2015, pp.37-40). Here, we will once again build upon an interpretation of Deleuze's work by the feminist New Materialist philosopher Rosi Braidotti (Braidotti, 2012, pp.170-97). For those not familiar with this work, it requires a mental shift which is challenging in its own right. We are not about to encounter yet another ethical framework in competition with utilitarianism, deontological ethics, virtue ethics, or even a Habermasian communicative ethics, because what Deleuze sets out to describe does not fit these categories. The problem with this is that it tends to be dismissed as ethical relativism or even a refusal to engage with this sort of analysis. Yet Braidotti claims that Deleuze's engagement with ethics is at the heart of his philosophy (Braidotti, 2012, p.170). In contrast to a Derridean or Levinasian approach to ethics, which focuses upon the relationship between the subject and the other-the unconditional demand of the other in terms of proximity and hospitality which may often lead to vulnerability and sacrifice—Deleuze proposes an affirmative and positive understanding based on a notion of becoming. This is an active, relational ontology in which otherness is approached as the expression of a productive limit or generative threshold which calls for an always already compromised set of negotiations. In other words, there is no escape from the messy, confused and complex web of relationships and assemblages which constitute the creative chaos that is life as lived experience. Unlike Floridi's Kantian approach, which assumes a self-regulating and rational moral subject or individual struggling with how to implement an existing set of values, this digs down to the ever-changing and developing interrelationships among human beings as well as between humans and non-humans. There is no overarching or transcendent position from which one might evaluate situations and reach a justifiable ethical decision, but rather the constant embedding in the midst of contexts where human autonomy is already proscribed and limited, both in terms of relationships with others and with the non-human other. Thus, it should be possible to acknowledge the ways in which, for instance, media and information as encountered in digital technology are always already both shaped by and shaping the relationships which are a matter of concern.

The concept of a moral individual or subject is brought into question and replaced by an interest in the affects, or impacts, and indeed the effects of truth and power that such a subject's actions are likely to have upon the world. As Braidotti says:

This is a kind of ethical pragmatism, which defines ethics as the practice that cultivates affirmative modes of relation, active forces, and values. It is also conceptually linked to the notion of embodied materialism and to a non-unitary vision of the subject (Braidotti, 2012, p.173).

Hence, ethics is a discourse about forces, desires and values that act as empowering modes of becoming whereas morality is the implementation of established protocols and sets of rules. Somewhat like both Nietzsche and Spinoza, Deleuze views existing moral frameworks as representing essentially negative and resentful emotions characteristic of life-denying creative passions. Life, vitality, movement and change emerging as affect and creativity are the life-enhancing approach which Deleuze aims to promote as an ethics for good, although always acknowledging that change in itself is neither good nor evil. Immanence rather than transcendence, and engagement with context rather than predetermined structures is the way to move towards lifeenhancing actions and events. All of this is to be seen as action in the context of the assemblages, gatherings and collectives—both human and non-human—which constitute the sphere within which ethics is to operate. Ethics means faithfulness to the desire to become, but what is to become is not predetermined or even evaluated in advance. One's engagement is empirically embodied and embedded because it is inter-relational and collective (Braidotti, 2012, p.179).

It is difficult to offer more than a taste of this approach, but the foregoing summary gives some sense of what is distinctive and interesting about a Deleuzian position. It is certainly very different from more familiar and traditional ethical frameworks, even the more recent ones deriving from Derrida and Habermas. As one begins to question elements of this, it will become clearer how New Materialist versions of ethics (acknowledging the inevitable plurality of these) relate powerfully to Deleuze, both providing a more dynamic and creative conceptuality appropriate for the subjects under discussion, but also limiting possibilities in terms of making decisions in the public sphere. A Philosophy of Christian Materialism, for instance, drew upon the work of Alain Badiou to suggest that, when decisions have to be made, a different

sort of dynamic is called for (Baker, James and Reader, 2015). The challenge then is to balance what appears to be a form of decisionism with the open and more fluid approached associated with New Materialism. If this is about human subjects making lone decisions at key moments, then it would appear to exclude the activity of agents (human and non-human) acting in concert as part of embedded assemblages in response to ongoing shifting contexts. There is a need for both the relational aspect (proximity) and what theologians would call the apophatic (distance).

2.3 Ethics in the Infosphere

Before moving into direct discussion of the potential contribution of an New Materialist ethics we need to identify specific issues raised by what Floridi calls 'the infosphere' in order to evaluate existing ethical responses. In a longer text looking at the so-called 4th Revolution, he highlights key aspects of this new reality (Floridi, 2014). He argues that ICTs (Information Communication Technologies) are as much modifying our world as creating new realities and promoting an informational interpretation of every aspect of our world and our lives in it (Floridi, 2014, p.43). The online digital world is spilling over into the offline analogue world and merging with it. The Internet of Things, Ambient Intelligence and web-augmented things are encroaching ever more deeply (Reader and Savin-Baden, 2018). Floridi savs we are increasingly living 'onlife' (Floridi, 2014, p.43). The distinction between online and offline will eventually disappear altogether. For successive generations this is already the reality. This is the infosphere in which life is increasingly synchronised, delocalised and correlated (Floridi, 2014, p.48). An obvious political and ethical problem this raises is that of the digital divide, which could quickly become a chasm and lead to what he calls 'informational slums' (Floridi, 2014, p.49). The infosphere could become synonymous with reality itself. In addition, there will be less emphasis

upon the physical nature of objects and processes which means that a right of usage becomes at least as important as the right to ownership. Floridi calls this virtual materialism (Floridi, 2014, p.50). (Note, however, that this is not to be confused with Deleuze's very different use of 'virtual'). In terms of information, though, it poses the issue of how much of this is a public good rather than an individual possession. Software is acknowledged to be a (digital) good, even though intangible. But where and how are the lines to be drawn in this new context?

Further issues that must be registered in passing are those of identity and how influential ICTs are becoming in shaping individual identities as well as our social selves and relationships with others. 'Onlife' experience does not respect boundaries between different online and offline environments, so there might need to be more spaces or affordances where self-expression and self-construction can take place (Floridi, 2014, p.73). All of this brings its own dangers, as we are becoming acutely aware. Privacy, agency, political democracy and how this is to be mediated are additional issues that arise in the infosphere and require some sort of ethical response. Whether Floridi's rights-based and individualistic, rationalist ethical framework is adequate to address these is a serious question. Beyond this is the challenge of the environmental impacts of the infosphere which tend to be neglected but are indeed significant. Floridi acknowledges that we are taking a gamble by increasing our use of ICTs with their associated environmental damage in the hope that these will enable advances in technology that can avert the worst consequences of ecological damage. But time may not be on our side. Thus, there is a raft of immediate social, political, environmental and individual concerns raised by the infosphere for which Floridi's only response is to appeal to an ethical framework which dates from a totally different era. What New Materialism and Relational Christian Realism offer is a new conceptuality to form the basis of an appropriate and timely ethics.

2.4 New Materialism and Ethics

As might be gathered from the brief exposition of Deleuze, ethics as such does not always feature as a major or explicit concern in the writings of the New Materialists and one must also be wary of categorising what is a diverse collection of thinkers under one simple heading. In order to offer a further sense of what is to be encountered in this field we turn to a series of conversations between Brian Massumi (translator of Deleuze and Guattari's *A Thousand Plateaus*) and a number of fellow academics (Massumi, 2015). In one of these conversations, Massumi lays out in more detail his understanding of ethics as resulting from a New Materialist approach. He suggests that moving in an ethical direction is not a matter of attaching positive or negative values to actions based on some pre-set system of judgement. It is more about realising a particular potential and seeing how this plays out in terms of its effects upon the overall situation. He writes:

Ethics in this sense is completely situational. It's completely pragmatic. And it happens between people in the social gaps. There is no intrinsic good or evil (Massumi, 2015, p.11).

Ethics is about how we inhabit uncertainty, together. There is still a distinction between good and bad although not between good and evil, the good being that which realises the maximum potential in a situation, the best that can become. This requires living and acting within the constraints that are inevitably part of our existence. He contrasts this with a more traditional approach which presupposes acting according to *a priori* moral imperatives. What is important is what emerges from within a specific set of circumstances and the impacts this then has upon those others with whom one is engaged. Although he does not explicitly extend this to non-humans this would be something that New Materialism would aim to do. In Deleuze's terms this is an acknowledgement of the priority of immanence over transcendence as it moves away from the idea that there is some overall, overarching universalist framework of values against which one can evaluate one's actions or motives. Instead, one acts within the assemblages or gatherings of which one is already a part and hopes that what emerges will realise the potential for good, or becoming, that might result from this. The main criterion is that the result should be life-affirming rather than life-denying. Whilst this is indeed creative and potentially liberating, does it go far enough in addressing the ethical dilemmas one has to face or provide at least a steer in the face of the sort of challenges evident within the field of information ethics?

The task now is to briefly examine both the strengths and weaknesses of the New Materialist approach and to propose how the resources available from within Relational Christian Realism might supplement and help to construct a trajectory which moves beyond these limitations. As Reader (2017) has already covered this in some detail, this will be a summary rather than a full exposition. The first area is that identified above as the tension between transcendence and immanence. As against such a stark binary Relational Christian Realism employs the thought of Latour to argue instead for an understanding of local or mini transcendences (Reader, 2017, pp.20-30). Rather than dismissing the concept completely, Latour proposes that there is a plurality of different contexts within which one can legitimately understand that there is something which goes beyond the immediate and the available, and in terms of which one can begin to interpret and evaluate one's thoughts and actions. The issue is how much one claims for such mini or local transcendences. As long as they are not then turned into a universal or overarching set of criteria to be applied across all contexts, then it is acceptable to operate with them as a reference point in one's ethical dilemmas. This approach enables one to acknowledge and respect difference but without totally abandoning any sense of an appeal to something beyond oneself. In essence this is a half-way house between relying

on a predetermined set of moral values and simply making it up as one goes along. Context and situation are fully recognised but without allowing them to be the only determining factors. We suggest that this is a more appropriate basis for a practical ethics. Once again this is where retaining a dynamic tension between the relational (proximity) and the apophatic (distance) becomes important.

A second area which is of equal importance is that of agency and what is meant by that. Reader (2017) looks in detail at various interpretations of this to be found in the works of Jane Bennett, Levi Bryant, Braidotti and Manuel DeLanda, each of them important contributors to New Materialism (Reader, 2017, pp.48-61). There are two crucial issues which require a different and expanded understanding of human agency, and which can draw heavily upon New Materialism. First is how to acknowledge the role of non-humans in how things occur and develop in the world, and this clearly emerges from a concern with environmental issues. Humans are always already fully embedded in the assemblages, gatherings and collectives which are the effective means by which change occurs, either for good or bad. Whether we are talking about technology or indeed what we describe as nature, humans do not function as lone individuals distinct and separate from what is around and beyond them. The relevant term from New Materialism in this context is that of distributed agency. The question of what that means in any particular situation has to be left to examination, but it better describes the ways in which humans function in practice. Second is to address the question of human autonomy, and this discourse of assemblages and distributed agency again presents a more appropriate interpretation of the constraints and limits within which humans operate. There is a difference between agents and subjects, and this alternative understanding moves the debates beyond the binary between subject and object which presupposes that humans are always the subjects in control of, and manipulating for their own benefit, either nature or technology as objects. If agency is indeed distributed within the assemblages of humans and

non-humans, then we gain a more realistic perspective upon how we function within that greater whole. This is perhaps the major area where New Materialism has a conceptual advantage over more traditional interpretations.

A third area is related to this but draws upon some other philosophers and a greater range of ideas. One of the problems identified with Floridi's approach is that it is based too heavily upon the notion that humans operate as rational thinkers and decision makers and that once the evidence and arguments are presented one can reasonably expect clear and sensible decisions to follow. This fails to take into account what might be called the subjective or affective dimensions of what it is to be human. Reader (2005) drew upon the thought of Derrida and Levinas to argue for a pre-autonomous level of human functioning. This acknowledges that one often engages with others in situations before any process of conscious thought or decision-making has taken place. So, the moment of eye contact with another person is already in advance of any conscious reaction or response and can easily determine or shape what happens next. This is not to deny a level of autonomy, but to recognise that humans are always so much more than what happens at a conscious level. New Materialist ideas on affect and embodiment would further add to this understanding and challenge Floridi's appeal to a reduction of humans to the simply rational. Allied to this are the concepts of metastability and neuroplasticity associated with the philosophers Gilbert Simondon and Catherine Malabou (see Reader, 2017, pp.72-9). The issue which these ideas attempt to address is that of the capacity of humans to change and develop, one which is surely crucial if ethical problems are to receive alternative responses. If it is the case that human behaviour and responses are largely predetermined by existing patterns of conduct or adherence to specific traditional frameworks—ethical, political or religious—then the scope for flexibility and adaptation is severely limited and hope for the future, either environmental or technological, is going to be in short supply. Both philosophy and related ideas and

research from neuroscience can offer a deeper understanding of the human capacity to alter damaging patterns of behaviour and provide a more positive outlook. However, this must not be limited to the purely rational and conscious as we have already seen. Once again, this is an area where New Materialist thinkers have a significant contribution to make.

2.5 In defence of Time and Spaces to reflect

As argued above ideas from New Materialism certainly assist in moving beyond the more traditional approaches which now seem inadequate in their overall conceptualities to address the ethical questions raised by both environmental and digital technological challenges. Yet they also have their limits—hence the proposal to supplement them with concepts from other sources, notably Latour and Stiegler. In summary, those that we would commend from Latour include his suggestion that truth is a matter of circulating references and that one of the keys to constructing appropriate responses is to keep feeding into any discussion of ethical or political dilemmas further ideas, people or agents (to use the New Materialist terminology). It is when the references stop circulating and someone claims to have reached definitive answers which they then intend to impose upon others that one needs to get worried. This would represent a return to the universal claims of traditional ethical or religious frameworks. The alternative is not some form of relativism but a consideration of the plurality of voices that need to be heard and acknowledged in any serious debate. A further helpful idea is Latour's suggestion that what we need to deal with are matters of concern rather than matters of fact (Latour, 2004). The latter are always in danger of reducing complexity to an evidence-based approach which cannot recognise that values are always already embedded in such judgements. The task is to acknowledge those values and bring them to the surface by addressing shared matters of concern. What this also requires is that we take time reassembling the various factors and components that go to make up any specific matter of concern rather than trying to reach quick and easy conclusions that fail to address the whole range of issues that are normally involved. Take time, stand back, allow other factors and ideas to enter the debate, and keep working on the issues rather than pre-empting the discussions with sound bite solutions. It is not always easy to abide by these proposals and there are times when decisions have to be made with greater haste, but there is much to commend in Latour's overall approach.

To summarise Stiegler's contribution to this discussion is even more challenging, but more detail is again to be found in Reader (2017), especially Chapter 6. One pair of concepts that is certainly relevant to this particular debate is the terms 'otium' and 'negotium' (Stiegler, 2013). Both are derived from the time when Roman soldiers were allowed time out, or recreation from the normal business of fighting. Otium was that time out and negotium the carrying on of the conflict. Stiegler suggests that in order to stand back and take time out to reflect and consider we need to regain those spaces and opportunities similar to the otium—the danger being that the pace and rapidity with which we are forced into functioning by digital technology leads to a pre-empting of critical thought and response (Stiegler, 2013, p.60). He sees religious practices and artefacts as being conducive to this practice through repetition and attention to those symbols and images which encourage deeper reflection. Care, attention and attending to what is possible through the slow work of time, are each potential antidotes to the instant and exploitative demands thrust upon us moment by moment by the new technologies. Some of the references that need to be kept in circulation are therefore the resources of space and places for reflection that both Stiegler and Latour associate with religious traditions. If the opposite of religion is neglect, then paying proper attention to the matters of concern is indeed consistent with a religious approach, although there is a risk that institutional religion can itself be too easily drawn into the instant culture of digital technology.

Our understanding of knowledge is another area where Stiegler has some important ideas. He argues that much of what is now counted as knowledge is actually information. We are bombarded with information but without the know-how or wisdom to fully engage with what is being presented to us. Knowledge requires direct participation rather than a simple recording or absorbing of one thing after another, and this again is an area where religious traditions carry an alternative understanding. Knowing that is not the same as knowing how or being able to identify in depth with what one is encountering. In terms of relationships with others, both human and non-human, this deeper engagement is essential for exercising care and attention. Once again this is about time, or the lack of it, in our contemporary culture. It perhaps throws a new perspective on Floridi's idea of the infosphere in which that time may become ever more difficult to find and protect.

Chapter 3

From Modest Ethics to Modest Religion

3.1 Relational Christian Realism and Ethics

A key public theologian who already models the dimensions of a modest ethics as reflected in Relational Christian Realism is John Atherton who, before he died in 2016, was working with ideas of wellbeing (Atherton, 2018). He was aware that there are possible links with Relational Christian Realism and that this is not a matter of presenting an ethical framework in any traditional sense, but rather of taking advantage of empirical research and examining the actual practices to be found within a religious context. This is based upon sociological and psychological research into the idea of subjective wellbeing which reveals that certain key elements contribute to this. Briefly, these are: emotional wellbeing as positive feelings about the future combined with a degree of personal resilience; finding meaning in one's life; being able to develop strategies for dealing with difficult circumstances and challenges; the social support provided by family and friends; how each of the above can be communicated to younger generations; and then a sense that one's life is of value not only to oneself but also to others (Atherton, 2018, p.65). Atherton's argument is that it is possible to identify how religious beliefs and practices can also contribute to each of these areas. This is not presented as a proposal to prove the existence of God but to suggest that religions can have value in terms of supporting wellbeing.

The equivalents of the areas above are then: comforting beliefs and the faith and trust in a better future and the possibility of transformation which support emotional wellbeing; finding meaning by connecting to a reality beyond oneself; the experience of rituals and repetition within worship—something that Stiegler also notes as being of value in creating alternative spaces where one can distance oneself from the constant and immediate demands of digital technology; regulating lifestyle and behaviour which enables one to acquire life skills to cope with difficult circumstances; churchgoing as providing social support and networking; nurturing young people through religious engagement with schools and education; and having a philosophy of life which could well include a vision of the common good. A question might then be the extent to which digital technology contributes positively, or otherwise, to each of those categories. Can one see how and under what circumstances information technology through the digital is either life enhancing or life denying in terms of each of those areas? This is not an ethical framework but a means of evaluating the impact and performance of the digital against certain empirically established criteria.

We would also want to add to that list a concern for the environment, not in the narrow sense of circumstances which would simply be of benefit to humans such that relationships with the non-human are no more than instrumental for human wellbeing, but rather for the wellbeing of the non-human in its own right. Under what circumstances does the digital either benefit or harm the wellbeing of the planet and all of those with whom we share this fragile earth? This feels like a really important question to raise and doing so in this way could take us beyond the more traditional Kantian framework developed by Floridi. Atherton's work offers some real content to what could otherwise appear a rather schematic contribution from Relational Christian Realism. Much of the current use of the digital, even within church circles, is based on its capacity to provide information, or as a means of communication. If, with Stiegler, we can agree that knowledge is so much more than either information or communication but is about participation and active engagement with oneself and others, then we have the basis for a critique of much contemporary practice in this field.

One final area where Relational Christian Realism presents a different approach is what we have referred to as the dynamic, or tension, between proximity and distance. What we experience with digital technology is generally a lack of space and distance as everything is instant and immediate and we are tempted to respond unthinkingly and without due care and attention. Religious traditions still protect that delicate and vital dynamic which allow for withdrawal, and the capacity to distance oneself from the immediate. (The 'right to be forgotten' is an interesting position in this respect.) Reader (2017) uses the terms relational and apophatic to describe this. Latour and New Materialism are strong when it comes to describing the relational, and this is crucial, but less convincing when it comes to acknowledging that which escapes description and articulation (the apophatic). This, again, is where religious traditions still have an advantage in that they can point to that which lies beyond, even though these might be mini or local transcendences. Spaces for other spaces—or so-called 'khora'—are another means of articulating this priority.

A further dimension is perhaps an ethics of non-appropriation or allowing others (human and non-human) to exist for themselves in their own right rather than as what they might be for us. This takes us back to Floridi's point about everything existing for itself and the need to respect and acknowledge this. Whether and to what extent this is really possible is a subject for further exploration, but it is certainly part of the picture for a Relational Christian Realist ethics. There is much more to be developed and examined in this field, but the contributions of New Materialism as supplemented by the ideas from Relational Christian Realism form an appropriate contemporary approach to forming ethical responses to the subjects engaged in this paper. A final comment refers us back to the work of Derrida where he talks about 'being eaten' as meaning being appropriated by others for their own reasons, and where he suggests that this is an ideal which is often impossible to achieve, in which case the task is to ensure that one is 'eaten well' (Derrida, 1991). As we have little choice but to engage with the infosphere and digital technologies as described by Floridi, the challenge is to work out what being eaten well means in practice as we reassemble each instance in Latourian fashion, but also seek to identify and protect those spaces (otium) which Stiegler identifies as present in religious practices as well as elsewhere.

Chapter 4

From Modest Religion to Modest Science

In the previous sections we have seen that the philosophies of New Materialism (and the associated authors who complement, expand upon and critique this approach) can provide alternative theoretical lenses for understanding both the ethics of information and the ethics of digital techno-cultures. Whilst forming a broad church, these approaches all embrace modesty as one of their defining characteristics. They are modest with regards to:

- their rejection of over-arching ethical frameworks and their respect for the empirical complexities of real-world scenarios
- the amount of power and agency that they ascribe to human rationality
- and their focus on the deep interconnections between ethics and materiality, leading to a new kind of worldly ethics, which is more-than-human in its scope.

As such, these theories seem particularly well-suited to tackle an era faced with ecological decline and bearing witness to radical changes in what it means to be human (in the wake of the growth of Alternative Intelligences and digitally augmented bodies).

In this section, we continue our line of argument by contending that the philosophies of New Materialism (and associated authors) can help us to radically re-think the *nature of science and the ethical characteristics of knowledge making more generally.*

4.1 New Materialism and the ethics of knowing

First, whilst traditional representational approaches to knowledge privilege the roles of abstract cognition (mind over body) and 'secluded' knowing (laboratory over field), a New Materialist approach instead embraces the notion of 'cognition in the wild' (Hutchins, 1995) and seeks to interrogate how the material contexts in which and through which knowledge is produced help to shape and mould what can be known. For example, authors such as Latour (1993) and Pickering and Cushing (1986) have shown how the material contexts of knowledge production (including experimental apparatuses, measuring and monitoring equipment and equipment for storing and analysing data) can have a dramatic impact upon knowledge outcomes.

Second, whilst traditional representational approaches to knowledge favour rationality, calculation and logical argumentation, to the exclusion of other less-formalised or formalisable knowledge, a New Materialist approach allows space for us to consider the value and importance of tacit, embodied, pre-conscious, intuitive knowing (what was referred to as the 'pre-autonomous' in a previous section). Indeed, a New Materialist approach might even contend that the vast majority of human action and practice is habitual and pre-conscious, and that being-in-the-world precedes thinking. In terms of human action, thought, it would seem, is almost always an afterthought. Third, whilst traditional representational approaches to knowledge view knowledge making, and particularly scientific forms of knowledge making, as ways to 'represent' or mirror a relatively fixed external world, New Materialist approaches are more sensitive to the ways in which techniques, methods and epistemologies of knowledge production act more like 'tools' that simultaneously probe but also intervene with what they are trying to engage with.

4.2 Science after New Materialism

We believe that New Materialism can open up at least two fruitful avenues of enquiry for understanding the ethics of science. First, new materialist thinkers highlight the *worldly* and *material* nature of scientific knowing. This in turn allows us to consider the importance of the multiple socio-material contexts in which and through which scientific knowledge is produced and circulated—laboratories, field stations, museums, lecture halls, class rooms etc. and how these contexts help to shape the types of knowledge that can be produced. Furthermore, it also allows us to consider the ways in which other non-scientific, but still potentially 'expert' forms of practitioner or 'lay' understanding are also thoroughly entwined with their own contexts; a fact that at once makes them invaluable (think of the farmer with a lifetime of experience of farming in a specific locale) and hard to replicate through scientific abstraction alone. This in turn presents scientists with a problem (in that they cannot adequately represent these types of deeply context-dependent, intuitive knowledges); and an opportunity—to think about new ways of integrating scientific understanding with other forms of knowledge making practices.

This novel, worldly, approach to science raises important ethical issues, for if scientific understanding is shaped by material contexts and by scientific tools and equipment, then it is clear that these materials deserve far more scrutiny than they have hitherto received within mainstream science. 'Devices' such as microscopes or massspectrometers or even standards for assessing and evaluating biodiversity do not merely present reality as it is but rather they take a certain partial engagement with a segment of reality and cement and elevate it. This in itself can be very useful, to extend the analogy drawn at the very beginning of this tract, they provide the string that gives stability to the vest. However, what is also needed for science to flourish is the gaps between the string—the acknowledgement that our current scientific concepts are only 'best approximations' that can and should be swept away if new empirical evidence arises. This in itself is not a new contention but just a reassertion of the notion that science is not just a powerful way of knowing the world but also a disruptive method for generating complexity and uncertainty.

The connection between ethics, science and materiality becomes even more apparent within the design of new technologies. For, as numerous authors have shown, technologies are never purely technical in nature but are both shaped by societal values and in turn 'configure users' along certain pathways, some of which are more ethical than others. Even mundane technologies such as electric doors, or sewage systems, or door keys embody a set of assumptions and values about the nature of social life. More complex technologies such as computers or mobile phones or autonomous vehicles contain a vast ethical cosmology within both their hard and soft-wares. Consider, for example, how a programmer might plan for different crash scenarios within the software of an autonomous vehicle—how much 'weight' would be given to the livelihoods of drivers versus passengers versus other vehicles versus pedestrians when deciding on the 'least harmful' outcome. These are hardly technical issues and yet they are part and parcel of many modern technologies and seem to be largely exempt from public scrutiny or debate.

Second, new materialist thinkers highlight the character of science as a world-making, as well as, or perhaps instead of, a world-revealing enterprise. Debates about the nature of scientific knowledge making are by no means new and arguments still endure between realist and constructivist approaches to the philosophy of science. What New Materialism can offer is a middle path between these two extremes—an appreciation that the world as we apprehend it is not merely a human construction, but it is also not simply a passive, unchanging externality that is unaffected by our attempts to know and interact with it. New Materialist thinkers have coined the term 'performative' as a shorthand for this approach. Crucially, a performative approach flips the relationship between ontology and epistemology. Within a broadly realist perspective, ontology (the nature of reality) is pre-eminent and the role of epistemology is only secondary (its sole goal being to refine our sets of methods and techniques for unveiling the world as it is). In contrast, within a performative approach, epistemology and our ways, techniques, practices and apparatuses for knowing the world, come first, because it is through these that we reveal/make different ontologies and create different worlds. This in turn opens up a new field of enquiry—namely the study of the ways in which scientists make the world in their own image and the kinds of ethics, politics and aesthetics that these forms of world making entail. This field has been termed 'onto-politics' but we believe that it might equally well be termed onto-ethics.

Two excellent illustrations of the ways in which scientists engage in world making or onto-political endeavours can be found in Latour's (1993) analysis of the 'Pasteurization of France', and Annemarie Mol's (2002) analysis of the medical condition atherosclerosis. In his study of Pasteur, Latour goes to great lengths to argue that Pasteur's success owed as much to his skills as a network builder than to his skills as a laboratory scientist. Pasteur was able to gain support for his research by aligning with contemporaneous social, political and economic goals, such as the need to preserve the success of the French wine industry and the need to maintain a healthy military force. But perhaps more importantly than this, Latour also shows that pasteurisation can only become widespread as an industrial technique if certain aspects of the laboratory (equipment, methods, practices, techniques, ways of evaluating success) are exported into the real world. Thus, for Latour science is more about building novel networks or assemblages of humans and non-humans, than it is about discovering truths.

Similarly, Mol's study of the medical condition atherosclerosis (a disease in which plaque builds up inside your arteries) provides a seminal account of how different medical techniques and ways of understanding diseases produce not just different perspectives on a uniform disease but rather create different (very material and very real) disease ontologies that then have to be knitted together to develop a more uniform account. Mol argues that the atherosclerosis physically experienced by patients; described to doctors; probed by imaging techniques; and ultimately examined at autopsy are not just different perspectives on the same phenomenon but rather they are different phenomena. Furthermore, 'the reality' of atherosclerosis is almost endlessly fluid as new advances in technology could change the entire way in which the disease is treated, imaged and experienced. This type of onto-politics has significant implications for medical ethics and highlights the potentially all-encompassing and overwhelming, not just ideological but also socio-material nature of diagnostic and treatment regimes. Thus, one can see that New Materialists approaches can open up fertile new grounds for exploring the ethics of science.

4.3 More-than scientific knowledges

To complete this section, we would like to discuss the implications that New Materialist approaches to science might have with regards to developing more ethicallyfocused and ethically-aware knowledge making practices. Much progress has already been made in both developing new approaches to scientific understanding, which foreground ethical considerations, and in promoting new interdisciplinary and transdisciplinary forms of knowledge making that integrate scientific approaches with other forms of understanding (such as lay knowledges, practitioner understandings, indigenous beliefs and religious insights). Furthermore, we believe that these developments are entirely necessary if science is to cope with the complexities of multi-dimensional, socio-natural issues such as climate change, bio-diversity loss, food security, energy and water provisioning. Two particularly promising new approaches to (scientific) knowledge making commensurate with New Materialism, include Michel Callon's (2009) notion of 'hybrid forums' and Latour's (2004) notion of a 'parliament of things'. Both these approaches propose a new kind of science that is open to the value of other ways of knowing the world and that appreciates the deeply ethical character of knowledge making.

In his book *Politics of Nature*, Latour contends that for too long scientists have had a monopoly over the representation of nature and instead we need to find other ways of representing the 'interests' of non-humans (Latour, 2004). In particular Latour argues that, rather than scientists presenting undisputed facts about a singular and knowable nature, we should instead have an array of different 'spokespeople' all of whom speak with a voice that is partly theirs and partly of the non-human nature that moves them to speak. This does not mean that we should ignore the views of scientists concerning non-humans; indeed, in some ways these become even more important than before. Only that we should listen to a plurality of spokespeople—scientists, poets, artists, indigenous people, and farmers—and that we should challenge scientists to speak openly about the complexities and uncertainties within their work and to bring these uncertainties into the public arena, so that they can be debated and discussed amongst a much larger assemblage.

Callon takes a similar approach and contends that the current model of a detached science that secludes itself in laboratories and then exports its findings onto the world is no longer sustainable and instead we require new approaches to science in which scientists work closely with a range of stakeholders and citizens to open up their endeavours to broader public scrutiny and accountability. Callon coined the term 'hybrid forums' to illustrate these types of heterogeneous groups of scientists, practitioners, stakeholders and laypeople that sometimes spontaneously emerge and sometimes are artificially co-opted to discuss often controversial issues, such as the disposal of radioactive waste, or GM crops or the use of pesticides. Callon contends that these types of hybrid forums provide a powerful means for 'bringing science back into democracy'.

As a final point, it is worth considering what role religious understanding might play within these types of new arenas of knowledge formation and exchange. We would contend that whilst there is undoubtedly an important role for religious understandings to play within these new hybrid forums that role cannot be one of a domineering and dogmatic force but rather one that is multi-faith and part of, and open to, a broader dialogue—in other words, and as outlined in detail previously, it must be a modest religion.

Chapter 5

A Modest Conclusion

We are arguing for a modest ethics, linked to a similar modesty in both science and religion. But one has to be careful with this terminology: a modest claim is still a claim which itself suggests a degree of force in the argument. Behind this lie a series of substantive positions as articulated in the text: knowledge as embedded and material rather than distant and abstract taking into account non-specialist perspectives, material practices and the insights of other disciplines. A willingness to acknowledge the other levels at which humans function, those of feelings and instincts as well as what is normally termed the logical and autonomous, and then the realisation that one is always already in relationship with the non-human in shifting and evolving assemblages. Rather than lone individuals exercising a meansends rationality we perceive that we operate within a distributed agency and that can mean that we are as much shaped by the technology we devise as we imagine the creation is under our complete control. Along with some of the other influences identified, such as the work of Latour and Stiegler, this can lead to a more modest ethics drawing on the insights of New Materialism as related to the themes just identified. Ethics is less about constructing frameworks according to which one can judge whether or not one is living a good life or taking appropriate actions, than

being worthy of the events over which one has no or little control. Can we affirm, enhance and intensify such events through the capacity to affect and be affected? In order to be of some practical use, however, this requires a capacity to reflect and act, and not simply to be swept along by events. What does this look like in practice and does it have advantages over the more traditional, Kantian, rights-based approach we have also examined.

The UK is at the beginning of rolling out 5G, the next generation of smart technology which will apparently link machines to machines as well as machines to humans. Fridges will be able to know when stocks are depleted and re-order without human intervention. Cities will have so many monitors that cars will be able to know traffic conditions beyond human sight and adjust accordingly. This may be less effective out in rural areas, but for city living a new era of interconnectedness and machine directed interactions will become the norm. This is presented as simply the next stage in the development of current technologies and enhancing the capacity to speed up responses and activity. Beyond the obvious concerns about national security because of the Chinese company being employed to construct these systems, there are much deeper questions about the values and decisions that are already built into this process. One notes that the UK's Committee for Data Ethics and Innovation has given itself the brief to ask for evidence about on-line targeting and bias, and presumably 5G technology will emerge as being of great interest in both respects. We already know that companies such as Google and Facebook use the technology to track our movements and habits which are then made available to advertisers in order to be able to target us individually—we become the product rather than us consuming other products. How will 5G then add to the powers of these companies to predict, shape and influence our behaviour? Privacy has been sacrificed for the sake of convenience and speed of response. Exactly which values and biases have already been built into the technology and of which we will have little or no knowledge or

understanding? Algorithms beyond our ken will determine what we will be told and what will remain hidden.

The concern with a traditional, rights-based or even environmental ethical approach is that both come too late on the scene. They apply certain ethical principles only after the important decisions have already been made: the targeting and the biases are already built into the systems being deployed. Trying to identify or even challenge and change those once they are already functioning is going to be too late. Governance procedures might limit the scope of these operations, but no more than that. The difficulty is that of entering the debate at an earlier stage, before the decisions have been made. We would argue that the understandings of a modest ethics as above stand a better chance of avoiding the instrumentalist approach of more traditional ethical frameworks—in other words, the ethics is no more than an application of ideas to systems that are already in place—and instead engage with the material energies and movements embedded in the technologies as they are being developed. This becomes a political as well as an ethical challenge.

Chapter 6

Questions for Reflection

- 1. Are there ways in which a modest religion might contribute to the task of engaging issues of digital developments, other than through established ethical frameworks?
- 2. In what ways might it be possible for non-experts to become involved in the very technical areas of digital development? For instance, through 'hybrid forums' or citizens' councils?
- 3. Do we have criteria for wellbeing that provide a means of shaping an alternative future less dominated by commercial interests?
- 4. Given that so much of the dominance of the digital technology relies upon speed and immediacy, what is required to sustain the 'slow work of time' associated with a more measured and reflective response?
- 5. Are there religious resources that can take into account the affective, embodied and material aspects of human becoming, or the metastability of the preautonomous?
- 6. Could a more modest science in conversation with modest religion produce a

more effective ethics of the digital and the environmental?

7. In what ways could we prevent knowledge as participation being reduced to knowledge as information?

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