

Naturalism and Naturalness: A Naturalist's Perspective

I have been asked to discuss—and perhaps to defend—the ‘naturalness’ of naturalism. Since I have not seen the other contributions to this volume, I am not sure where it will be most useful to direct my efforts. I am a naturalist; some of my recent worksⁱ can be read, in part, as defences of naturalism. But it is not clear that one needs to embrace the claim that naturalism is ‘natural’ in order to be a naturalist. Much turns on what it would be for naturalism to be ‘natural’. As we shall see, this is hardly a straightforward matter.

(1)

‘Natural’ carries a lot of baggage. Consider some of the available contrasts:

1. ‘processed’, ‘refined’, ‘ersatz’, ‘synthetic’ (food, material, stuff)
2. ‘artificial’, ‘strained’, ‘faux’, ‘affected’, ‘phony’ (character, manner, bearing, speech)
3. ‘acquired’, ‘taught’ (knowledge, belief)
4. ‘perverted’, ‘deviant’, ‘degenerate’, ‘immoral’, ‘decadent’ (act, thought)
5. ‘abnormal’, ‘atypical’, ‘unorthodox’, ‘irregular’, ‘preternatural’, ‘surprising’, ‘unpredictable’ (event, state, instance, sample, outcome)
6. ‘illegitimate’, ‘bastard’ (offspring)
7. ‘unreasonable’, ‘illogical’, ‘incomprehensible’ (inference, conclusion, belief)
8. ‘unreal’, ‘intangible’, ‘non-concrete’ (object, reality, property)
9. ‘artifactual’, ‘gerrymandered’ (kind)
10. ‘supernatural’, ‘magical’, ‘miraculous’ (person, being, event)
11. ‘revealed’ (theology)
12. ‘human’, ‘institutional’ (law)
13. ‘artificial’, ‘assisted’ (selection, insemination, childbirth)
14. ‘not reflecting the cards one holds’ (bridge bid)
15. ‘neither sharp nor flat’ (note in music)
16. ‘unbleached’, ‘undyed’ (fabric)

‘Naturalism’ also carries a lot of baggage. Within philosophy: ‘moral naturalism’, ‘mathematical naturalism’, ‘methodological naturalism’, ‘scientific naturalism’, ‘epistemological naturalism’, ‘metaphysical naturalism’, and so forth. Beyond philosophy: ‘literary naturalism’, ‘dramatic naturalism’, ‘artistic naturalism’, ‘educational naturalism’, ‘political naturalism’, ‘sociological naturalism’, and so on.

If we are to discuss the naturalness of naturalism, then we need to be very clear what we mean by ‘natural’ and ‘naturalism’, and we need to take care that our discussion is not derailed by the myriad alternative meanings and associations that these terms bear.

Many of the contrasts between the ‘natural’ and the ‘non-natural’ are degreed: some things are more natural than others. In these cases, it typically won’t make much sense to ask after the absolute ‘naturalness’ of things. Rather, the interesting questions will be comparative: is *this* thing more natural or less natural than *that* thing.

In this volume, the primary question is comparative: is *naturalism* more or less natural than *theism*? So it is not just that we need to be clear about what we mean by ‘naturalism’; we need to be no less clear what we mean by ‘theism’.

(2)

‘Naturalism’ and ‘theism’ are names for claims (theses, statements).

Theism is the claim that there is at least one god. Monotheism is the claim that there is exactly one god. Atheism is the claim that there are no gods.

Naturalism is the claim that: (a) there are none but natural causal entities with none but natural causal powers (‘natural reality exhausts causal reality’); and (b) well-established science is our touchstone for identifying causal entities and causal powers.

Worldviews are complete theories of everything: logic, model selection, ontology, epistemology, axiology, normativity, natural sciences, human sciences, formal sciences, applied sciences, humanities, arts, and so on. Worldviews are idealisations; none of us has, nor could have, a complete theory of everything. *Big pictures* are our approximations to worldviews: our big pictures take in what we believe in the domains of logic, model selection, ontology, epistemology, axiology, normativity, natural sciences, human sciences, formal sciences, applied sciences, humanities, arts, and so on.

Theistic big pictures include, or are committed to, the claim that there is at least one god. Monotheistic big pictures include, or are committed to, the claim that there is exactly one god. Atheistic big pictures include, or are committed to, the claim that there are no gods. Naturalistic big pictures include, or are committed to, the claim that: (a) there are none but natural causal entities with none but natural causal powers; and (b) well-established science is our touchstone for theorising about causal entities and causal powers.

When we ask about ‘the naturalness of naturalism’, what we are interested in is whether naturalistic big pictures are more or less natural than theistic big pictures. Of course, there are many very different naturalistic big pictures and many very different theistic big pictures. Depending upon the details of our interest, it may be that it would be more accurate to say that we are interested in whether *best* naturalistic big pictures are more or less natural than *best* theistic big pictures. In cases where ‘natural’ carries normative implications, it may be that little interest attaches to consideration of less than best theistic big pictures and less than best naturalistic big pictures.

It is plausible to suppose that best naturalistic big pictures and best theistic big pictures will exhibit widespread agreement. In particular, wherever there is universal expert agreement, we should expect universal expert agreement to be reflected in both best naturalistic big pictures and best theistic big pictures. Across logic, mathematics, physics, chemistry, pharmacology, and a host of other domains, there is an enormous amount that is agreed by, for example, all members of all of the relevant national academies. Nothing that contradicts this agreed material will belong to any best naturalistic big pictures or best theistic big pictures. When we

are comparing best theistic big pictures and best naturalistic big pictures, we can treat everything upon which they agree as *data*.

It is plausible to suppose that best naturalistic big pictures and best theistic big pictures will exhibit widespread disagreement in those areas where there simply is no universal expert agreement: philosophy, politics, religion, and the like. Indeed, we expect to find widespread disagreement in these areas *between* best naturalistic big pictures and *between* best theistic big pictures. For the purposes of the coming discussion, I shall pretend that we are talking about a particular best naturalistic big picture N and a particular best theistic big picture T. But I shall try to assume as little as possible about the actual content of N and T. (I think that best atheistic big pictures are best naturalistic big pictures. So, by my lights, I am also pretending that we are talking about a particular best atheistic big picture and a particular best theistic big picture. However, not everyone accepts that best atheistic big pictures are best naturalistic big pictures.)

(3)

One question about the ‘naturalness’ of commitment to N and T concerns the *numbers* of people who are committed to each. If there are many committed to T and few committed to N, then that yields a sense in which commitment to N is not ‘natural’: atypical, unorthodox, or the like. As it happens, the world contains few committed to N, and very many committed to T. Moreover, this has always been true: whenever and wherever it has been true that there is either commitment to N or commitment to T, the world has always seen vastly greater commitment to T than to N. In this purely statistical sense, considering the entire population of the world, commitment to N is not ‘natural’.

But what is true for the world at large is not true for the membership of scientific academies and leading institutions of higher education in prosperous democracies. Among the membership of scientific academies and leading institutions of higher education in prosperous democracies, there are more naturalists than there are theists. In the same purely statistical sense, considering the membership of scientific academies and leading institutions of higher education in prosperous democracies, commitment to N is at least as ‘natural’ as commitment to T. Moreover, this has been true for at least the past hundred years.ⁱⁱ

Furthermore, when we look at the general population in prosperous democracies we see that, over the past century, there has been a significant drop in the percentage of that population committed to T, and a significant increase in the percentage of that population committed to N. Moreover, the rates at which the one percentage is dropping and the other percentage is increasing have also been steadily increasing over this period. Even where, in prosperous democracies, it remains true that commitment to N is not ‘natural’, it is also true that commitment to N has been becoming increasingly more ‘natural’, and commitment to T has been becoming increasingly less ‘natural’. If current trends in our prosperous democracies continue, by the end of this century N will be more ‘natural’ than T was at the beginning of the last century in prosperous democracies.ⁱⁱⁱ

(4)

A second question about the ‘naturalness’ of commitment to N and T concerns the *lives* of the people committed to each. It is not uncommon for those with one of these commitments to say that those with the other commitment are *immoral* and/or *unhappy*. If it were true that those with one of these commitments are much more prone to immorality and/or unhappiness than those with the other commitment, then that might yield a sense in which the first commitment is not ‘natural’: perverted, deviant, degenerate, decadent, wicked, or the like.

There is very broad agreement between N and T about what we should not *do*. N and T agree that we should not do harm: we should not kill, enslave, exploit, steal, cheat, lie, free ride, and so forth, except where it is permissible for us to do so. (Consider the case of killing. Most suppose that it can be permissible to kill in self-defence. Most suppose that it can be permissible to kill to protect one’s nearest and dearest. Many suppose that it can be permissible to kill in the course of a just war. Many suppose that it can be permissible to kill first-trimester human foetuses. Many suppose that it is permissible to kill on the proper authority of the state. Many suppose that it is permissible to kill non-human animals for food. Some suppose that it is permissible to kill non-human animals for pleasure. And so on. Nonetheless, all agree that we should not kill, except where it is permissible to do so; and, very importantly, there is a large range of cases in which all agree that it would not be permissible to kill.) There is also very broad agreement between N and T about how we should and should not *be*: we should be benevolent, civil, compassionate, cooperative, courageous, diligent, empathetic, honest, humble, just, kind, liberal, patient, prudent, sensitive, sincere, and sympathetic, and so on; we should not be boorish, callous, cold, cowardly, dishonest, illiberal, impatient, imprudent, insincere, lazy, mean, petty, rude, stingy, uncooperative, unfair, vain, wanton, and so forth. Given that there is broad agreement between N and T about what we should not do, and how we should and should not be, it would be surprising if there is significant systematic difference in the morality and/or happiness of those committed to N and T.

There is a mountain of data that bears on the morality and happiness of those committed to N and T. If there were systematic differences in the morality and/or happiness of those committed to N and T, then we should expect to be able to detect those differences in the data that we have about populations in which there is significant variation in rates of commitment to N and T. If those with commitment to N are much more immoral and unhappy than those with commitment to T, then we should expect that immorality and unhappiness to show up in data about, for example: homicide rates; incarceration rates; juvenile mortality; average lifespan; consumption of pornography, adolescent gonorrhoea and syphilis infections; all age gonorrhoea and syphilis infections; adolescent abortions; adolescent births; youth suicide; all age suicide; fertility; marriage; marriage duration; divorce; average life satisfaction; alcohol consumption; corruption; income; income disparity; poverty; employment; hours of work; resource exploitation base; and so on. But serious analysis of this data^{iv} simply does not bear out the view that those with commitment to N are much more immoral and unhappy than those with commitment to T.

There are many studies that have examined more local claims about the relative morality and/or happiness of those committed to T and N, looking at: trustworthiness, law-

abidingness, selfishness, emotional stability, mental health, physical health, sexual deviancy, and so on. These studies are all over the place; even meta-analyses do not all arrive at the same conclusions. Moreover, most studies fail to distinguish between those who are strongly committed to N and those who are not strongly committed to either T or N. But there is a significant body of work^v which suggests that there are no relevant differences—concerning morality and happiness—between those strongly committed to N and those strongly committed to T.^{vi}

(5)

A third question about the ‘naturalness’ of commitment to T and N concerns the reasons that one might have for one’s commitment. If there are compelling reasons to prefer T to N, then commitment to N is not ‘natural’: unreasonable, illogical, incomprehensible, ignorant, uninformed, or the like. If there are compelling reasons to prefer T to N, then those reasons might be theoretical, or practical, or both. I begin by considering the claim that there are compelling practical reasons to prefer T to N.

Human beings are vulnerable to existential anxieties about annihilation, catastrophe, death, deception, disease, guilt, injustice, insignificance, loneliness, loss, pain, unsatisfied want, and the like. Religions offer mastery of those existential anxieties. I suggest^{vii} something like the following explanatory framework:

Religions are passionate communal displays—of costly commitments to the satisfaction of non-natural causal beings and/or the overcoming of non-natural causal regulative structures—that result from evolutionary canalisation and convergence of: (1) widespread belief in non-natural causal agents and/or non-natural causal regulative structures; (2) hard to fake public expressions of costly material commitments to the satisfaction of those non-natural causal agents and/or the overcoming of or escape from those non-natural causal regulative structures; (3) mastery of people’s existential anxieties by those costly commitments; and (4) ritualised, rhythmic sensory coordination of (1)-(3) in communion, congregation, intimate fellowship, and the like.

Those who suppose that there is compelling practical reason to prefer T to N are supposing that T is a best religious big picture: the non-natural causal beings to which T is committed are part of a satisfying religious ‘ministering’ to our ‘existential needs’.

One important question here is about the extent to which religion itself creates the itches that it offers to scratch. Sure, human lives are likely to contain episodes characterised by deception, disease, guilt, injustice, loneliness, loss, pain and unsatisfied desire. But human lives are also likely to contain episodes characterised by connection, exhilaration, fellowship, health, justice, pleasure, satisfied desire, and so forth. It is not irrational to prefer a typical human life to no life at all even if there are some human lives that it would be better not to live. If we focus our attention squarely on this-worldly ills—deception, disease, guilt, injustice, loneliness, loss, pain, unsatisfied desire, and the like—it is simply not obvious that they do or should generate existential anxieties that are in need of ‘ministry’ in flourishing human beings.

Those who suppose that there is compelling practical reason to prefer T to N typically have a different range of ‘existential needs’ in mind. In their view, we need ‘ministry’ to cope with annihilation, cosmic insignificance, and post-mortem insecurity. But practically rational beings who believe that there are no non-natural causal agents and non-natural causal regulative structures simply do not have worries about annihilation, cosmic insignificance and post-mortem security. Depending how things go, dying may be relatively unpleasant; but death itself is nothing to be feared. True, death may come too early—or too late—but the timing of death rarely tips the scales in favour of preference not to have lived at all.

Some suppose that considerations about *wagers* give us practical reason to prefer T over N. On this line of thought, since the expected utility of wagering on T is greater than the expected utility of wagering on N, we have practical reason to accept T rather than N. This is not the place to give a detailed analysis of such wagers.^{viii} Perhaps it suffices to note that there is no good reason for proponents of N to accept that the expected utility of wagering on T is greater than the expected utility of wagering on N.

(6)

Are there good *theoretical* reasons for preferring T to N? Since this is a question that I have discussed at length elsewhere^{ix} I shall give only a very compressed summary of my answer to it.

Given that we treat T and N as comprehensive theories—‘theories of everything’—our assessment of their comparative virtue is simply an assessment of comparative theoretical virtue. We treat everything on which T and N agree as data; we treat everything on which they disagree as theory. Our assessment of their comparative theoretical virtue has three stages. First, at least in principle, we give a complete articulation of T and N. Second, at least in principle, we check to see whether either T or N is inconsistent. Third, assuming that both T and N survive the second stage, we check to see which of T and N makes the best trade-off between minimising theoretical commitments and maximising breadth and depth of explanation of data.

Pretend that we have complete articulations of T and N. In order to show that one of T and N is inconsistent, we need to find a set of sentences that belongs to the one that are jointly logically inconsistent. Assuming classical logic, any such logically inconsistent set of sentences can be converted to a derivation of the defining claim of the opposing theory from premises all of which belong to the theory that is shown to be inconsistent. There are no extant derivations that satisfy this condition, either for T or for N.^x So we proceed to the final stage of assessment.

While, in general, there is no agreed algorithm for theory assessment, there are special cases where assessment is straightforward. If, on given data, one theory does not anywhere give inferior explanations to a second theory and yet has fewer commitments than that second theory, then the first theory is better than the second. Elsewhere^{xi}, I argue that, while N has fewer commitments than T, N nowhere gives inferior explanations to T. So, I say, we should prefer N to T. While I allow that this argument is hardly incontestable, I do think that its

virtues make it pretty implausible to suppose that there is a good argument that we should prefer T to N. Even if theoretical reason does not tell us to prefer N to T, it is very hard to believe that theoretical reason tells us to prefer T to N. (My own view is that it is a matter for judgment whether to prefer one of T and N to the other: this is just one of those many things on which sensitive, intelligent, well-informed, reflective people can reasonably disagree. When we consider the range of opinion, we should come down on the view that, in the now relevant sense, neither big picture is more ‘natural’ than the other.)

(7)

It is not uncommon to hear the complaint that naturalism is out of tune with our most basic *intuitions* about, for example, consciousness, rationality, free will, persons, knowledge, intentionality, morality, cosmology, purpose, biological function, universals, scientific realism, material objects, beauty, evolution, and so on. Given that our intuitions are what come ‘naturally’ to us, this might be taken to show that naturalism is not ‘natural’. How should this complaint be understood and what should we make of it?

Here are some things that seem completely intuitive: we have compatibilist freedom; we do not have libertarian freedom; mental states and processes are neural states and processes; talk about ‘minds’ is a mere *façon de parler*; none of us reliably forms true philosophical, political, or religious beliefs; naturalism is necessarily true; first trimester abortion is morally permissible; causal reality began with the initial singularity; no religion is more credible than any other. I could go on.

When we are thinking about the comparative virtues of T and N, considerations about who finds what intuitive are completely irrelevant. Whether or not data is intuitive is irrelevant to its status as data. Whether or not theory is intuitive is irrelevant to the assessment of its theoretical virtue. It should have been obvious before I gave the above list that the intuitions of proponents of T and N do not align. What comes ‘naturally’ to theists is different from what comes ‘naturally’ to naturalists. Clash of intuitions gives no advantage to either side. (Given the symmetry of the situation, it would be the worst kind of special pleading to suppose that your intuitions carry more weight than do the intuitions of those on the other side.)

Many intuitions are mistaken. Consider, for example, intuitions of folk physics. When asked to drop a paperweight into a hoop on the ground below the window of a moving carriage, many people with no knowledge of theoretical physics deliberately wait until they are above or beyond the hoop before they let go of the paperweight. This is not just performance error; when asked, many people with no knowledge of theoretical physics say that the right thing to do is to wait until you are above or beyond the hoop before you let go of the paperweight. While some intuitions of folk physics are correct, many are mistaken.^{xii} In physics—as everywhere else—you do much better to rely on convergent expert opinion than on folk intuition. And, in areas where there is no convergent expert opinion—as, for example, in philosophy, politics and religion—intuition has no role to play in objective arbitration of expert differences of opinion.

Note that I have *not* argued that you should always second guess your own intuitions. Sure, if you hold opinions that run contrary to established convergent expert opinion, and if you have none but intuitive support for your opinions, then it is time for you to reconsider. But if you hold opinions where there is no established convergent expert opinion, then, even if you have none but intuitive support for your opinions, it may be that you have no reason to reconsider. In matters of philosophy, politics and religion, it is hard to see any good reason why experts have greater entitlement to hold particular beliefs than those who are not experts.

(8)

Let's go back to the statistical sense of 'natural'. There has been considerable discussion, in recent times, of the fact that, across time and place, certain kinds of non-naturalistic beliefs have been more or less universal. It is a standard naturalistic belief that mindedness is late and local: there are not—and could not be—minded things other than relatively recently evolved or late-evolving biological organisms and downstream causal products of the actions of such organisms. But across time and place, belief in minded things other than relatively recently evolved or late-evolving biological organisms and downstream causal products of the actions of such organisms is ubiquitous. In many cultures, we find beliefs in unembodied yet causally efficacious minds; in most cultures, we find attributions of mindedness to features of landscapes, astronomical entities, and so forth. Why is this?

One theory that has gained traction suggests a two part explanation. On the one hand^{xiii}, we are 'naturally' prone to over-attribution of intentional agency: our brains house hyperactive agency detection devices that lead us to attribute agency when none is present. On the other hand^{xiv}, when the misattributed agency is minimally counterintuitive, belief is both attractive and transmissible. Putting the two parts together: because we are 'naturally' prone to over-attribution of intentional agency, lots of non-naturalistic entities are thrown up as candidates for belief; and because we are 'naturally' attracted to and 'naturally' prone to transmit minimally counterintuitive beliefs, we find belief in non-naturalistic entities in all human cultures. As Smith suggests^{xv}, there is plausible a third part to this explanation. It is not just that belief in non-naturalistic entities is pervasive in human cultures; there are certain kinds of beliefs in non-naturalistic entities that are pervasive in human cultures: lots of origin beliefs advert to world eggs; there are many beliefs about earth mothers and sky fathers; and so forth. It is plausible to suppose that, where the same kinds of beliefs crop up in many different times and places, this is not due merely to common features of our brains; in part, the commonality is explained by structural similarities in the external environments in which we live. Why so many beliefs in earth mothers and sky fathers? Because there is an observable connection between rain and the growth of plants; it is a very 'natural' analogy to suppose that the sky is inseminating the earth.

Some theorists—including Barrett—have conjectured that his theory fits 'naturally' into T: our hyperactive agency detection device is given to us by God to facilitate belief in God on our part. But, even if we suppose that T includes some claim along those lines, it seems implausible that, in virtue of this fact, T gains some kind of explanatory advantage over N. After all, there is a perfectly straightforward evolutionary explanation of our coming to have

a hyperactive agency detection device: far better false positives than false negatives in the detection of agential threats.

(9)

My characterisation of naturalism is *minimal*: there are many naturalists who take their naturalistic commitments to go well beyond the minimal requirements that earn entry to the class of naturalists, just as there are many theists who take their theistic commitments to go well beyond the minimal requirements that earn entry to the class of theists. Furthermore, there are many naturalists who disagree with me about the plausible commitments of N.

I maintain that the evaluative, the normative, and the abstract are independent of the causal: the minimal requirements for entry to the class of naturalists do not constrain the beliefs that naturalists hold about the evaluative, the normative and the abstract. I also maintain that naturalists are perfectly entitled to rely upon their evolved cognitive capacities—for perception, memory, inference, and the like—across a wide range of domains, including domains that underwrite scientific investigation. Of course, our evolved cognitive capacities are imperfect in various respects; but the institutions of science are well-designed to correct for biases and performance errors across a wide range of domains. And, in those domains where there is no established convergence of expert opinion, there is only philosophical speculation.^{xvi}

The subtitle of this work refers to ‘theism’s reasonability’. This expression is ambiguous. If it refers to the rational *permissibility* of theistic belief, then—as on the parallel reading of ‘naturalism’s reasonability’—it refers to something that is really not worth contesting. However, if it refers to the rational *obligation* of theistic belief, then—as on the parallel reading of ‘naturalism’s reasonability’—it refers to something that does not deserve to be taken seriously. When we are engaged in philosophy—as we are when we consider the question whether to prefer N to T—we are dealing with matters where there is no expert agreement on either content or method. In those circumstances, it is absurd to suppose that there is a substantive position—such as N or T—that is rationally required.

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ⁱ See, e.g., G. Oppy (2018a) *Naturalism and Religion* London: Routledge; and G. Oppy (2018b) *Atheism: The Basics* London: Routledge.

ⁱⁱ See: E. Larsen and L. Witham (1998a) ‘Scientists are Still Keeping the Faith’ *Nature* 386: 435-6; E. Larsen and L. Witham (1998b) ‘Leading Scientists Still Reject God’ *Nature* 394: 313; E. Ecklund and C. Scheitle (2007) ‘Religion and Academic Scientists: Distinctions, Disciplines and Demographics’ *Social Problems* 54: 289-307; N. Gross and S. Simmons (2009) ‘The Religiosity of American College and University Professors’ *Sociology of Religion* 70: 101-29; M. Stirrat and E. Cornwell (2013) ‘Eminent Scientists Reject the Supernatural: A Survey of the Royal Society’ *Evolution: Education and Outreach* 6 <https://link.springer.com/content/pdf/10.1186%2F1936-6434-6-33.pdf>; and E. Ecklund et al. (2016) ‘Religion among Scientists in International Context: A New Study of Scientists in Eight Regions’ *Socius* 2: 1-9.

ⁱⁱⁱ See: P. Zuckerman (2009b) *Atheism and Secularity*, two volumes, Westport: Praeger; L. Lugo (2012) ‘“Nones” on the Rise: One-in-Five have no Religious Affiliation’ *Pew Research Centre* <http://www.pewforum.org/2012/10/09/nones-on-the-rise/>; and W. Gervais and M. Najile (2017) ‘How Many Atheists Are There?’ *Social Psychological and Personality Science* DOI: 10.1177/1948550617707015.

^{iv} See, e.g., G. Paul (2005) ‘Cross-National Correlations of Quantifiable Societal Health with Popular Religiosity and Secularism in Prosperous Democracies’ *Journal of Religion and Society* 7: 1-17; G. Paul (2009) ‘The Chronic Dependence of Popular Religiosity upon Dysfunctional Psychosociological Conditions’ *Evolutionary Psychology* 7: 398:441; and P. Zuckerman (2009a) ‘Atheism, Secularity and Well-Being: How the Findings of Social Science Counter Negative Stereotypes and Assumptions’ *Sociology Compass* 3: 949-71.

^v See, for example, C. Ross (1990) ‘Religion and Psychological Distress’ *Journal for the Scientific Study of Religion* 29: 236-45; K. Hwang et al. (2009) ‘Extending Religion-Health Research to Secular Minorities: Issues and Concerns’ *Journal of Religion and Health* 50: 608:22; J. Paterson and A. Francis (2017) ‘Influence of Religiosity on Self-Reported Response to Psychological Therapies’ *Mental Health, Religion and Culture* 20: 428-48.

^{vi} For more detailed discussion of the studies and data adverted to in the past two paragraphs, see G. Oppy (2018b) *Atheism: The Basics* London: Routledge (especially Chapters Four and Five).

^{vii} Roughly following S. Atran and A. Norenzayan (2004) ‘Religion’s Evolutionary Landscape: Counterintuition, Commitment, Compassion, Communion’ *Behavioural and Brain Sciences* 27: 713-70

^{viii} For some of my views on this, see G. Oppy (2006) *Arguing about Gods* Cambridge: Cambridge University Press, 241-58.

^{ix} See, for example, G. Oppy (2013) *e Best Argument against God* London: Macmillan.

^x I argue for this conclusion at some length in G. Oppy (2006) *Arguing about Gods* Cambridge: Cambridge University Press, and in various subsequent publications.

^{xi} See Oppy (2013) *The Best Argument against God* London: Macmillan, and subsequent publications.

^{xii} For discussion of another example, see M. McCloskey et al. (1983) ‘Intuitive Physics: The Straight-Down Belief and its Origins’ *Journal of Experimental Psychology: Learning, Memory and Cognition* 9: 636-49

^{xiii} See J. Barrett (2004) *Why Would Anyone Believe in God?* Walnut Creek: AltaMira Press, and others.

^{xiv} See P. Boyer (1994) *The Naturalness of Religious Ideas* Berkeley: University of California Press, and others.

^{xv} T. Smith (2017) *Science and Religion: A Conflict of Methods*, Doctoral Dissertation, University of Otago

^{xvi} These claims are defended in G. Oppy (2018a) *Naturalism and Religion* London: Routledge.