Holm, Søren, Professor of Bioethics. "Religion and Scientific Freedom." *Scientific Freedom: An Anthology on Freedom of Scientific Research*. Ed. Simona Giordano, John Coggon and Marco Cappato. London: Bloomsbury Academic, 2012. 128–140. Science, Ethics and Society. *Bloomsbury Collections*. Web. 26 Apr. 2023. <<http://dx.doi.org/10.5040/9781849669009.ch-012>>.

Downloaded from Bloomsbury Collections, www.bloomsburycollections.com, 26 April 2023, 14:18 UTC.

Copyright © Simona Giordano, John Coggon and Marco Cappato 2012. You may share this work for non-commercial purposes only, provided you give attribution to the copyright holder and the publisher, and provide a link to the Creative Commons licence.

Religion and Scientific Freedom

Søren Holm

*Professor of Bioethics, University of Manchester and
Professor of Medical Ethics, University of Oslo*

... When people reasonably think that shared premises of justice and criteria determining truth cannot resolve critical questions of fact, fundamental questions of value, or the weighing of competing benefits and harms, they do properly rely on religious convictions that help them answer these questions.¹

The two interrelated questions that this chapter will try to answer are deceptively simple ‘Should religion play a role in determining science policy?’ and ‘Is religious influence on science policy inimical to scientific freedom?’²

Many scientists, including some writing in this book have immediate answers to these questions. Their answer to the first question is ‘No!’ and their answer to the second question ‘Yes!’ For them it is obvious that religious influence on science policy is a threat to scientific freedom, but this is perhaps too hasty.

It may be too hasty because ‘play a role in determining’ and ‘influence on’ are both read as ‘DETERMINING’ full stop; and the answers therefore are answers to different questions.³ Or it may be too hasty simply in the sense that it is not fully thought through. As Campbell points out there is a profound difference between acknowledging and allowing for a legitimate influence of religion on policy making and ceding authority over these decisions to religion.⁴

In order to answer the specific questions about science policy and scientific freedom satisfactorily we therefore need first to answer two parallel, but more fundamental questions ‘To what degree should religion play a role in determining any policy?’ and ‘What is the justification, scope and limits of scientific freedom?’

The focus for much debate about these issues recently has been in relation to human embryonic stem cell science, but the issue itself cuts across the whole of science policy. In 2001 the General Synod of the Church of England for instance:

... asked Her Majesty’s Government to commission independent research which will lead to the identification of minimum income standards related to need and then bring forward the legislation that will put such minimum standards into effect.⁵

This was clearly a religious intervention in science policy, but perhaps one most scientists find more congenial.

The justification, scope and limits of scientific freedom

Let us start with the second of these more fundamental questions. Scientific freedom is undoubtedly a valuable species of freedom and is sufficiently separable from other valuable freedoms so that it can receive independent protection. However, is the justification for protecting scientific freedom just the same as the justification for protecting freedom in general, or is there an additional basis for protecting this specific freedom?

Let us first briefly remind ourselves of the difference between scientific freedom conceived as a negative freedom and scientific freedom conceived as a positive freedom.⁶ Scientific freedom understood as a negative freedom or a liberty is simply the freedom of an individual researcher or a group of researchers to pursue any scientific question or research program without outside interference. Scientific freedom understood as a positive freedom is more difficult to define succinctly, but includes the claim that society should materially and in other ways support science. Society should remove obstacles to science and it should, within the general envelope of its resources also support valid scientific endeavours. Exactly how much material support that should be given to science in a given society is not easy to determine and the allocation to different areas of scientific endeavour is not straightforward either.

What reasons could we have for claiming that scientific liberty (i.e. the negative freedom) is more important than just the bare liberty to do anything a person wants to do?

The most obvious justification is that scientific liberty is more important because the goal of scientific endeavours is not trivial. Just as 'push-pin is not as good as poetry' science is more important than, say gardening.⁷ Science is intrinsically important as a truth or knowledge seeking activity and the knowledge it produces is often also instrumentally valuable. Science is worth pursuing in itself and it has the potential to make the world better. Furthermore, it is exactly because science is a non-trivial, truth seeking activity that some may have a strong interest in restricting science. So, scientific liberty is strongly justified as protecting an important activity that may in certain circumstances need protection.

Just like other liberties, however, scientific liberty is not absolute. Even though the reasons adduced just above should lead us to think that scientific liberty is an important liberty, it does not show that it is the most important liberty or that it trumps all other ethical concerns. A scientist cannot simply in the name of scientific liberty claim an absolute right to perform scientific actions that harm other people or infringe their rights. Even on the most expansive reading of Mill's so-called 'harm principle' society can legitimately restrict the liberty of scientists to prevent harm to others, and if situations arise where scientific liberty is in conflict with some other liberty then it is conceivable that it is sometimes scientific liberty that must give way. If we take scientific liberty

to be an important human right it still means that when it conflicts with other human rights an adjudication will have to take place concerning which right should yield. A current area of controversy in human rights jurisprudence is the conflict between privacy and freedom of speech which is resolved quite differently in Europe and in the United States,⁸ but privacy can also conflict with scientific liberty and some balancing aiming at resolving this conflict is already taking place in research ethics.

Let us move on to the question of the justification, scope and limits of the positive side of scientific freedom. The justification for society having a positive obligation to support science is essentially the same as the justification for a strong scientific liberty. Science is both intrinsically and instrumentally valuable, but how much science should be supported is essentially a question of resource allocation. First science has to compete against all the other claims on a society's resources and then different research programmes have to compete against each other. The range of arguments that are relevant in these two stages of resource allocation is very wide, and go far beyond arguments only relating to the science in question. In deciding science funding policy a society will, *de facto* have much more legitimate latitude than in deciding on protections for scientific liberty.

Similarly in deciding exactly which obstacles to scientific endeavour a society has an obligation to remove, it is legitimate to consider whether the removal of a particular obstacle is justified when the general function of the obstacle is taken into account. A number of legal systems do, for instance not directly enforce contracts where a person is contracted to perform a specific task. If I am contracted to write a valedictory poem for your birthday, but decide not to do it the law will uphold a claim for compensation, but not a claim that I must write the poem. There are situations where it would be advantageous for researchers, and possibly research subjects if it was possible to consent not to withdraw from a research project once consent was given.^{9,10,11,12,13,14} However current research ethics regulation enshrines an almost absolute right of withdrawal. In deciding whether to change current research regulation and allow binding research 'contracts' that makes it impossible to withdraw it is clearly not enough to point out that such a change would remove an obstacle to positive scientific freedom.¹⁵ The decision would have to take into account the importance of upholding the general principle against enforcement of contracts for specific performance.

The argument so far only establishes that scientific freedom is not an absolute trump card in discussion about whether society can restrict scientific activities, and it only shows that if other important values are at stake they can outweigh scientific freedom. But what kinds of values are sufficiently important to potentially play this role and can there be religious values among them?

The role of religion in determining policy

Let us assume that we live in a representative democracy where policy making is performed in some complex interplay between the citizens, their elected representatives and the state bureaucracy, and let us further assume 1) that this democracy is secular in the sense that no representatives of organized religion have an automatic place in the legislature or in the state bureaucracy and that no religious representative can in any other way determine public policy, unless elected to do so and 2) that it is not a perfect deliberative democracy in a Rawlsian or Habermasian sense.^{16,17,18,19} Our democracy is therefore not perfect but lies somewhere on a (possibly multi-dimensional) scale of imperfection. The imperfections vis a vis a perfect deliberative democracy may involve imperfections in involving citizens, allowing the bureaucracy too much influence, or allowing decision makers to make decisions that are not fully publically justified, not fully theorized or depend on world views that are not fully explicated and not shared by, or even intelligible to all.²⁰ I take it that all current democracies belong to this type of imperfect democracies.

The definition of secular is chosen to allow for a secular society to have, perhaps a majority of religious citizens (for example Turkey). If a secular society is defined as a society with predominantly secular citizens, then only a few societies if any are currently secular.²¹

Does religion have a legitimate role in policy making in such a society?

A number of philosophers have argued that in a secular society only secular arguments can have a role in public discourse. The reasons adduced for this proposition differ somewhat between different proponents of the view but all claim that religious arguments are either not accessible or not intelligible to all participants in public discourse. In a certain sense this is false, already on the face of it because it is open to everyone who is not religious to accept a religiously-based argument as valid (if it is) but not sound because the religious premises are false. So the idea cannot be that the arguments are not accessible or not intelligible *sensu strictu*. The idea must be that it is only legitimate in public discourse to use arguments that everyone would agree to be sound, if they are valid. This seems to be a very strange view (see more below).

John Rawls states that:

What public reason asks is that citizens be able to explain their vote to one another in terms of a reasonable balance of public political values, it being understood by everyone that of course the plurality of reasonable comprehensive doctrines held

by citizens is thought by them to provide further and often transcendent backing for those values.²²

Robert Audi offers two principles.

The principle of secular rationale:

... one has a *prima facie* obligation not to advocate or support any law or public policy that restricts human conduct, unless one has, and is willing to offer, adequate secular reasons for this advocacy or support....^{23,24}

The principle of secular motivation:

... one has a (*prima facie*) obligation to abstain from advocacy or support of a law or public policy that restricts human conduct, unless one is sufficiently *motivated* by (normatively) adequate secular reason....²⁵

The principles are based on the following account of secular:

These are secular in the sense that their justificatory authority does not depend on the existence of God – or on denying it²⁶ – or on religious scriptures or the views of religious authorities as such.²⁷

And finally Ronald Dworkin states in a US context that:

Americans have a constitutional right that government not infringe certain personal liberties when it acts to safeguard an intrinsic value. A state may not curtail liberty, in order to protect an intrinsic value, when the effect on one group of citizens would be special and grave, when the community is seriously divided about what respect for that value requires, and when people's opinions about the nature of the value reflect essentially religious convictions that are fundamental to moral personality.²⁸

However, these arguments are problematic on their own terms,²⁹ and although they entail the exclusion of religious arguments from public discourse, they do not entail the exclusion of the argument of the religious. This second point is important to note. In so far as a secular argument can be made to reach the same conclusion as is reached on non-secular grounds a religious person or organisation can make that argument as a valid contribution to the public discourse in a deliberative democracy, if it also plays a role in their own motivation for holding specific views. Pope John Paul II³⁰ tried to convince people by secular argument that we live in a 'culture of death' and that this is a significant problem for society. If he had been successful then political decision makers who were so convinced would be justified in formulating policy on this basis.

Dworkin wants to go further than this and exclude arguments and reasons that 'reflect essentially religious convictions'. However this is clearly problematic since it would exclude almost any reason in a debate on almost any contentious issue of value. Whether an argument reflects a certain mental or epistemic state is to a large degree in the eyes of the beholder. All interlocutors can easily

claim that the views of their opponents, although secular on the surface ‘reflect essentially religious convictions’, and if this is denied then their opponents are clearly suffering from self-denial. All of Dworkin’s own arguments can for instance be seen as reflecting his essentially religious conviction that there is no god.³¹

One way of trying to circumvent this problem in Dworkin’s position is to appeal to a thin principle of non-interference that can be claimed to be part of most (or less plausibly all) comprehensive worldviews. On this basis we could claim that religious arguments should be excluded, because they want to impose a specific positive morality on others, something that by implication we have to believe non-religious arguments do not do! This then sets up the second problem, because if we only have a principle of non-interference we have no moral resources left with which to set up positive obligations enforceable as public policy, we may still believe that we have obligations to help others, but on the very thin concept of non-interference we have it becomes illegitimate to force people to discharge these obligations and we end up in (right wing) libertarianism of the Nozick-Engelhardt type.^{32,33}

Third it is performatively inconsistent with the actions of liberal bioethicists and liberal politicians. Liberal bioethicists are quite happy to advocate positive public policy, that society should fund certain kinds of research, that legal systems should be shaped so that they not only allow but actually promote certain practices, or that taxes should be raised for good ends. Many of these positive conclusions, and the similar public policies clearly rely on a comprehensive worldview (or more than one) and should therefore have been ruled out. If we allow room in policy making for any positions that would impose a specific positive morality on others, and all societies allow this, then we cannot rule out religious arguments on this ground.

There is thus a high price to be paid for excluding religious arguments from consideration in bioethical discussion and policy making.

What makes the arguments of Rawls, Audi and Dworkin problematic in general is that they overestimate the degree to which actual political argument can be detached from the underlying comprehensive worldview that sustains them. Imagine a debate between a Marxist and a Libertarian about the rate of income tax. How could any of them ‘explain their vote to one another in terms of a reasonable balance of public political values’, to use Rawls’ terminology? Their comprehensive worldviews fully explain their balancing of public political values and also explains why neither of them can ever see the balancing performed by the other to be reasonable.

Unless we therefore exclude anyone with a strongly held comprehensive worldview from the public discourse, we have no reason to exclude the religious or their secularly stated arguments.

Having a comprehensive worldview is not peculiar to religious people. Everyone, including every bioethicist holds an explicit or implicit comprehensive

worldview that is rarely or never questioned. Such a worldview includes an ontology, a view of what kinds of things that exist and are relevant in thinking and analysing, an anthropology, a view of what kind of beings humans are, what their essential constituents are; and an epistemology, a view of how we gain knowledge and what the status of that knowledge is. We live with and within our comprehensive worldview and often only notice its influence when we collide with people with other worldviews.

A well known example of a comprehensive worldview is the Marxist worldview. Marxism holds an explicitly materialist ontology, the only existing things and the only existing forces are material, a perfectionist anthropology and a realist epistemology. For a Marxist historical developments are driven not by changes in ideas or by the decisions of historical actors but by changes in the productive forces that are products of the relationship between the social classes.

It should be obvious that not all secular thinkers hold a Marxist materialist ontology. The German philosopher Friedrich Hegel, for instance, held that historical developments were not driven by material factors, but by changes in the 'Zeitgeist', the 'Spirit of the time.' The great British political philosopher Margaret Thatcher held that 'there is no such thing as society'; and the British evolutionary biologist Richard Dawkins has postulated the existence of 'memes', transmissible elements of culture and thinking that are in evolutionary competition. It is for Dawkins, partly, the evolution of memes that shape historical developments.

There are also many examples of differences in anthropology relevant to bioethics. Aristotle famously drew quite radical conclusions from a faulty anthropology where women and barbarians were defined as deficient in reason and therefore not as moral agents. A current example is the sharp distinction in anthropology between liberals and communitarians – are human beings basically individuals or socially constituted beings?

Are religious worldviews in some sense fundamentally different from non-religious worldviews? At first sight we might be tempted to say yes, but that is probably an artefact caused by the historical fact that the three largest religions in our part of the world all have very similar roots and therefore rather similar worldviews (including the very unusual feature of monotheism which is rare in religions). Each religious worldview has its own ontology, anthropology and epistemology; and if we look carefully at the range of religious traditions we will find that there are no elements of these that are shared by all. Not all religions do, for instance postulate any kind of supernatural elements in their ontology (some variants of Buddhism being cases in point). There is simply nothing that keeps together the class of religious worldviews, apart from the willingness to self-identify as such, but that can't provide any reason to treat these worldviews differently from other comprehensive worldviews.

Are religious worldviews less coherent than secular worldviews and thereby more contestable? All of us probably think that there is one comprehensive worldview that is more coherent and defensible than all others, i.e. the one we ourselves hold (otherwise we should probably convert to the best competitor worldview). At the same time, however, we are forced to admit that although the general belief in an optimally coherent worldview is shared, the specific identification of this optimally coherent worldview is highly contested. This is so, partly because most large sets of beliefs contain some incoherence, partly because our ontology, anthropology and epistemology also have to cohere with observations about the world that are in themselves contestable. There is no *a priori* reason to believe that religious worldviews are any more or any less coherent than other worldviews.

Maybe the problem is that religious worldviews are held in a different way than other worldviews? That because those who hold them believe them to be transcendentally justified,³⁴ they hold them with more fervour and are less willing to change? It is undoubtedly true that many religious believers hold their beliefs and worldviews in a rather intransigent manner and seem to be resistant to change by sound philosophical argument. However the same is true of many non-religious people who believe their worldview to be based on such obvious truths that they cannot understand that anyone can disagree with them. A belief in self-evidence can lead to exactly the same kind of argumentative intransigence that a belief in transcendence can. Similarly a belief in the immutability of certain values or prescriptions can arise with or without a belief in transcendent grounding. If it was the case that all religious people were argumentatively intransigent then we might have a reason to stop engaging with them in argument, since it would be pragmatically pointless, but it is clearly not the case. The moral theology of most of the major world religions is in a process of constant change and that process is not driven by new transcendent revelations or moral truth, but by reasoned argument.

What are the implications of this for public decision making? Let us first look at the implications for the religious person, then for the religious politician and finally for the religious organisation.

The religious person

What role can religion legitimately play in the personal decisions of a religious person? If we are discussing purely self-regarding decisions then there seems to be no restriction on the role religion can play. If I want not to pursue a specific scientific career because it would involve me in actions that are against my religion, then I should in general be free not to do so.³⁵ On the other side it seems equally clear that a bureaucrat with religious beliefs cannot let his personal religious beliefs influence the decisions he is empowered to make in his bureaucratic role. A religious head of a national research council should not

let her decisions be influenced by religion, just like an atheist head should not let his decisions be influenced by his particular metaphysical views.

Then what about the many situations in the middle, for instance situations where a person acts as a citizen? Is it legitimate, for instance to vote for a politician who shares my religious views, or who promotes policies that are consistent with my religious views?³⁶ Or is it legitimate to direct my charitable contributions to an atheist research charity instead of a religious one, because I identify more with the aims of the atheist charity?

Even in an ideal deliberative democracy it would be legitimate to vote for a representative to the fully deliberative decision making forum on the basis that this representative shared my comprehensive worldview and/or promoted policies with which I agreed.³⁷

If I believe that embryos have moral status and that there are good, secular arguments that can show this, then I can legitimately vote for a politician who holds the same views. It may not even be necessary for me, as a citizen to be able to produce the good secular arguments, as long as I am reasonably convinced that they are available. We would, I presume find nothing strange in someone voting for a politician on the basis that they agreed with her taxation policy, without fully understanding the economic theory of taxation or having full command of the details of the tax system.³⁸

The religious politician

Can a politician who holds religious beliefs let those beliefs influence his decisions? We are here getting closer to the secular core of the secular society and if we maintain that in the deliberative forum of decision making only secular arguments can be used, then a religious politician should not use religious arguments and should only use secular arguments to come to the same conclusions if he is convinced that they are valid and sound. We should therefore hold politicians to a higher standard than citizens in relation to their understanding of the arguments they refer to.

Holding politicians to this standard does, however, create a potential problem in our less than ideal deliberative democracies. As a matter of fact many 'arguments' are routinely a part of political discourse in our parliaments that would be given no weight or would be deemed to be illegitimate in an ideal deliberative democracy. Many are simply invalid, others deliberately conceal important premises and some are of very questionable soundness. Which of the many arguments of this kind we should deem illegitimate now in our less than ideal situation is not easy to decide. Arguments that are invalid and cannot be reconstructed to achieve validity should obviously not be put forward as serious contributions to policy making, but it is much more difficult to say which of the potentially unsound or deliberately enthymematic arguments we should discount.

The religious organisation

Let us move on to the influence of religious organisations. One way to conceptualize religious organisations is as specific type interest groups. In the following we will mainly be focusing on the overarching religious organisations, like Churches with a big ‘C’, but it is important to remember that there are many other kinds of more focused religious organisations³⁹ that try to influence policy across the whole policy spectrum.

Churches and similar bodies differ from interest groups with a narrow scope because their scope is wide and potentially all encompassing, but they are in many ways similar to other interest groups with a wide scope.

People join interest groups with a wide scope for a range of reasons, many unrelated to any public policies and campaigns that the group is pursuing. But it can still be legitimate for such groups to pursue campaigns and for their leaders to claim to represent the membership, because members can exit the organisation if they are unhappy with its policies.⁴⁰

In the United Kingdom the Women’s Institute for instance defines its history and current mission in the following way:

The Women’s Institute (WI) was formed in 1915 with two clear aims: to revitalise rural communities and to encourage women to become more involved in producing food during the First World War. Since then our aims have broadened and we are now the largest women’s organisation in the UK. We celebrated our 90th anniversary in 2005 and currently have 207,000 members in 7,000 WIs.

We play a unique role in providing women with educational opportunities and the chance to build new skills, to take part in a wide variety of activities and to *campaign* on issues that matter to them and their communities. (<http://www.thewi.org.uk/section.aspx?id=12>)

The WI pursues a wide range of policies and campaigns from promoting ‘Fairtrade’ to campaigning for an end to custody for people with mental illness. Many women probably join the WI primarily because of its social aspects, but the organisation can never the less make some claim to speak for them on a quite wide range of issues.

In an ideal deliberative democracy we might conceivably not need interest groups, because every citizen would have equal actual opportunity to participate in decision making processes in society,⁴¹ but in our non-ideal societies interest groups play an important role. They can be a focus for specific interests that are otherwise neglected and they can energise people to try to take an active role in promoting their own views. This is not to say that interest groups are always a force for the good, since they clearly are not. They often, knowingly or unknowingly portray the interest that they are promoting as more important than it really is.

Are religious organisations different from other interest groups in ways that would give us reason to specifically exclude them from influencing policy processes?⁴²

A number of possible relevant differences are:

- Religious organisations are not democratic in their internal decision making;
- Leaders of religious organisations have power over their members;
- Religious organisations are inherently hierarchical and elitist;
- Members do not voluntarily choose to become members of religious organisations;⁴³
- Religious organisations are not open to everybody, membership is restricted;
- The views of religious organisations are not determined by reason.

What can be said about these possible differences between religious organisations and other organisations?

The first thing to notice is that both individually and taken together there are non-religious interest groups that exhibit these features. They are not specific to religious organisations and if we use them as criteria to exclude groups from influencing policy making, then they need to be applied to all interest groups.

Many scientific organisations are less than perfect democracies and many promote views that are not fully determined by reason.

Second, each of these features characterize some religious organisations but not all. So they do not provide justification for excluding religious organisations as a class.

It is clearly problematic if a religious organisation or any other organisation of which politicians are members exploits its power over its members to try to determine policy. However, it is not immediately obvious that a religious organisation that publicly states that ‘good members of our organisation will vote for this legislation’ is doing anything that is fundamentally different and more problematic than the trade organisation which states that ‘only politicians that vote for this legislation will continue to enjoy our financial support’. Both organisations attempt to use power in a space where only argument should be used.

What I am denying here is not that there are religious groups with characteristics that make them illegitimate participants in public policy making. What I am denying is that these characteristics are shared by all, or in many western societies even most currently active religious groups. So, we do again not have any reason to exclude religious organisations as a class.

Real politics?

The sections above can perhaps be accused of misstating what the problem with religious influence in policy is. Isn't the real problem that politicians, whether or not they themselves are religious take the pronouncements of religious figures too seriously and give religion a privileged place in public life?

There is much to be said for this view as an empirical account of what happens in some societies. Organized religion is in decline and politicians no longer need to take the views of religious figures as seriously as they did previously. The religious figures speak for fewer people and ignoring them is not as dangerous to a government's re-election prospects as it used to be.

One way of understanding this 'realist' description of the political situation is therefore that on a cynical Schumpeterian account of politics – parties do not get elected to pursue policies, they pursue policies to get elected – politicians in some countries have not yet realised that they do not, as a matter of political expedience, need to take religious views into account.

However the other side of the realist coin is that politicians in societies where religion is still important should take the views of religious figures seriously, even if they think the arguments don't hold up.

We could also read the complaint as a more principled warning against giving some organisations privileged status in public life. If 'privileged status' here really means 'unjustified privileged status' then we are close to a tautology, but if it is a placeholder for 'organisation a politician can legitimately take account of' we will need a more precise account of what creates such organisational legitimacy. Given the many similarities between religious organisations and non-religious organisations mentioned above, that account it unlikely to cut precisely at the religious/non-religious distinction.

Religion and science policy – Take 2

What are the implications of these arguments for religious influence on science policy in a secular society?

First it follows that if a religious person, organisation or politician influences science policy through arguments that are both valid and sound within a secular frame then seeking and potentially getting influence on science policy is completely legitimate and unproblematic, *pace* Dworkin.

Second it follows that any restrictions we want to apply to religious agents in debates about science policy will also have to be applied to anyone else who holds a deeply rooted world view. This also extends to the degree of suspicion of 'non-secularity' we can reasonably apply to agents, their motives and their arguments. If the mere fact that an agent is religious is ground enough for suspicion with regard to some hidden 'religiousness' in action, motive or

argument, then the same hermeneutics of suspicion⁴⁴ must be applied to deep ecologists, Marxists, libertarians, feminists, one nation conservatives or any other participants in the debate who can be suspected of holding a world view. Their arguments must also be scrutinized for any remainder of ideology or world view that will entail that they do not solely rely on 'public political values'.

However what if the religious influence leads to a curtailment of either positive or negative scientific freedom? Will this not in itself show that religious influence is inimical to scientific freedom and make the whole argument above superfluous? If it is the case that scientific freedom is absolute and can never legitimately be curtailed, then the conclusion does follow, but the argument is invalid in so far as we have good reason to believe that scientific freedom while an important freedom is not an absolute freedom. If there are situations where scientific freedom can be curtailed legitimately, then what matters is that this curtailment happens by a legitimate process and based on legitimate and sound justifications. In a secular society the process and the justifications must be secular as discussed above and it is only if the religious influence has gone beyond this that it is inimical to scientific freedom in a problematic way.

Conclusions

This chapter has argued that certain kinds of religious influence on science policy are completely legitimate in a secular society, and that such influence is not necessarily inimical to scientific freedom.

More specifically it has argued that it can be justifiable to restrict scientific liberty to protect other important ethical freedoms and rights. This requires good justification, but is not excluded by the fact that scientific liberty is an important liberty. Further it has been argued that in relation to the more expansive conception of scientific freedom as a positive freedom society has greater latitude in deciding which of the many worthwhile scientific endeavours it wants to pursue. The mere fact that some piece of scientific work is important is, for instance not sufficient to create a non-rebuttable claim for funding.

In both of these areas of science policy the religious citizen and the religious organisation can legitimately put forward secular arguments for certain policy choices, and in so far as these arguments convince policy makers there is nothing problematic in making policy choices on these grounds.