A pluralist challenge to “integrative medicine”: Feyerabend and Popper on the cognitive value of alternative medicine

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ABSTRACT

This paper is a critique of ‘integrative medicine’ as an ideal of medical progress on the grounds that it fails to realise the cognitive value of alternative medicine. After a brief account of the cognitive value of alternative medicine, I outline the form of ‘integrative medicine’ defended by the late Stephen Straus, former director of the US National Centre for Complementary and Alternative Medicine. Straus’ account is then considered in the light of Zuzana Parusnikova’s recent criticism of ‘integrative medicine’ and her distinction between ‘cognitive’ and ‘opportunistic’ engagement with alternative medicine. Parusnikova warns that the medical establishment is guilty of ‘dogmatism’ and proposes that one can usefully invoke Karl Popper’s ‘critical rationalism’ as an antidote. Using the example of Straus, I argue that an appeal to Popper is insufficient, on the grounds that ‘integrative medicine’ can class as a form of cognitively-productive, critical engagement. I suggest that Parusnikova’s appeal to Popper should be augmented with Paul Feyerabend’s emphasis upon the role of ‘radical alternatives’ in maximising criticism. ‘Integrative medicine’ fails to maximise criticism because it ‘translates’ alternative medicine into the theories and terminology of allopathic medicine and so erodes its capacity to provide cognitively-valuable ‘radical alternatives’. These claims are then illustrated with a discussion of ‘traditional’ and ‘medical’ acupuncture. I conclude that ‘integrative medicine’ fails to exploit the cognitive value of alternative medicine and so should be rejected as an ideal of medical progress.

1. Introduction

This paper is a defence of the cognitive value of alternative medicine. I have two aims. The first is to provide a general account of the possible cognitive value of alternative medicine to medical theory and practice. The second is to criticize certain recent proposals for ‘integrative medicine’ which maintain, implicitly or not, that the body of alternative medical theory and practice can, will, and should be ‘integrated’ into the body of allopathic medicine.1 My discussion will focus on the form of ‘integrative medicine’ defended by Stephen Straus, for reasons that will be elaborated later. After outlining Straus’ account of ‘integrative medicine’, I consider the criticism of it offered by Parusnikova (2002), and assess her claim that Karl Popper can be usefully invoked to reject it. It emerges that though she is right that Popper’s emphasis upon criticism is an important response to the ‘dogmatism’ of the medical establishment, it is, in itself, insufficient and requires augmenting with a further emphasis upon the need for ‘radical alternatives’ to maximize criticism. For that, an appeal to Paul Feyerabend is needed. The paper concludes by affirming the cognitive value of a thoroughgoing medical pluralism to the growth of medical knowledge and understanding.

Since my discussion emphasises the cognitive value of alternative medicine, it is worth beginning by outlining just what this means. There are three points to make. First, all forms of alternative medicine have, in principle at least, cognitive value insofar as two medical writers remark, ‘[i]ntegration can occur at a variety of different levels: from patients who combine various therapies to practitioners who practice different modalities, clinics that offer a range of therapies, and health care systems that facilitate the use of multiple treatment options’ (Boon & Kachan, 2008, p. 2).
as they can potentially contribute to medical knowledge and understanding—for instance by contributing novel therapeutic and diagnostic modalities or critical perspectives upon allopathic medicine. Second, the cognitive value of alternative medicine stands independently of its medical efficacy. Counterintuitive as this may at first sound, a particular alternative medical theory or practice need not actually be medically efficacious for it to enjoy cognitive value; a particular alternative medical treatment may do nothing at all, yet still have value by embodying an original theory of the body which, once applied within allopathic medicine, may offer new insights into healthcare and healing.

Third, the cognitive value of alternative medicine is not exhaustible. It is unlikely that the cognitive value of a particular alternative medical theory or practice would be exhausted by a particular program of research, such that at the termination of those researches it could be safely confined to intellectual oblivion. The reason is that the cognitive value of alternative medicine is likely to be dependant upon the prevailing forms of allopathic medicine, such that certain alternative medical theories may be of little cognitive value at a particular time because they share strong characteristics with the dominant forms of allopathic medicine. A few more years down the line, however, those allopathic theories may have changed, such that the cognitive value of those alternative theories becomes newly prominent. This third point therefore reflects the claim, voiced by Paul Feyerabend—to whom I return later—that ‘[m]edicine can only profit from making history part of its practice and its research’. Feyerabend urges us to ‘preserve fault points of view for possible future use’ (namely, alternative medicine), for the two reasons that, first, our ‘practice[s] can change direction in surprising ways’, such that ‘obsolete’ theories and practices enjoy newfound significance, and, second, to insure us against the vicissitudes of ‘recurrent fashions’ (1987, p. 33). The history of medicine therefore has an essential role here.

It is also worth adding that the alternative medicine can be of value to the general public—whether they use it or not—for instance, by encouraging and enabling them to identify and affirm the values they wish to see reflected in the forms of medical treatment available to them—consistent with contemporary advocacy of ‘values-based medicine’ (Fulford, 2004). As Crumley puts it, public interest in alternative medicine often reflects value-preferences—for instance, many people want healthcare which is ‘holistic’ and ‘personalised’, and which ‘looks at them as a whole person’ rather than as ‘an anatomical specimen to be tested, prodded’ (Crumley, 2006, p. 83).

With these remarks about the cognitive value of alternative medicine in place, I will now outline the form of ‘integrative medicine’—if my argument holds—fails to realize the cognitive value of alternative medicine.

2. Stephen Straus’ vision of ‘integrative medicine’

Stephen Straus was, until 2006, the founding director of the US National Centre for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health (NIH). I focus upon his account of ‘integrative medicine’ for two reasons. First, as the account of the director of NCCAM, it has obvious institutional and professional influence and prestige. Straus’ ideas helped to shape not only American policy on complementary and alternative medicine, but also found instantiation through NCCAM. For instance, Straus’ account is often reproduced for discussion in textbooks on complementary and alternative medicine. Second, it is a particularly strong form of ‘integrative medicine’, and so my criticisms, if successful, should help us to chart the weaker, yet more plausible, forms that ‘integrative medicine’ could take. After all, my claim here is not that ‘integrative medicine’ in all its many forms is objectionable; rather, the suggestion here is simply that Straus’ ‘vision’ of it is not a tenable ideal.

In a 1999 contribution to the Journal of the American Medical Association, entitled ‘2020 Vision: NIH Heads Foresee the Future’, Straus outlines his ‘vision’ of the nature and future of ‘integrative medicine’. This vision begins with a strikingly optimistic prediction, that ‘by 2020, [CAM therapies] will have been incorporated into conventional medical education and practice, and the term ‘complementary and alternative medicine’ will be superseded by the concept of ‘integrative medicine’ (Straus, 1999, p. 2287).

Straus then outlines the strategy by which these ‘incorporations’ will be achieved. He explains that the ‘biological and pharmacological basis for effectiveness of selected herbal and nutritional supplements will be clarified, leading to their standardisation and to the rational design of yet more potent congeners. Advances in neurobiology will elucidate mechanisms underlying ancient practices such as acupuncture and meditation.’ (Straus, 1999, p. 2287). Straus goes on to conclude that, once allopathic medicine has ‘incorporated’ the efficacious alternative medical therapies into its body of ‘education and practice’, the medical establishment and an ‘informed general public’ will have ‘rejected’ whatever else remains. This is the vision of integrative medicine that Straus defends.

These remarks are strikingly optimistic, and perhaps too much so. Consider, for instance, the attitude towards ‘complementary and alternative medicine’. This is a remarkably elastic term, and incorporates medical, religious, and philosophical theories and practices which are so diverse and heterogeneous that they have, in a sense, very little to do with one another, except for the fact that they have all been judged by the medical establishment to be ‘alternative’. Therefore, Straus’ confident assertion that the entire body of alternative medicine can, in practice and in principle, be ‘integrated’ into mainstream medicine seems worryingly overconfident. The allopathic medicine related to scientific biomedicine may, perhaps, actually enjoy therapeutic and diagnostic superiority over all forms of ‘non-scientific’ medicine; but, as cautionary critics like Feyerabend and Parusnikova emphasise, this must be demonstrated by patient and fair-minded examination and research, not by ex cathedra declaration or scientific presumption.

It is important to note that Straus’ remarks rely upon a dubious presumption. This is that any efficacy that alternative medicine has will be due to biological, pharmacological, or neurobiological processes. The aim of ‘integrative medicine’ is therefore to ‘clarify’, ‘standardise’, and ‘elucidate’ the bases for efficacious alternative medical therapies, and to reject the rest. There is no indication here that the actual theories and concepts upon which alternative medical therapies are based will be taken seriously, or even considered. Therefore, one would have grounds for worrying about the rhetoric of ‘integration’. It seems misleading for Straus to describe his recommended programme as ‘integrative’ medicine, for the reason that, by his account, little of the theoretical, conceptual, and practical content of alternative medicine will be preserved. It is a poor sort of integration that draws little from one side and everything...
from the other—this is, rather, a form of ‘assimilation’.\(^5\) As Cant and Sharma warn, ‘integration’ could all too easily see the ‘incorporation’ of alternative medicine by the medical establishment ‘without any concession of authority by the latter’ (Cant & Sharma, 1999, p. 157). The term ‘integration’ should suggest that the resulting body of medical theory and practice will include elements of both allopathic and alternative medicine: for Straus, this is clearly not the case.

Straus’ ‘integrative medicine’ aims to translate alternative medical theory and practice into the theories and terminology of allopathic medicine. I argue that, via this strategy, alternative medicine is neutered by assimilation.\(^6\) As Zuzana Parusnikova puts it, ‘[i]n these integrative processes, alternative practitioners are sometimes pushed to adopt allopathic-like styles, which leads to their original philosophies being abandoned’ (Parusnikova, 2002, p. 177). Its diverse and original theoretical and practical content is erased, because the medical establishment’s engagement with it proceeds upon terms set by allopathic medicine. The entire strategy of ‘integrative medicine’ which Straus advocates refuses to grant parity to allopathic and alternative medicine, and implicitly favours the former by prioritising investigative procedures sympathetic to it. And, of course, few things do well when it is one’s opponents who set the terms of engagement. My two worries are, first, that Straus’ vision of integrative medicine will prevent the medical establishment from realising the full cognitive value of alternative medicine, and, second, that although it purports to be a form of cognitive interest, it is fact disguises an ‘opportunist’ concern to secure the authority of allopathic medicine. To develop these two worries, I now turn to a recent critical discussion of ‘integrative medicine’.

3. Parusnikova on ‘cognitive’ and ‘opportunist’ engagement with alternative medicine

‘Integrative medicine’ was recently criticised by Zuzana Parusnikova. In a 2002 paper in *Studies in History and Philosophy of Biological and Biomedical Sciences*, entitled ‘Integrative medicine: partnership or control?’, she considers two possible reasons for the medical establishments’ engagement with alternative medicine: ‘cognitive interest’ and ‘opportunist’. After considering the quantity of research devoted to alternative medicine within leading medical journals, Parusnikova concludes that the medical establishment’s increasing engagement with alternative medicine cannot be attributed to cognitive interest: that is, a concern to explore the potential diagnostic and therapeutic contributions that alternative medicine could make to allopathic medicine. The reason is that the resources given to the study of acupuncture, herbalism, and the like is ‘pathetic’ (Parusnikova, 2002, p. 174). Certainly the paucity of research does not encourage or support the idea that the medical establishment has any serious cognitive interest in alternative medicine.

The second possible reason Parusnikova considers is ‘opportunist’ self-interest on the part of the medical establishment. In response to growing public interest in alternative medicine—a point consistently emphasised across the literature—the medical establishment has responded by trying to secure the social, professional, and political authority of allopathic medicine against the ‘challenge’ posed by alternative medicine. Their main motivations, then, are not cognitive, but rather reflect rather less noble concerns: namely, profits, power, and prestige.\(^7\) As Parusnikova puts it, ‘[t]he opportunistic concern of allopathic medicine with protecting and strengthening its authority can be explained by the strong influence of complex social and economic factors in medical discourse’. This is especially the case in medicine, which is ‘highly politically charged … at the centre of public interest and … under constant public scrutiny’ (Parusnikova, 2002, p. 177). The aim of ‘opportunist’ engagement is not, however, the cognitive contributions that alternative medicine can make to medical thought and practice, but to a self-interested concern to secure the authority of allopathic medicine. The interests at heart are not medical or moral, but political and professional.

Parusnikova argues that the medical establishment’s increasing engagement with alternative medicine is prompted not by cognitive interest but by opportunistic self-interest. The paucity of research into alternative medicine undermines the suggestion of genuine cognitive interest, and there are strong, non-conspiratorial reasons why the medical establishment should be keen to secure its privileged status. As such, the cognitive value of alternative medicine goes unrealised, and dogmatism prevails. Parusnikova concludes that ‘the cognitive challenges presented by CAM are not seen as opportunities to explore new aspects of medical knowledge, but are rather regarded with suspicion because of their potential to disturb—and even undermine—the high cognitive and social authority of the medical profession’ (Parusnikova, 2002, p. 178). Therefore the medical establishment lapses into ‘dogmatism’. It becomes unwilling to reassess its accepted theories, consider novel forms of criticism, or to engage fairly and freely with rival or alternative medical traditions and practices. Such dogmatism is, arguably, an abrogation of the medical, intellectual, and professional duties concomitant upon the medical profession, and so is, on a range of terms, a bad thing which ought to be criticised and rejected. And if that remark seems too strong, it is enough simply to complain that the evident ‘dogmatism’ of the medical establishment means that it neglects the cognitive value of alternative medicine—and so represents an obstacle to the improvement of medical knowledge and understanding and, beyond that, efficacious treatments, health, and wellbeing.

4. Parusnikova’s appeal to Popper

Parusnikova argues that the best cure for the ‘dogmatism’ of the medical establishment is a good, healthy dose of Popper’s ‘critical rationalism’. In this section, I outline Parusnikova’s appeal to Popper, and introduce my worry that appealing to Popper alone is not enough to secure a critique of ‘integrative medicine’, as outlined by Straus, and so suggest that it needs augmenting by a similar dose of Feyerabend. Central to Popper’s account of the growth of knowledge is the importance of *criticism*: Throughout his works, Popper maintained that ‘the growth of knowledge depends entirely on the existence of disagreement’ (Popper, 1994, pp. 35–36). Such disagreements prompt critical engagement between the competing theories, and the communities that embrace them. Such disagreement generates criticism and this is to the advantage of our theories; they are subjected to novel tests, comprehensive assessment, and their

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\(^5\) Stumpf and Shapiro distinguish between ‘acculturation’ and ‘assimilation’. They argue that ‘[p]reservation of [CAM] values and knowledge as [CAM] is integrated with conventional medicine is preferred to changing [CAM] so that it more closely resembles or even becomes a subset of conventional medicine’. The ‘assimilation’ approach, which Straus clearly favoured, would see ‘the values and knowledge of [CAM] … subordinated to those of conventional medicine, the outcome of which leaves the techniques without a theoretical framework’ (Stumpf & Shapiro, 2006, p. 279).

\(^6\) Crumley also notes a further worry, namely, that efficacious therapies will be ‘brought into the standard practice of medicine’, with the consequence that ‘the intellectual property of that field is taken away from the original practitioners’ (Crumley, 2006, p. 83). See further (Kidd, 2012a).

\(^7\) No doubt many medical practitioners do have such self-concerned concerns; however, many others may have more legitimate worries—for instance, they may earnestly wish to prevent their patients forsaking allopathic treatments in favour of ‘quack remedies’ from alternative medicine ‘charlatans’, and invoke genuine ethical and professional concerns.
advocates are forced to be increasingly imaginative and ingenious in defending their theories against criticisms, on the one hand, and in articulating and extending them, on the other. But criticism presupposes disagreement. As Popper says, ’problems crop up especially when we are disappointed in our expectations, or when our theories involve us in difficulties, in contradictions. It is the problem which challenges us to learn; to advance our knowledge; to experiment; and to observe’ (Popper, 1985, p. 222).

Parusnikova worries that ’something valuable is lost in this process [of integration]—the openness to new and fascinating problems that could emerge from the encounters between the two kinds of medicine’ (Parusnikova, 2002, p. 179). In the most obvious sense, this is because, through the processes of ’integration’, the very fact of there being two meaningfully distinct ’kinds’ of medicine is eroded: alternative medical concepts, theories, and practices are translated or ’restated’ into the theories and language of allopathic medicine. ’Opportunistic’ engagement with alternative medicine generates ’dogmatism’ because of its conservative, protectionist motivation to preserve the authority of allopathic medicine in a way that precludes sympathetic, open-minded consideration of the potential contributions that alternative medicine could make—for instance, introducing rival concepts and theories of healthcare and healing. An ’alternative’ can just as easily be considered a ’rival’, depending upon whether one is driven by opportunistic self-interest or cognitive interest. Parusnikova argues that Popper’s critical rationalism is our best response, since it provides a means of ’easing the dogmatic tendencies in medical discourse’ about CAM: ’the critical attitude would imply that the medical establishment should be open-minded to alternatives and investigate them eagerly’ (Parusnikova, 2002, p. 183). Therefore, a healthy dose of Popper will provide the enthusiasm for ’criticism’ that will counteract the medical establishment’s ’dogmatism’. ’Dogmatic’ resistance to alternative medicine would be replaced by an enthusiastic and cognitively productive critical engagement.

Although Popperian criticism is important in resisting ’dogmatism’, it seems that it alone is not enough to resist Straus’ ’integrative medicine’. After all, Straus’ vision of ’integrative medicine’ would seem to fare rather well within the Popperian perspective. NCCAM itself has funded many long-term projects investigating the efficacy of various forms of alternative medicine and these reflect medical and cognitive interest manifested in a ’critical’ spirit that Popper would approve of. Straus’ ’integrative medicine’ could therefore be considered as an excellent example of ’critical’, cognitively motivated engagement with alternative medicine. NCCAM could be judged to be critically, cognitively engaging with alternative medicine, to the betterment, in most cases, of allopathic medicine—and, indeed, to the corresponding improvement of alternative medicine, which, if Straus is justified in his ambitions, would see its ’basis for effectiveness … clarified’ and the ’underlying mechanisms’ (neurobiological, say) that it appeals to ’elucidated’. Within the Popperian framework that Parusnikova sets out, Straus’ ’integrative medicine’ seems to fare very well.

Despite the positive tone of this judgment, there are reasons for caution. My worry is that Straus’ ’integrative medicine’ does not maximise criticism, and so is not fully realising the potential cognitive value of alternative medicine. Straus allows only for ’bounded criticism’, and so ’integrative medicine’, on his terms, cannot class as a ’cognitive engagement’ in the sense that Parusnikova intends. The reason is that Straus’ ’integrative medicine’ seeks to examine alternative medicine exclusively using the resources of allopathic medicine; for instance, the investigative and theoretical resources of the biological sciences. In the aforementioned remark, Straus indicates that the ’bases’ for the efficacy of ’selected’ alternative medical therapies are ultimately describable using the resources of biomedical science. As such, it excludes a whole host of alternative metaphysical schemes embodied in certain alternative medical theories and therapies. Although utilization of the resources of biomedical science does enable effective forms of criticism, the concomitant refusal to explore alternative medicine ’on its own terms’ precludes it from maximising criticism—and, as long as criticism is minimised, the full cognitive value of alternative medicine cannot be realised.

I propose that an appeal to Popperian criticism alone is insufficient for providing a critique of Straus’ ’integrative medicine’. If the cognitive value of alternative medicine is to be fully realised then the critical potential it offers must be maximised, and this requires, in turn, that the ’terms of engagement’ are not exclusively set by biomedical science. Indeed, as long as ’integrative medicine’ persists in engaging with alternative medicine using theoretical and investigative resources peculiar to allopathic medicine, it can be accused of ’rigging the game’. This would re-invite the ’opportunism’ that Parusnikova rightly rejects. To maximise criticism and preclude opportunistic assimilation of alternative medicine one needs an emphasis upon the value of radical alternatives in maximising criticism—and, hence, an affirmation of the value of medical pluralism—and this is where Feyerabend can contribute.

5. A Feyerabendian appeal

Invoking Popper’s emphasis upon criticism is important, but it only gets us halfway towards a critique of Straus’ ’integrative medicine’. What one needs to complete the criticism is, I suggest, Feyerabend’s pluralistic emphasis upon ’radical alternatives’ as the best means of maximising criticism. The need for Feyerabend is defended as follows: Straus could reply that his ’integrative medicine’ is already manifesting the sort of ’criticism’ that Popper has in mind—for instance, experimenting, running clinical trials, and so on. This is, of course, true. The problem, however, is that the terms of this engagement with alternative medicine are set entirely by the theories and evaluative norms of allopathic medicine. This precludes any genuine critique of those theories and norms, and the presumptive preservation of the theories, concepts, and practices related to them. As long as the terms of engagement are set by allopathic medicine, the best that Straus could sustain is ’bounded criticism’, and such bounded criticism will fail to exploit fully the cognitive value of alternative medicine.

Before elaborating on Feyerabend’s contributions, a brief caveat is needed. Many philosophers and historians will likely hear ‘Feyerabend and alternative medicine’ and suppose, perhaps understandably, that some sort of praise of voodoo and witch doctors is coming. This is understandable, because for a brief time in the late 1970s, Feyerabend did indeed affirm that alternative medicine is just as effective and valuable as allopathic medicine, and that only whim or preference could help us choose between them (see, for instance, Feyerabend, 1978, p. 137f). Such a claim is obviously nonsense, and Feyerabend was therefore quite sensible to retract it, and in later writings he agreed that, in certain areas of medicine, like pharmacology, invasive surgery, and immunology, ’Western scientific medicine’ was by far superior to any alternative (see, for instance, Feyerabend, 1987, p. 26ff; 1993, p. 3). With this caveat in place, Feyerabend’s proper contributions can now be made.

Feyerabend can make two contributions to my discussion of the cognitive value of alternative medicine. The first is a historical observation which links with Parusnikova’s concerns—and the second is an epistemological point which, if I am correct, importantly augments the appeal to Popper. Taken together, these two points also indicate that Feyerabend does have useful contributions to make to discussions of the role and authority of Western science.
and medicine, and which are happily free from the crass ‘relativism’ that taints his reputation.\(^8\)

The first point is historical. This is that Feyerabend was aware of the ‘opportunistic’ nature of the medical establishments’ engagement with alternative medicine. From the late 1970s, and throughout the 1980s and 1990s, he often remarked upon the widespread and unjustified presumption of the superiority of allopathic medicine. In 1980, for instance, Feyerabend noted the common claim that the sciences ‘are uniformly better than all alternatives—but where is the evidence to support this claim? Where, for example, are the control groups which show the uniform superiority of Western scientific medicine over the medicine of the Neh Ching?’ (Feyerabend, 1980, p. 13). The force of many of Feyerabend’s discussions of alternative medicine was not that they were uniformly superior to allopathic medicine. It was, rather, that the fair-minded processes of comparison and assessment which would determine the superiority of the one or the other had not been performed (see, for instance, Feyerabend, 1987, p. 30).

Feyerabend expanded this point. Drawing upon his work in the history of science, he emphasised that the emergence and establishment of allopathic medicine owed not only to theoretical and medical successes, but also to social and political factors.\(^9\) Feyerabend argued that ‘many so-called victories of science-based practices’ were results not of ‘systematic comparative research’, but, rather, of ‘social developments, political (institutional) pressures, and power play’ (Feyerabend, 1987, p. 31). Though these observations do not undermine the efficacy of allopathic medicine, of course, they do support Parusnikova’s complaint that the medical establishment’s engagement with alternative medicine is primarily ‘opportunistic’, and that the entrenchment of allopathic medicine is not the result of patient and prolonged processes of investigation and comparison. Therefore, Feyerabend was aware of the ‘opportunistic’ nature of the medical establishment’s engagement with alternative medicine, and an advocate of its cognitive value—and it is striking to note that, some thirty years later, Parusnikova confirmed that the same situation had persisted.

The second point is epistemological. Like Popper, Feyerabend is an enthusiastic advocate of criticism and he sees this as essential to the growth of knowledge and understanding. Unlike Popper, however, Feyerabend stresses that criticism is maximised when it invokes alternatives to the theories or positions under scrutiny. As he says, ‘[c]riticism must use alternatives. Alternatives will be the more efficient the more radically they differ from the point of view to be investigated’ (Feyerabend, 1963, p. 7f). Criticism performed in the absence of alternatives is a form of bounded criticism: without inclusion or consultation of ‘radical alternatives’, it is all too easy for theories, methods, concepts, and practices to remain unchallenged and for their weaknesses and deficiencies to remain invisible. Maximal criticism of allopathic medicine requires that we ‘make the basic assumptions visible’, and ‘examine them in a more direct manner’ by ‘compare[ing] the results of scientific medicine with the results of forms of medicine based on entirely different principles’ (Feyerabend, 1981, pp. 32–33).

In order to maximise criticism it is necessary to subject theories to criticism from a plurality of competing, radically alternative theories. This was a key theme throughout Feyerabend’s philosophy, and formed the basis of his ‘pluralistic test model’ for scientific theories. More specifically, Feyerabend considered that the use of radical alternatives—and the pluralism which resulted—would function not only as cognitive resources, but could also help to combat dogmatism and ‘conceptual conservatism’—in just the manner that Parusnikova needs to complete her critique of ‘integrative medicine’. However, by appealing to Popper only, Parusnikova cannot quite maximise the criticism that she needs, and this can come, I argue, by including Feyerabend and his emphasis upon ‘radical alternatives’. In the medical case, of course, the ‘radical alternatives’ to the theories and practices of allopathic medicine are, obviously, those provided by alternative medicine, in all its forms.

One might object that Feyerabend did not intend his ‘pluralistic test-model’ to be employed within medicine. This worry is unfounded. Although Feyerabend introduced and elaborated his account of the role of ‘radical alternatives’ by using examples from the history of the physical sciences, it is clear enough that he did consider it applicable to the growth of knowledge per se, and not just within the context of physics, astronomy, and the like. In the introduction to the second volume of his philosophical papers, for instance, Feyerabend writes that ‘criticism [and] proliferation’ have ‘played an important role in the history of science, philosophy, and civilization’, and offers as examples their importance to Buddhism, mysticism, and the theatre, as well as in the ‘rather narrow and technical problem [of] the interpretation of scientific theories’ (Feyerabend, 1981a, p. vii). There is, therefore, no good reason to suppose that Feyerabend’s epistemological arguments for pluralism cannot be applied to medicine. Indeed, Eric Oberheim (2006) has recently argued that Feyerabend’s entire philosophy can be profitably understood as a comprehensive elaboration of a ‘philosophical pluralism’, and medicine can serve as a good example of such pluralism just as much as physics or astronomy.

The contribution that Feyerabend can make to Parusnikova is that emphasising criticism in itself is not enough. Such criticism can only be maximised by using ‘radical alternatives’ to allopathic medicine—namely, alternative medicine. This in turn requires, of course, that those alternative medical theories and practices must be considered whilst retaining their ‘radical’ status, rather than through the lens of allopathic theories, norms, and terminology. Alternative medicine, on these terms, provides ‘radical alternatives’ to allopathic medicine. These alternatives might include: novel concepts of healthcare, healing, and disease; new perspectives upon the nature of treatment and recovery; and original accounts of the psychological and emotional dimensions of health (see, for instance, Kidd, 2012b). Many forms of alternative medicine can also offer modalities of medical care that enjoy the ‘personalised’, ‘holistic’ character which many users of alternative medicine cite as key motivating reasons. After all, alternative is ‘in’ not just because its users and adherents think that it ‘works’, but because of their perception that it ‘works’ in ways which fulfill certain values which matter to them, and which, conversely, reflect certain dissatisfaction with allopathic medicine, such as its ‘depersonalised’, ‘invasive’ character.

The cognitive value of alternative medicine, then, resides in the fact that it provides ‘radical alternatives’ to the conceptual, medical, and clinical structures of allopathic medicine—and, as Feyerabend emphasises, it is only through engagement with such ‘radical alternatives’ that criticism of allopathic medicine can be maximised. Criticism is maximised by the employment of radical alternatives—but this requires that those ‘alternatives’ retain their ‘radical’ status by having the integrity of their conceptual, theoretical, and practical features respected and preserved. ‘Integrative medicine’, as Straus described it, does not respect the integrity of alternative medicine and so must be rejected as an ideal of medical progress.

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8 On the complex history of Feyerabend’s changing conceptions of and commitment to ‘relativism’, see Kusch (in press).

With my main arguments in place, I go on in the next section to discuss a case study—that of ‘medical acupuncture’—and use this to add concrete details to the foregoing remarks.

6. A case study

It is worth recapping the main points made during the foregoing discussion. The emerging claim is that the medical establishment will remain guilty of opportunistic (rather than cognitive) engagement with alternative medicine unless it takes seriously the ‘radical alternatives’ to its own concepts, theories, and practices the wide range of forms of complementary and alternative medicine offer. It is because contemporary forms of ‘integrative medicine’ tend towards opportunistic rather than cognitive engagement that they are, in my judgment, not really concerned with integration in any meaningful sense.

The aim of this section is to further develop and evidence these claims by providing a sustained case study—that of contemporary ‘medical acupuncture’. My claim is that medical acupuncture does not, despite its pretensions, constitute a legitimate form of integrative medicine because it does not evince any genuine cognitive engagement with traditional acupuncture. I raise two objections—the ‘ignorance objection’ and the ‘derogation objection’—and illustrate these with examples from leading medical acupuncture authors and organizations. It is worth emphasizing that none of these arguments presume or rely upon the claim that traditional acupuncture is efficacious or even intelligible—that it ‘works’ or is ‘true’—but only that medical acupuncture, at least in its present form, does not fulfill the conditions for genuine cognitive engagement with a radical alternative that would legitimate its claim to be engaged in integrative medicine.

Before offering an account of acupuncture, both ‘traditional’ and ‘medical’, it is worth justifying my focus on it. There are three reasons. The first is that acupuncture is consistently identified as one of the most popular forms of complementary and alternative medicine, amongst patients. The second is that it has one of the largest penetrations into healthcare systems of any complementary and alternative medicine; in the UK, for instance, it has been made available as an alternative form of pain relief by the National Health Service. The third reason is that Feyerabend used acupuncture as an example; indeed, unlike most writers on and critics of acupuncture, he indicates his awareness of *The Yellow Emperor’s Classic of Internal Medicine* and of the important work of Joseph Needham—a point I return to later in this section (Feyerabend, 1987, p. 25fn5; see further Feyerabend, 1993, p. 37).

Contemporary literature distinguishes between two forms of acupuncture, usually dubbed ‘traditional’ and ‘medical’ (see, for instance, *The Acupuncture Working Group 2003, §2.3*). Those labels are, of course, imperfect, but since they are prevalent in the literature, I will use them. The term ‘traditional acupuncture’ refers to the set of practices that had emerged in ancient China by at least the second century BCE, although its early history is still unclear. Its main components are *qi*, *yin-yang*, and *jing-luo* (‘meridians’), and the general theory is that bodily functions are regulated by the flow of *qi*, a ‘vital energy’, through the body and that the disruption of this flow causes disease. An acupuncturist can help to restore the proper flow of *qi* through the needling of certain points on or under the skin, today called ‘acupoints’, organised along twelve ‘regular’ and eight ‘extraordinary’ meridians (though the number and placement of these points varies according to the specific tradition). *Yin* and *yang* refer to the two ‘creative forces’ or ‘generative principles’, correlated to dualities like ‘male/female’, whose interaction generates the world as we experience it. The meridians connect the organs, which are themselves divided into those considered *yang* (like the stomach) and those considered *yin* (like the lungs).

Brief as that account is, it should be clear that the concepts and postulates of traditional acupuncture are very different from anything recognised in contemporary biomedical science. Little scholarly training is required to recognize that neither *qi* or *yin-yang* find any resonance with the prevailing theories of modern science, and meridian lines do not correlate to anything in contemporary theories of human physiology, despite the ingenuity of some medical acupuncturists. Those concepts and theories are grounded in a very different set of philosophical convictions and sensibilities, ones originating in ancient Chinese philosophy rather than Enlightenment Europe (see *Cheng, 2009*).

Such incompatibilities are recognised by medical acupuncturists. Most dutifully refer, albeit briefly and without detail, to the history and philosophy of traditional acupuncture, but quickly move to distance themselves from it. As the influential medical acupuncturist Felix Mann bluntly put it, ‘acupuncture points and meridians, in the traditional sense, do not exist’ (Mann, 2000, p. 3). Likewise, the British Medical Acupuncture Society is quick to state that ‘Western medical acupuncture...does not involve the traditional concepts such as *Yin/Yang* and circulation of “*qi*”’ (White & The Editorial Board of Acupuncture in Medicine, 2009, p. 33). The tendency amongst medical acupuncturists is to adopt certain of the concepts or practices of traditional acupuncture—such as the idea that needling certain points on the body can have therapeutic value—and to discard the theories of the body, metaphysical theories, and wider philosophical frameworks within which those concepts and practices are grounded.

It is therefore unsurprising that many medical acupuncturists repeat the rhetoric of ‘integration’ employed by Straus. ‘Integration’ here involves the ‘incorporation’ of whichever traditional acupuncturist concepts and methods can be ‘translated’ or rationalised in the terms of contemporary biomedical science, and the abandonment of the rest. ‘The ideal state of acupuncture’, explains one trio of authors, is one in which ‘the major component is science’—for example, in which the ‘essence of meridians’ is given ‘scientific bases’—in accordance with a ‘general methodology’ drawn from the standards and methods of ‘contemporary medicine’ (*Jin, Jin, & Jin, 2007, p. 5*).

Since my reservations about describing this as ‘integration’ have already been recorded, let me offer two objections to the claim that medical acupuncture’s engagement with traditional acupuncture is genuinely cognitive. Call these the ignorance objection and the derogation objection.

The ignorance objection is that advocates of medical acupuncture generally evince little deep or detailed knowledge and understanding of the history, theories, and practices of traditional acupuncture and so fail to fulfill a basic precondition of genuine cognitive engagement—having a substantial degree of knowledge and understanding of the object of their engagement. This objection has three related aspects. First, medical acupuncturists typically display little knowledge of the historical development of traditional Chinese medicine, and by implication, the ways in which it engaged with and was informed by philosophical and metaphysical thinking. Second, medical acupuncturists do not usually display knowledge of the specific ideas of traditional acupuncture, nor even of the means of expressing those ideas in contemporary biomedical terms. Lastly, medical acupuncturists do not usually display understanding of the ways in which traditional acupuncture is structured and organised as a system of knowing, feeling, and acting.

10 See, for instance, Barnes, Bloom, & Nain (2008), the House of Lords Committee on Science and Technology (2000) and Price & White (2004).


12 I searched the website of the BMAS for the terms ‘*qi*’, ‘*yin-yang*’, ‘*yin-yang*’, ‘*yin*’, and ‘*yang*’ but found no results; see http://www.medical-acupuncture.co.uk/.

13 Such tendencies are widespread: in recent years there have been similar attempts to ‘integrate’ or reconcile Buddhist philosophy with the deliverances of the modern sciences; concerning neuroscience, see Flanagan (2011), and concerning ‘mindfulness’ and cognitive science, see the essays in Williams & Kabat-Zinn (2011), especially those by Bhikkhu Bodhi and Rupert Gethin. I thank David E. Cooper for these references.
acupuncture—including its place within the history of ancient Chinese medicine—and no effective understanding of the philosophical systems, like Daoism, which have informed its development. There is invariably no reference to, let alone sophisticated engagement with, the main texts of traditional acupuncture, such as the first-century BCE Yellow Emperor’s *Classic of Internal Medicine* (*Huang Ti Nei Ching, Veith, 2002*)—which Feyerabend refers to—and the later *Classic of Acupuncture* (*Zhen jiu jia Jing, Shandong, 1979*) of 259AD.13 This is despite the fact that, as three scholars of Daoist acupuncture explain, ‘[o]ne must have some idea of the Nei Jing if one wants to understand Chinese medicine and acupuncture’ (*Liu et al., 1999*, p. 37). Since these are the foundational texts of traditional acupuncture, it is reasonable to demand that critics have an informed acquaintance with them for otherwise no meaningful cognitive engagement is possible (in the same way that one would rightly expect critics of evolution to have read and understood Darwin’s *Origin of Species*, say).

Second, there is typically no indication of the worry that such ignorance is a cause for concern, or any sign of fault on the part of advocates of medical acupuncture. The British Medical Acupuncture Society’s article ‘Western medical acupuncture: A definition’ offers an account of the ‘development of Western medical acupuncture’ of just under one hundred and sixty words which contains no substantive account of the history, theory, or practice of traditional acupuncture, and no indication that anything is amiss in their presentation of traditional acupuncture (*White & The Editorial Board of Acupuncture in Medicine, 2009*). Since medical acupuncturists generally aspire to reject traditional acupuncture, it is important that they fulfill the requirements of good scholarly practice—to ‘do the work’—and to avail themselves of the insights of the relevant historians, Sinologists, and other relevant scholars.

Third, medical acupuncturists are invariably ignorant of the extremely complex philosophical issues inherent in the claim that one could ‘disprove’ or ‘falsify’ the ontological postulates of traditional acupuncture. The BMAS Editorial Board remark that the ‘ideology’ of traditional acupuncture is ‘difficult to reconcile with a scientific world view’ (*White & The Editorial Board of Acupuncture in Medicine, 2009*, p. 33). But there are very difficult metaphysical and epistemological issues at work here, none of which are noted by those authors: what is the ‘scientific worldview’; is it a broad metaphysic, or a set of theories, or a collective commitment to projects of enquiry of a certain kind, or something else; can something like *qi* be investigated or disproven by the methods of the natural sciences; can non-naturalistic metaphysical schemes be subjected to critical evaluation by investigatory practices grounded in a naturalistic metaphysics—and so on. These are very complex questions that need careful articulation and elaboration, the answers to which are far from obvious; but that fact is not recognized by those medical acupuncturists—like the BMAS Editorial Board—who maintain that the ontological postulates of traditional acupuncture both can be, and are, false and disproven.

The force of the ignorance objection is therefore that medical acupuncturists are typically ignorant of the history, methods, and theories of traditional acupuncture, of the philosophical issues inherent in their interpretation and understanding, and moreover untoutrbled by their ignorance of it. Such systematic ignorance is, of course, clearly incompatible with any genuine cognitive engagement with traditional acupuncture, and since medical acupuncturists are ignorant of that which they criticise, there is—as it stands—no good reason to take their pronouncements seriously.

The derogation objection is that most writers on medical acupuncture tend to dismiss and derogate traditional acupuncture, despite their ignorance of it. To quote the Editorial Board of the British Medical Acupuncture Society again, traditional acupuncture is grounded in an ancient ‘ideology’ that should be ‘discarded by medical practitioners’ (*White & The Editorial Board of Acupuncture in Medicine, 2009*, p. 33).16 The trio of authors quoted earlier similarly describe traditional acupuncture as the product of an ‘ancient cultural environment’, burdened with ‘primitive terms [and] philosophy’, whose core concepts (like *yin* and *yang*) are ‘stretched… broad and vague’, and are the products of ‘naïve dialectical thought’ (*Jin, Jin, & Jin, 2007*, pp. 3–4ff). The derogation objection can be parsed out into three related concerns. First, the fact that concepts like *qi* are unfamiliar to modern eyes—which indeed they may be—indicates nothing about their merits or intelligibility. The proper scholarly response to the unfamiliar is either to acquaint oneself with it or to resist making judgment, to heed Wittgenstein’s wise advice that whereof one cannot speak, one must remain silent. Second, the fact that traditional acupuncture is grounded in an ancient system of thought is not in itself a criticism, not least since an appeal to ‘presentist chauvinism’ is a poor sort of argument.17 Third, the ‘vagueness’ complained of here surely lies in the analysis and not the analyses themselves. It would astonish a scholar of Chinese philosophy for one to complain that *yin* and *yang* are ‘confused’, obscure concepts. For one thing, the classical Chinese philosophical texts devote a great deal of careful attention to articulating those concepts, and, for another, there exists a vast scholarly literature devoted to the articulation and examination of them. Of course, neither those texts nor that literature is referred to or discussed by the medical acupuncturists. It is obvious enough that traditional acupuncture may seem ‘primitive’ to a person lacking any substantive knowledge and understanding of it, but of course such judgements—made from a position of ignorance—are, again, hardly ones to take seriously.

With the two objections in place, let me summarise my claim. Earlier in the paper I argued that ‘integrative medicine’ tends to be a form of opportunistic engagement with traditional medicine, aimed at securing the prestige and authority of allopathic medicine, rather than genuine cognitive engagement with what Feyerabend calls ‘radical alternatives’. Many possible sources of cognitive value—of new concepts of health, healing, and so on—are therefore lost to us. In this section, I argued that medical acupuncture offers a specific case of such opportunistic engagement, for two reasons. The first is that its advocates are generally deeply ignorant of traditional acupuncture and the second is that they tend to derogate it—dismissing *qi*, *yin/yang*, and the like as ‘primitive’, ‘confused’, and so on. But clearly one cannot genuinely cognitively engage with a tradition about which one is ignorant and which one derogates as primitive, confused, or otherwise cognitively redundant.

It is worth repeating an earlier caveat. These criticisms of medical acupuncture should not be taken as indications, let alone proofs, of the efficacy of traditional acupuncture. I am not arguing that traditional acupuncture ‘works’ nor that *qi* and *jing-luo* are ‘real’: those are empirical and metaphysical issues quite distinct from my epistemological concerns with the nature of medical acupuncturists’ engagement with the traditions of traditional acupuncture. Indeed, my interest lies with what one might call the ‘procedural impeccability’ of such engagement: for while medical acupuncturists may be right to claim that *qi* and the like are ‘confused’ and inefficacious, the procedures by which they are making those judgements are deeply flawed—not least owing to the

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15 A rare exception is *White & Ernst (2001)* who mention these works; however, they do not discuss them. The overwhelming majority of texts on medical acupuncture do not.

16 The term ‘ideology’ is too loose, not least since the medical and philosophical theories of traditional acupuncture are, in fact, much more systematic and complex than the fuzzy term ‘ideology’ suggests.

17 I take the useful term ‘presentist chauvinism’ from *Simmel (1980*, p. 165).*
ignorance built into them. Moreover, the concern with procedural impeccability is also one visible in Feyerabend’s own defense of the ‘eccentric’ practice of astrology in his 1978 book *Science in a Free Society*. His defense was motivated by the publication of a statement signed by almost two hundred scientists condemning astrology as an irrational and groundless pseudoscience: when challenged, Feyerabend replied that his defense ‘should not be misunderstood. Astrology bored me to tears. However it was attacked by scientists, Nobel Prize winners among them, without arguments, simply by a show of authority and in this respect deserved a defense’ (Feyerabend, 1991, p. 165). The ostensibly defense of an eccentric practice was, in fact, a call for the rigorous application of the intellectual standards and procedures recognized by the scholarly community—including the important principle that one should not criticize from a position of ignorance.\(^{19}\)

There is an obvious response that a medical acupuncturist might make to this demand for procedural impeccability in their engagement with traditional acupuncture. This response would take the form of a denial of their need to become learned in the history and theories of traditional acupuncture as a precondition of cognitive engagement, on the grounds that it is obvious—to all but the most obstinate—that qi and yin/yang are false. Therefore, there is no cognitive value to be derived from them. If so, then the ignorance and derogation objections lose their force.

I offer two replies. The first reply is that it is circular and question begging to claim that the unintelligibility of traditional acupuncture is obvious. For one thing, that is an appeal rather than an argument and one that we have no obligation to respect, not least when the appeal comes from a critic ignorant of the tradition being derogated. The cognitive value of traditional acupuncture can only be identified through informed engagement with its history, theories, and methods and the existing literature indicates that there is, in fact, much to learn from it. More generally, an appeal to what seems obvious will hardly persuade those for whom the opposite claim is true, and pitting one’s own sense of the obvious against others’ is, in any case, philosophically unsophisticated.

The second reply concerns procedural impeccability. If medical acupuncturists do want to establish that traditional acupuncture is not of cognitive value—in either of the three senses outlined earlier in the paper—then they simply must ‘do the work’. Nothing less will do, especially since intellectual integrity always requires that a scholar should prefer the provision of argument and evidence to what Feyerabend called the offering of ‘dogmatic assertions’ concerning topics, like acupuncture, about which critics ‘have no knowledge whatsoever’ (Feyerabend, 1991, p. 93).\(^{19}\) If at the end of a procedurally impeccable process of enquiry it does emerge that traditional acupuncture is not of cognitive value, then it can be set aside and its enthusiasts should either offer better arguments or accept the judgment; however, nothing approaching such a process of enquiry has yet taken place.

As long as medical acupuncture is vulnerable to the ignorance and derogation objections, it remains guilty of opportunistic engagement with traditional acupuncture. Once again, this is not a defense of the efficacy of traditional acupuncture, but only the insistence that it cognitive value is not yet exhausted and that the medical acupuncturists’ engagement with it is deeply procedurally imperfect, and not genuinely ‘integrative’. The positive upshot of these remarks is that it should be clearer what a medical acupuncturist would have to do to establish their criticisms of traditional acupuncture; a good pluralist does not insist that ‘anything goes’, but only that our judgments about what ‘goes’—which theories and methods to consider, accept, and reject—are grounded in careful and informed analysis and enquiry rather than presumptive appeals, ignorance, and derogation.

7. Conclusions

In this paper, my aim has been to argue that ‘integrative medicine’ fails to capture fully the cognitive value of alternative medicine. Questions of medical efficacy aside, the wide range of theories and practices included within the elastic term ‘alternative medicine’ can prove valuable to allopathic medicine—by providing novel and original concepts, therapeutic and diagnostic modalities, theories of healthcare and healing, and so on. Even if alternative medical theories and treatments do not find themselves incorporated into allopathic medicine—or into the medical establishment more widely—they can still contribute to medical knowledge and understanding. At the least, they can help us to resist the ‘dogmatic’, ‘opportunistic’ behaviour of the medical establishment which Parusnikova rightly criticises.

Straus’ ‘integrative medicine’ fails to realise the cognitive value of alternative medicine. By assimilating alternative medical theories and practices into the theories and terminology of allopathic medicine, ‘integrative medicine’ undermines alternative medicine’s capacity to provide cognitively-valuable, ‘radical alternatives’. The core theories, concepts, and values instantiated in allopathic medicine will remain unchallenged as long as they are conservatively protected from critique by the ‘radical alternatives’ provided by alternative medicine. Feyerabend’s emphasis upon pluralism as a means of maximising criticism helps to secure this point: by assimilating alternative medicine into the theoretical and therapeutic modalities of allopathic medicine, one forsakes its capacity to provide ‘radical alternatives’ and so fails to realise its cognitive value. With Popper and Feyerabend both invoked, I conclude that Straus’ ‘integrative medicine’ should be rejected as an ideal of medical progress, on cognitive-critical grounds, and urge that, for the time being at least, that we embrace a thoroughgoing medical pluralism.

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References


\(^{18}\) For alert Feyerabend scholars, this quotation is taken from the ‘First Dialogue’, dated 1990.


