

## Is the Wisdom Revolution Underway?

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### **Abstract**

The world faces grave global problems. These have been made possible by modern science and technology. We have put knowledge-inquiry into academic practice – a seriously irrational kind of inquiry that seeks knowledge and technological know-how dissociated from a more fundamental concern to seek and promote wisdom. We urgently need to bring about a revolution in academic inquiry, so that knowledge-inquiry becomes wisdom-inquiry – a kind of inquiry rationally designed and devoted to helping humanity make progress towards a wiser world. In this paper I indicate what needs to change if knowledge-inquiry is to become wisdom-inquiry, and I indicate a number of recent developments, mainly in universities in the UK, that can be regarded as first steps towards wisdom-inquiry.

**Key Words:** Wisdom-inquiry, knowledge-inquiry, global problems, academic revolution, environmental problems, global warming, university, higher education, social science, natural science, technology, science policy, philosophy of science, rationality, values, politics, inter-disciplinarity, civilization.

### **The Urgent Need for Wisdom-Inquiry**

Humanity faces grave global problems: rapid population growth, destruction of natural habitats and extinction of species, the spread of modern armaments and the lethal character of modern war and terrorism, depletion of vital natural resources such as oil, pollution of earth, sea and air, vast inequalities of wealth and power around the globe, and above all, impending climate change. A key factor in the genesis of these problems, and our current incapacity to resolve them is our pursuit of scientific knowledge and technological know-how *dissociated from a more fundamental concern of academic inquiry to seek and promote wisdom*. Universities first acquire knowledge and then, secondarily, seek to apply it to help solve social problems. In other words, they put what may be called *knowledge-inquiry* into academic practice. But knowledge-inquiry, judged from the standpoint of helping to promote human welfare, is grossly and damagingly irrational. It is our long-standing implementation of knowledge-inquiry that is, in part, responsible for the creation of our global problems, and our current incapacity to resolve them. We need urgently to bring about an intellectual/institutional revolution in our universities so that they come to put what may be called *wisdom-inquiry* into practice – both more rigorous and of greater potential human value. Wisdom-inquiry would put problems of living at the heart of the academic enterprise, the tackling of problems of knowledge emerging out of and feeding back into sustained imaginative and critical thinking about what our problems of living are, and what we ought to do about them. Social inquiry and the humanities would seek to help humanity build cooperatively rational methods of problem-solving into the fabric of social and political life, so that we may gradually acquire the capacity to resolve our conflicts and problems of living in more cooperatively rational ways than at present.<sup>1</sup>

If we are to make progress towards a good world we need to learn how to do it, and that in turn means that we possess institutions of learning rationally organized and

devoted to helping us do it. It is this that we so disastrously lack at present, and so urgently need.

### **Outline of Argument in Support of Wisdom-Inquiry**

Elsewhere, I have expounded the arguments in support of wisdom-inquiry in some detail.<sup>2</sup> Here, I will be as brief as I can.

There are two arguments, the first appealing to a “problem-solving” conception of rationality, the second to an “aim-pursuing” conception. The second argument builds on the first. They establish, I claim, that knowledge-inquiry is damagingly irrational in a wholesale, structural way. Wisdom-inquiry emerges when knowledge-inquiry is modified just sufficiently to cure it of its gross irrationality.

I assume that a proper, basic aim of academic inquiry is to help promote human welfare, help people realize what is of value to them in life, by intellectual, technological and educational means, it being recognized that knowledge and understanding can be of value in their own right.

Knowledge-inquiry holds that, first, knowledge must be acquired; once acquired, it can be applied to help solve social problems. In order to be of value to humanity, academia must acquire authentic, objective, reliable knowledge. This in turn means that the pursuit of knowledge must be shielded from the influence of all sorts of social factors, only considerations relevant for the determination of knowledge of truth being permitted to enter the intellectual domain, such as claims to knowledge, evidence, experiment, facts, logic, valid argument. If this is not done, knowledge will degenerate into mere propaganda and ideology, and academia will cease to be of value to humanity. Almost paradoxically, values, policies, political programmes, articulations of human problems and what to do about them must all be excluded from the intellectual domain of inquiry so that it may be of genuine benefit to humanity, and help solve human problems.

At the core of knowledge-inquiry there is a philosophy of science that may be called standard empiricism. This asserts that, in science, evidence alone ultimately decides what theories are accepted and rejected. Simplicity, unity or explanatory power may influence choice of theory too, but not in such a way that the universe, or the phenomena, are assumed to be simple, unified or comprehensible. *No thesis about the world can be accepted as a part of scientific knowledge independent of evidence, let alone in violation of evidence.*

In deciding to what extent this whole conception of inquiry is rational, the notion of rationality that we require appeals to the idea that there is some no doubt rather ill-defined set of methods, rules or strategies such that, if they are put into practice, they give us our best chances of solving our problems, realizing our aims. These rules of reason do not guarantee success, and do not prescribe precisely what we must do. They are meta-methods in that they presuppose that we can already implement a great variety of methods in order to act successfully in the world. The meta-methods of reason help us marshal what we can already do so as to solve new problems, realize hitherto unrealised aims.

Granted this relevant conception of rationality, four absolutely elementary rules of rational problem-solving are: (1) articulate, and try to improve the articulation of, the problem to be solved; (2) propose and critically assess possible solutions; (3) when the problem to be solved is intractable, break it down into a number of simpler, preliminary, specialized problems in an attempt to work gradually towards the solution to the basic

problem to be solved; (4) ensure that specialized and basic problem-solving interact, so that each may influence the other.

No problem-solving or aim-pursuing enterprise can be rational which persistently violates one or other of these four rules. Knowledge-inquiry is so severely irrational that it violates, in a structural way, *three* of these four most elementary rules of reason. It puts rule (3) into practice to splendid effect: hence the multiplicity of specialized disciplines of academia today. But rules (1), (2) and (4) are all violated.

Granted that the aim really is to help promote human welfare, then the problems academia fundamentally must help to solve are problems of *living*, not problems of *knowledge*. Even where new knowledge and technology are required, in medicine for example, it is always what this enables us to do (or refrain from doing) that enables us to achieve what is of value in life (except when knowledge is itself of value). Thus, putting the first two rules into academic practice would involve (1) articulating, and improving the articulation of our problems of living, and (2) proposing and critically assessing possible solutions – possible and actual *actions, policies, political programmes, philosophies of life*. Knowledge-inquiry excludes these fundamental activities from the intellectual domain of inquiry – or at least pushes them to the periphery, rather than putting them at the heart of the academic enterprise. Having suppressed, or marginalized, thinking about problems of living, knowledge-inquiry is not able to link up such thinking with specialized research – thus violating rule (4) as well.

This gross, structural irrationality of knowledge-inquiry is bound to have adverse humanitarian or social consequences. It means academia fails to do what it most needs to do, if it is to help humanity achieve what is of value, make progress towards a good world, namely: create, sustain and promote imaginative and critical thinking about what our problems of living are, and what we need to do about them – especially our global problems. It means specialized research fails to be influenced by, and fails to influence, our most enlightened thinking about what our problems of living are, and what we need to do about them. The aims and priorities of scientific research fail to respond to the most urgent needs of humanity. As I have already indicated, it is the successful pursuit of knowledge *irrationally dissociated from a more fundamental concern with tackling problems of living, with promoting wisdom*, which is responsible for the genesis of our current global problems, and our current incapacity to resolve them.

Wisdom-inquiry emerges when knowledge-inquiry is modified structurally just sufficiently to ensure that all four rules of rational problem solving are put into practice. Social inquiry and the humanities acquire, as their basic tasks, (1) to articulate, and improve the articulation of, problems of living, and (2) to propose and critically assess possible solutions – and to promote these activities in the great world beyond academe. Social inquiry, so construed, is intellectually more fundamental than natural science. Further details are listed below in the next section.

So much for the first argument. I come now to the second one, which exploits an “aim-pursuing” notion of rationality.

It may be asked: If academia really is damagingly irrational in the way I have argued it is, how on earth did this situation arise? When did it arise?

It all goes back to the 18<sup>th</sup> century Enlightenment, especially the French Enlightenment. The *philosophes* – Voltaire, Diderot, Condorcet and company – had the profound idea that it may be possible to learn from scientific progress towards greater knowledge how to achieve social progress towards an enlightened world. They thought the way to do this is to develop the social sciences alongside natural science. This idea was developed

throughout the 19th century, by Mill, Marx and others, and built into academia in the early 20<sup>th</sup> century with the creation of disciplines and departments of social science. The outcome is what, by and large, we have today: knowledge-inquiry. But this way of developing the Enlightenment programme contains a series of blunders.

In order to develop the profound Enlightenment idea correctly, the following three steps need to be got right:

- (i) The progress-achieving methods of science need to be correctly identified.
- (ii) These methods need to be correctly generalized so that they become fruitfully applicable to any human endeavour, whatever the aims may be, and not just applicable to the endeavour of improving knowledge.
- (iii) The correctly generalized progress-achieving methods then need to be exploited correctly in the great human endeavour of trying to make social progress towards an enlightened, wise, civilized world.

The *philosophes* got all three steps wrong, and it is this bungled version of the Enlightenment programme that we built into academia in the early 20<sup>th</sup> century, knowledge-inquiry as we have it today being the outcome.

To begin with, the *philosophes* took for granted rather crude inductivist versions of standard empiricism. All versions of standard empiricism are, however, untenable. Physics, quite properly, only accepts *unified* theories – theories that attribute the same laws to all the phenomena to which the theory applies – even though endlessly many empirically more successful disunified rival theories could always be concocted. This means physics makes a big, persistent, implicit, metaphysical assumption: the universe is such that all grossly disunified theories are false (and hence can be ignored, whatever their empirical success might be). Rigour demands that this big, influential, highly problematic and implicit assumption be made explicit within science so that it can be critically assessed, so that alternatives can be developed and assessed, in an attempt to develop an improved version of the assumption. Put another way, the basic, highly problematic *aim* of physics of discovering the precise nature of the underlying dynamic unity that runs through all physical phenomena needs to be made explicit within physics so that it can be critically explored and assessed in the hope that it can be improved.

The best way to do this is to represent the assumption – or aim – of physics in the form of a hierarchy, assumptions and associated methods becoming less and less substantial as one goes up the hierarchy, and so more and more likely to be true, and more nearly such that their truth is required for science, or the pursuit of knowledge, to be possible at all. In this way we create a framework of relatively secure assumptions and methods – aims and methods – high up in the hierarchy, within which much more substantial and problematic assumptions and methods – aims and methods – can be critically assessed and, we may hope, improved. Those modified assumptions are accepted which do the best justice to assumptions higher up in the hierarchy, and at the same time support the most empirically progressive research programmes, or promise to do so.

We arrive at a new picture of the nature of physics, which I have called *aim-oriented empiricism*. According to this picture, there is something like positive feedback between improving knowledge, and improving aims and methods – improving knowledge-about-how-to-improve-knowledge. Science adapts its nature to what it finds out about the nature of the universe. This is the nub of scientific rationality, and the key to the astonishing progressive success of science.<sup>3</sup>

This picture of physics can be generalized to other branches of natural science, and so as to include broader aims of science.

For the aims of science do not just make problematic *metaphysical* assumptions. They make assumptions that are, if anything, even more problematic concerning *values*, and the humanitarian or social *use* of science. The scientific pursuit of *unified* or *explanatory* truth is a special case of the more general pursuit of truth that is, in one way or another, of *interest*, of *value*, or of *use*. And knowledge is sought so that it may be *used* by people so as to achieve what is of value in life.

But precisely because these broader aims are, if anything, even more problematic, they too need to be subjected to sustained critical scrutiny in an attempt to improve them, so that they come to reflect the best interests of humanity.

So much for the first blunder of the *philosophes* and what needs to be done to put it right. The *philosophes* failed to capture correctly the progress-achieving methods of science – a failure still prevalent in the way most scientists, philosophers and others think about science today.<sup>4</sup>

The second blunder concerns the failure of the *philosophes* to generalize the progress-achieving methods of science correctly, which follows on, of course, from the first failure. In order to put this right, it needs to be appreciated that it is not just in science that aims are problematic; this is the case in life too, for individuals, for institutions, for societies, for humanity. Aims can be problematic because, despite what may be thought, they are unrealisable, undesirable, or both. They can be undesirable because they conflict with other aims, or because attempts to realize them have all sorts of unforeseen undesirable consequences. Quite generally, then, and not just in science, whenever aims are problematic, we need to represent them in the form of a hierarchy, aims becoming less and less specific and problematic as we go up the hierarchy. In this way we create a framework of relatively unproblematic aims and associated methods, high up in the hierarchy, within which much more specific and problematic aims and methods, low down in the hierarchy, can be scrutinized and, we may hope, improved, as we act, as we live. This generalization of aim-oriented empiricism may be called aim-oriented rationality.

Third, and most disastrously of all, the *philosophes* failed completely to try to apply aim-oriented rationality to the immense, and profoundly problematic enterprise of making social progress towards an enlightened, wise world. The aim of such an enterprise is notoriously problematic. For all sorts of reasons, what constitutes a good world, an enlightened, wise or civilized world, attainable and genuinely desirable, must be inherently and permanently problematic.<sup>5</sup> Here, above all, it is essential to employ aim-oriented rationality, arrived at by generalizing the methods of science, and designed specifically to facilitate progress when basic aims are problematic. It is just this that the *philosophes* failed to do. Instead of applying aim-oriented rationality to *social life*, the *philosophes* sought to apply a seriously defective conception of scientific method to *social science*, to the task of making progress towards, not a *better world*, but to better *knowledge* of social phenomena. And this ancient blunder is still built into the institutional and intellectual structure of academia today, inherent in the current character of social science.<sup>6</sup>

Properly implemented, in short, the Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world would involve developing social inquiry, not as *social science*, but as *social methodology*, or *social philosophy*. A basic task would be to get into personal and social life, and into other institutions besides that of science – into government, industry, agriculture, commerce, the media, law, education, international relations – hierarchical, progress-achieving

methods (designed to improve problematic aims) arrived at by generalizing the methods of science.

A basic task for academic inquiry as a whole would be to help humanity learn how to resolve its conflicts and problems of living in more just, cooperatively rational ways than at present. Academia would become a kind of people's civil service, doing openly for the public what actual civil services are supposed to do in secret for governments. Academia would have just sufficient power (but no more) to retain its independence from government, industry, the press, public opinion, and other centres of power and influence in the social world. It would seek to learn from, educate, and argue with the great social world beyond, but would not dictate. Academic thought would be pursued as a specialized, subordinate part of what is really important and fundamental: the thinking that goes on, individually, socially and institutionally, in the social world, guiding individual, social and institutional actions and life. The fundamental intellectual and humanitarian aim of inquiry would be to help humanity acquire wisdom – wisdom being the capacity to realize (apprehend and create) what is of value in life, for oneself and others, wisdom thus including knowledge and technological know-how but much else besides.

One outcome of getting aim-oriented rationality into social and institutional life is that it becomes possible for us to develop and assess rival philosophies of life as a part of social life, somewhat as theories are developed and assessed within science. Such a hierarchical methodology provides a framework within which competing views about what our aims and methods in life should be – competing religious, political and moral views – may be cooperatively assessed and tested against broadly agreed, unspecific aims (high up in the hierarchy of aims) and the experience of personal and social life. There is the possibility of cooperatively and progressively improving *such philosophies of life* (views about what is of value in life and how it is to be achieved) much as *theories* are cooperatively and progressively improved in science. In science, ideally, theories are critically assessed with respect to each other, with respect to metaphysical ideas concerning the comprehensibility of the universe, and with respect to *experience* (observational and experimental results). In a somewhat analogous way, diverse philosophies of life may be critically assessed with respect to each other, with respect to relatively uncontroversial, agreed ideas about aims and what is of value, and with respect to *experience* – what we do, achieve, fail to achieve, enjoy and suffer – the aim being to improve philosophies of life (and more specific philosophies of more specific enterprises within life such as government, education or art) so that they offer greater help with the realization of what is of value in life.<sup>7</sup> This hierarchical methodology is especially relevant to the task of resolving conflicts about aims and ideals, as it helps disentangle agreement (high up in the hierarchy) and disagreement (more likely to be low down in the hierarchy).

### **What Needs to be Done to Transform Knowledge-Inquiry into Wisdom-Inquiry**

Here is a list of changes that need to be made to knowledge-inquiry if it is to become wisdom-inquiry.

1. There needs to be a change in the basic intellectual *aim* of inquiry, from the growth of knowledge to the growth of wisdom — wisdom being taken to be the capacity to realize what is of value in life, for oneself and others, and thus including knowledge, understanding and technological know-how (but much else besides).

2. There needs to be a change in the nature of academic *problems*, so that problems of living are included, as well as problems of knowledge – the former being treated as intellectually more fundamental than the latter.
3. There needs to be a change in the nature of academic *ideas*, so that proposals for action are included as well as claims to knowledge – the former, again, being treated as intellectually more fundamental than the latter.
4. There needs to be a change in what constitutes intellectual *progress*, so that progress-in-ideas-relevant-to-achieving-a-more-civilized-world is included as well as progress in knowledge, the former being indeed intellectually fundamental.
5. There needs to be a change in the idea as to where inquiry, at its most fundamental, is located. It is not esoteric theoretical physics, but rather the thinking we engage in as we seek to achieve what is of value in life. Academic thought is a (vital) adjunct to what really matters, personal and social thought active in life.
6. There needs to be a dramatic change in the nature of social inquiry (reflecting points 1 to 5). Economics, politics, sociology, and so on, are not, fundamentally, *sciences*, and do not, fundamentally, have the task of improving knowledge about social phenomena. Instead, their task is threefold. First, it is to articulate problems of living, and propose and critically assess possible solutions, possible actions or policies, from the standpoint of their capacity, if implemented, to promote wiser ways of living. Second, it is to promote such cooperatively rational tackling of problems of living throughout the social world. And third, at a more basic and long-term level, it is to help build the hierarchical structure of aims and methods of aim-oriented rationality into personal, institutional and global life, thus creating frameworks within which progressive improvement of personal and social life aims-and-methods becomes possible. These three tasks are undertaken in order to promote cooperative tackling of problems of living — but also in order to enhance empathic or “personalistic” understanding between people as something of value in its own right. Acquiring knowledge of social phenomena is a vital but subordinate activity, engaged in to facilitate the above three fundamental pursuits.
7. Natural science needs to change, so that it includes at least three levels of discussion: evidence, theory, and research aims. Discussion of aims needs to bring together scientific, metaphysical and evaluative consideration in an attempt to discover the most desirable and realizable research aims. It needs to influence, and be influenced by, exploration of problems of living undertaken by social inquiry and the humanities, and the public.
8. There needs to be a dramatic change in the relationship between social inquiry and natural science, so that social inquiry becomes intellectually more fundamental from the standpoint of tackling problems of living, promoting wisdom. Social inquiry influences choice of research aims for the natural and technological sciences, and is, of course, in turn influenced by the results of such research. (Social inquiry also, of course, conducts empirical research, in order to improve our understanding of what our problems of living are, and in order to assess policy ideas whenever possible.)
9. The current emphasis on specialized research needs to change so that sustained discussion and tackling of broad, global problems that cut across academic specialities is included, both influencing and being influenced by, specialized research.
10. Academia needs to include sustained imaginative and critical exploration of possible futures, for each country, and for humanity as a whole, policy and research implications being discussed as well.

11. The way in which academic inquiry as a whole is related to the rest of the human world needs to change dramatically. Instead of being intellectually dissociated from the rest of society, academic inquiry needs to be communicating with, learning from, teaching and arguing with the rest of society — in such a way as to promote cooperative rationality and social wisdom. Academia needs to have just sufficient power to retain its independence from the pressures of government, industry, the military, and public opinion, but no more. Academia becomes a kind of civil service for the public, doing openly and independently what actual civil services are supposed to do in secret for governments.
12. There needs to be a change in the role that political and religious ideas, works of art, expressions of feelings, desires and values have within rational inquiry. Instead of being excluded, they need to be explicitly included and critically assessed, as possible indications and revelations of what is of value, and as unmasking of fraudulent values in satire and parody, vital ingredients of wisdom.
13. There need to be changes in education so that, for example, seminars devoted to the cooperative, imaginative and critical discussion of problems of living are at the heart of all education from five-year-olds onwards. Politics, which cannot be taught by knowledge-inquiry, becomes central to wisdom-inquiry, political creeds and actions being subjected to imaginative and critical scrutiny.
14. There need to be changes in the aims, priorities and character of pure science and scholarship, so that it is the curiosity, the seeing and searching, the knowing and understanding of individual persons that ultimately matters, the more impersonal, esoteric, purely intellectual aspects of science and scholarship being means to this end. Social inquiry needs to give intellectual priority to helping empathic understanding between people to flourish (as indicated in 6 above).
15. There need to be changes in the way mathematics is understood, pursued and taught. Mathematics is not a branch of knowledge at all. Rather, it is concerned to explore problematic *possibilities*, and to develop, systematize and unify problem-solving methods.
16. Literature needs to be put close to the heart of rational inquiry, in that it explores imaginatively our most profound problems of living and aids personalistic understanding in life by enhancing our ability to enter imaginatively into the problems and lives of others.
- 17 Philosophy needs to change so that it ceases to be just another specialized discipline and becomes instead that aspect of inquiry as a whole that is concerned with our most general and fundamental problems — those problems that cut across all disciplinary boundaries. Philosophy needs to become again what it was for Socrates: the attempt to devote reason to the growth of wisdom in life.
- 18 Academic contributions need to be written in as simple, lucid, jargon-free a way as possible, so that academic work is as accessible as possible across specialities and to non-academics.
19. There needs to be a change in views about what constitute academic contributions, so that publications which promote (or have the potential to promote) public understanding as to what our problems of livings are and what we need to do about them are included, in addition to contributions addressed primarily to the academic community.
20. Every university needs to create a seminar or symposium devoted to the sustained discussion of fundamental problems that cut across all conventional academic



boundaries, global problems of living being included as well as global problems of knowledge and understanding.

The above changes all come from my “from knowledge to wisdom” argument spelled out in detail elsewhere. The following three institutional innovations do not follow from that argument but, if implemented, would help wisdom-inquiry to flourish.

21. Natural science needs to create committees, in the public eye, and manned by scientists and non-scientists alike, concerned to highlight and discuss failures of the priorities of research to respond to the interests of those whose needs are the greatest – the poor of the earth – as a result of the inevitable tendency of research priorities to reflect the interests of those who pay for science, and the interests of scientists themselves.
22. Every national university system needs to include a national shadow government, seeking to do, virtually, free of the constraints of power, what the actual national government ought to be doing. The hope would be that virtual and actual governments would learn from each other.
23. The world’s universities need to include a virtual world government which seeks to do what an actual elected world government ought to do, if it existed. The virtual world government would also have the task of working out how an actual democratically elected world government might be created.<sup>8</sup>

### **Steps Towards Wisdom-Inquiry**

My efforts to start up a campaign to transform academia so that it becomes an intellectual and educational resource rationally devoted to helping humanity learn how to make progress towards as good a world as possible have not so far met with much success. I am not aware of any discipline, or any department in any university, that has changed in any way as a result of my work. Few are the academics who have even heard of my work. Even philosophers seem to be, by and large, ignorant of it, or indifferent to it – especially disappointing in view of the fact that the argument for the intellectual revolution is profoundly philosophical in character. And not just the argument: the outcome, the new conception of inquiry I argue for – wisdom-inquiry – is, I claim, quintessentially philosophical in that it is the solution to a profoundly significant philosophical problem, namely: *What kind of inquiry can best help us make progress towards a civilized world?*

Viewed from another perspective, however, my call for a revolution, for the implementation of wisdom-inquiry, has been astonishingly successful. During the last ten to twenty years, all sorts of changes have taken place in academia that amount to putting aspects of wisdom-inquiry into practice – even if in complete ignorance of my work. In what follows I concentrate in the main on universities in the UK.

Perhaps the most significant steps towards wisdom-inquiry that have taken place during the last twenty years are the creation of departments, institutions and research centres concerned with social policy, with problems of environmental degradation, climate change, poverty, injustice and war, and with such matters as medical ethics and community health.<sup>9</sup>

At Cambridge University, there is a more interesting development. One can see the first hints of the institutional structure of wisdom-inquiry being superimposed upon the existing structure of knowledge-inquiry. As I have indicated, wisdom-inquiry puts the

intellectual tackling of problems of living at the heart of academic inquiry, this activity being conducted in such a way that it both influences, and is influenced by, more specialized research. Knowledge-inquiry, by contrast, organizes intellectual activity into the conventional departments of knowledge: physics, chemistry, biology, history and the rest, in turn subdivided, again and again, into ever more narrow, specialized research disciplines. But this knowledge-inquiry structure of ever more specialized research is hopelessly inappropriate when it comes to tackling our major problems of living. In order to tackle environmental problems, for example, in a rational and effective way, specialized research into a multitude of different fields, from geology, engineering and economics to climate science, biology, architecture and metallurgy, needs to be connected to, and coordinated with, the different aspects of environmental problems. The sheer urgency of environmental problems has, it seems, forced Cambridge University to create the beginnings of wisdom-inquiry organization to deal with the issue. The “Cambridge Environmental Initiative” (CEI), launched in December 2004, distinguishes eight fields associated with environmental problems: built environment; climate change; conservation; energy; natural hazards; society, policy and law; waste; and water. Under these headings, it helps to coordinate the research of some 159 people working on specialized aspects of environmental issues in some 35 different (knowledge-inquiry) departments.<sup>10</sup>

The CEI holds seminars, workshops and public lectures to put specialized research workers in diverse fields in touch with one another, and to inform the public.

A similar coordinating, interdisciplinary initiative exists at Oxford University. This is the School of Geography and the Environment, founded in 2005 under another name. This is made up of five research “clusters”, two previously established research centres, the Environmental Change Institute (founded in 1991) and the Transport Studies Institute, and three inter-departmental research programmes, the African Environments Programme the Oxford Water Futures Programme, and the Oxford branch of the Tyndall Centre (see below). The School also hosts a number of other research projects, including the Oxford Centre for Tropical Forests, and UKCIP which helps organizations to adapt to climate change.<sup>11</sup>

At Oxford University there is also the Oxford Martin School, founded in 2005 to “formulate new concepts, policies and technologies that will make the future a better place to be”. It is made up of over thirty interdisciplinary research teams based in Oxford University departments, and carries out research that ranges from ageing, armed conflict, cancer therapy and carbon reduction to nanoscience, oceans, science innovation and society, the future of the mind, and the future of humanity. At Oxford there is also the Smith School of Enterprise and the Environment, founded in 2008 to help government and industry tackle the challenges of the 21<sup>st</sup> century, especially those associated with climate change.

Somewhat similar developments have taken place recently at my own university, University College London. Not only are there 141 research institutes and centres at UCL, some only recently founded, many interdisciplinary in character, devoted to such themes as ageing, cancer, cities, culture, public policy, the environment, global health, governance, migration, neuroscience, and security. In addition, in 2008, under the heading “UCL Grand Challenges”,<sup>12</sup> David Price, vice-provost for research at UCL, has been instrumental in creating four broad areas of research – global health, sustainable cities, human wellbeing, intercultural interaction – which bring together specialists from diverse fields to develop ideas, techniques and policies capable of helping humanity

tackle our current grave global problems. UCL now seeks to implement “The Wisdom Agenda”,<sup>13</sup> and is actively engaged in “Developing a culture of wisdom at UCL”.<sup>14</sup> On its website, under the heading Grand Challenges, UCL puts the matter like this:

The world is in crisis. Billions of us suffer from illness and disease, despite applicable preventions and cures. Life in our cities is under threat from dysfunctionality and climate change. The prospect of global peace and cooperation remains under assault from tensions between our nations, faiths and cultures. Our quality of life – actual and perceived – diminishes despite technological advances. These are global problems, and we must resolve them if future generations are to be provided with the opportunity to flourish.

These developments, surely echoed in many universities around the world, can be regarded as first steps towards implementing wisdom-inquiry.

Impressive too is the John Tyndall Centre for Climate Change Research, founded by 28 scientists from 10 different universities or institutions in 2000. It is based in eight British universities (Universities of East Anglia, Cardiff, Newcastle, Cambridge, Manchester, Oxford, Sussex and Southampton), and Fudan University, Shanghai, China. The Centre says “We bring together scientists, economists, engineers and social scientists who are working to develop sustainable responses to climate change. We work not just within the research community, but also with business leaders, policy advisors, the media and the public in general”<sup>15</sup> All this is strikingly in accordance with basic features of wisdom-inquiry.<sup>16</sup> We have here, perhaps, the real beginnings of wisdom-inquiry being put into academic practice.

A similar organization, modelled on the Tyndall Centre, is the UK Energy Research Centre (UKERC), launched in 2004. It says it “carries out world-class research into sustainable future energy systems. It is the hub of UK energy research and the gateway between the UK and the international energy research communities. Our interdisciplinary, whole systems research informs UK policy development and research strategy.”<sup>17</sup> UKERC coordinates research in a number of British universities and research institutions, and “participates and leads energy research activities internationally”. It has created the National Energy Research Network (NERN), which seeks to link up the entire energy community, including people from academia, government, NGOs and business.

Another possible indication of a modest step towards wisdom-inquiry is the growth of peace studies and conflict resolution research. In Britain, the Peace Studies Department at Bradford University has “quadrupled in size” since 1984 (Professor Paul Rogers, personal communication), and is now the largest university department in this field in the world. INCORE, an International Conflict Research project, was established in 1993 at the University of Ulster, in Northern Ireland, in conjunction with the United Nations University. It develops conflict resolution strategies, and aims to influence policymakers and others involved in conflict resolution. Like the newly created environmental institutions just considered, it is highly interdisciplinary in character, in that it coordinates work done in history, policy studies, politics, international affairs, sociology, geography, architecture, communications, and social work as well as in peace and conflict studies. The Oxford Research Group, established in 1982, is an independent think tank which seeks to develop “sustainable approaches to security as an alternative to violent global confrontation, through original research, wide-ranging dialogue, and practical policy

recommendations”.<sup>18</sup> It has links with a number of universities in Britain. Peace studies have also grown during the period we are considering at Sussex University, Kings College London, Leeds University, Lancaster University, Coventry University and London Metropolitan University. Centres in the field in Britain created since 1984 include: the Centre for Peace and Reconciliation Studies at Warwick University founded in 1999, the Desmond Tutu Centre for War and Peace, established in 2004 at Liverpool Hope University; the Praxis Centre at Leeds Metropolitan University, launched in 2004; the Crime and Conflict Centre at Middlesex University; and the International Boundaries Research Unit, founded in 1989 at Durham University.<sup>19</sup>

Additional indications of a general movement towards aspects of wisdom-inquiry are the following. Demos, a British independent think tank has, in recent years, convened conferences on the need for more public participation in discussion about aims and priorities of scientific research, and greater openness of science to the public.<sup>20</sup> This has been taken up by The Royal Society which, in 2004, published a report on potential benefits and hazards of nanotechnology produced by a group consisting of both scientists and non-scientists. The Royal Society has also created a “Science in Society Programme” in 2000, with the aims of promoting “dialogue with society”, of involving “society positively in influencing and sharing responsibility for policy on scientific matters”, and of embracing “a culture of openness in decision-making” which takes into account “the values and attitudes of the public”. A similar initiative is the “science in society” research programme funded by the Economic and Social Research Council which has, in the Autumn of 2007, come up with six booklets reporting on various aspects of the relationship between science and society. Increasingly, scientists appreciate that engagement with the public is a vital part of the scientific enterprise. Many appreciate that non-scientists ought to contribute to discussion concerning science policy. There is a growing awareness among scientists and others of the role that values play in science policy, and the importance of subjecting medical and other scientific research to ethical assessment. That universities are becoming increasingly concerned about these issues is indicated by the creation, in recent years, of many departments of “science, technology and society”, in the UK, the USA and elsewhere, the intention being that these departments will concern themselves with interactions between science and society.

Even though academia is not organized in such a way as to give intellectual priority to helping humanity tackle its current global problems, academics do nevertheless, of course, publish books that tackle these issues, for experts and non-experts alike. For example, in recent years many books have been published on global warming and what to do about it.<sup>21</sup>

Here are a few further scattered hints that the wisdom-inquiry revolution may be underway – as yet unrecognized and unorganized. In recent years, research in psychology into the nature of wisdom has flourished, in the USA, Canada, Germany and elsewhere.<sup>22</sup> Emerging out of this, and associated in part with Robert Sternberg, there is, in the USA, a “teaching for wisdom” initiative, the idea being that, whatever else is taught – science, history or mathematics – the teaching should be conducted in such a way that wisdom is also acquired.<sup>23</sup> There is the Arete Initiative at Chicago University which recently “launched a \$2 million research program on the nature and benefits of wisdom”.<sup>24</sup> The “Defining Wisdom” website includes a long list of publications on wisdom since 1990, and provides information about 1,499 people who have signed up to the wisdom research network.<sup>25</sup>

There are two initiatives that I have been involved with personally. The first is a new international group of 283 scholars and educationalists called Friends of Wisdom, “an association of people sympathetic to the idea that academic inquiry should help humanity acquire more wisdom by rational means”.<sup>26</sup> The second is a special issue of the journal *London Review of Education*; of which I was guest editor, devoted to the theme “wisdom in the university”. This duly appeared in June 2007 (vol. 5, no.2). It contains seven articles on various aspects of the basic theme.<sup>27</sup> Rather strikingly, another academic journal brought out a special issue on a similar theme in the same month. The April-June 2007 issue of *Social Epistemology* is devoted to the theme “wisdom in management” (vol. 21, no. 2). On the 5<sup>th</sup> December 2007, History and Policy was launched, a new initiative that seeks to bring together historians, politicians and the media, and “works for better public policy through an understanding of history”.<sup>28</sup>

Out of curiosity, on the 18<sup>th</sup> May 2009, I consulted Google, in connection with a number of relevant topics, to see whether the number of “results” might give some indication of whether the wisdom-revolution is underway. I did the same thing over two years later, on the 4<sup>th</sup> December 2011. Here are the results.

<b>Topic</b>	<b>18<sup>th</sup> May 2009</b>	<b>6<sup>th</sup> December 2011</b>
“Environmental Studies”	9,910,000	10,400,000
“Development Studies”	7,210,000	6,760,000
“Peace Studies”	529,000	2,070,000
“Policy Studies”	2,160,000	6,530,000
“Science, Technology and Society”	297,000	1,090,000
“Wisdom Studies”	5,510	56,400
“From Knowledge to Wisdom”	18,100	68,500
“Wisdom-Inquiry”	625	7,340

These figures do not, perhaps, in themselves tell us very much. There is probably a great deal of repetition – and Google gives us no idea of the intellectual quality of the departments or studies that are being referred to.

One of the items that comes up in Google is Cophthorne Macdonald’s “The Wisdom Page” – a compilation of “various on-line texts concerning wisdom, references to books about wisdom, information about organizations that promote wisdom”, and including bibliographies of more than 800 works on wisdom prepared by Richard Trowbridge.<sup>29</sup> The Stanford online Encyclopedia of Philosophy has had an entry on wisdom since 2007, (but only because I suggested to the editors that they ought to have one).<sup>30</sup> The online Wikiversity has a course on wisdom.<sup>31</sup> Perhaps wisdom-inquiry will develop first outside universities, and will only gradually percolate into universities as they are shamed into paying attention. This has happened before. Modern science began outside universities, and so too, later, social science. In February 2011 I attended a two-day conference on “transition universities” which took much of its inspiration and impetus from the “transition towns” movement.<sup>32</sup> The mood of the meeting, overwhelmingly, was that universities need to change dramatically if they are to help individuals and communities cope with the problems the future has in store for us.<sup>33</sup> The idea that universities have sold out to powerful interest groups and do not respond to the problems and aspirations of most people – it being necessary to create a people’s university outside the university – seems to be held by many taking part in the current “occupy movement” which began with “occupy Wall Street” in September 2011, and since has spread round the world.

Writing in *The Guardian* in November 2011, this is what one participant had to say about “Tent City University” outside St. Paul’s, in London.

Over the past month, Tent City University has hosted speakers ranging from world-renowned academics to migrant cleaners fighting for the right to organise. We have attracted huge crowds to our events and steadily had almost eight hours programmed every single day since we set up.... Many have described us as an alternative to university, often positioning us in opposition to the limited range of ideas and exorbitant fees that characterise much contemporary higher education. ... But we are not merely an alternative; we are a direct challenge to the contemporary structure of mainstream universities. In the neoliberal era, the role of the university has been clear: to reproduce society with all its injustices, disenfranchisements and grievances.<sup>34</sup>

None of these developments quite amounts to wisdom-inquiry. One has to remember that “wisdom studies” is not the same thing as “wisdom-inquiry”. The new environmental research organizations, and the new emphasis on policy studies of various kinds, do not in themselves add up to wisdom-inquiry. In order to put wisdom-inquiry fully into academic practice, it would be essential for social inquiry and the humanities to give far greater emphasis to the task of helping humanity learn how to tackle its immense global problems in more cooperatively rational ways than at present. The imaginative and critical exploration of problems of living would need to proceed at the heart of academia, in such a way that it influences science policy, and is in turn influenced by the results of scientific and technological research. Academia would need to give much more emphasis to public education by means of discussion and debate, ideas and arguments going in both directions. Our only hope of tackling global problems of climate change, poverty, war and terrorism humanely and effectively is to tackle them democratically. But democratic governments are not likely to be all that much more enlightened than their electorates. This in turn means that electorates of democracies must have a good understanding of what our global problems are, and what needs to be done about them. Without that there is little hope of humanity making progress towards a better world. A vital task for universities is to help educate the public – and be educated by the public – about what we need to do to avoid – at the least – the worst of future possible disasters. Wisdom-inquiry would undertake such a task of public education to an extent that is far beyond anything attempted or imagined by academics today. There is still a long way to go before we have what we so urgently need, a kind of academic inquiry rationally devoted to helping humanity learn how to create a better world. A university system that did that would need, for example, to create a shadow government, creating policies and possible legislation, imaginatively and critically, free of the shackles actual governments suffer from because of all sorts of pressures, honourable and dishonourable. As far as I know, there is not at present even a hint of an awareness that such an institution needs to be created within academia.

Nevertheless, the developments I have indicated can be regarded as signs that there is a growing awareness of the need for our universities to change so as to help individuals learn how to realize what is genuinely of value in life – and help humanity learn how to tackle its immense global problems in wiser, more cooperatively rational ways than we seem to be doing at present. My calls for this intellectual and institutional revolution may have been entirely in vain. But what I have been calling for, all these years, is perhaps, at

last, beginning to happen, entirely independent of my ineffective shouting on the sidelines. If so, it is happening with agonizing slowness, in a dreadfully muddled and piecemeal way. It urgently needs academics and non-academics alike to wake up to what is going on – or what needs to go on – to help give direction, coherence and a rationale to this nascent revolution from knowledge to wisdom.

## References

- Barnett, R. & Maxwell, N. (Eds.). (2008). *Wisdom in the University*. London: Routledge.
- Berlin, I., 1980, *Against the Current*, Hogarth Press, London.
- Howard, N. (2011). We are a Direct Challenge to the Contemporary Structure of Mainstream Universities'. *The Guardian*, 16 November. London.
- Iredale, M. (2007). From Knowledge-Inquiry to Wisdom-Inquiry: Is the Revolution Underway?. *London Review of Education*, 5, 117-129 (reprinted in Barnett & Maxwell, 2008, pp. 21-33).
- Macdonald, C. (2009). Nicholas Maxwell in Context: The Relationship of His Wisdom Theses to the Contemporary Global Interest in Wisdom. In L. McHenry (Ed.), *Science and the Pursuit of Wisdom: Studies in the Philosophy of Nicholas Maxwell* (pp. 61-81). Frankfurt: Ontos Verlag.
- Maxwell, N. (1980). Science, Reason, Knowledge and Wisdom: A Critique of Specialism. *Inquiry*, 23, 19-81.
- Maxwell, N. (1984). *From Knowledge to Wisdom*. Oxford: Blackwell.
- Maxwell, N. (1992). What Kind of Inquiry Can Best Help Us Create a Good World?. *Science, Technology and Human Values*, 17, 205-227.
- Maxwell, N. (2000). Can Humanity Learn to Become Civilized? The Crisis of Science without Civilization, *Journal of Applied Philosophy*, 17, 29-44.
- Maxwell, N., 2002, The Need for a Revolution in the Philosophy of Science. *Journal for General Philosophy of Science* 33, pp. 381-408.
- Maxwell, N. (2004). *Is Science Neurotic?*. London: Imperial College Press.
- Maxwell, N., 2005, Popper, Kuhn, Lakatos and Aim-Oriented Empiricism, *Philosophia* 32 (1-4), pp. 181-239.
- Maxwell, N. (2007a). *From Knowledge to Wisdom: A Revolution for Science and the Humanities*. London: Pentire Press (2<sup>nd</sup> ed. of Maxwell, 1984, revised and extended).
- Maxwell, N. (2007b). From Knowledge to Wisdom: The Need for an Academic Revolution. *London Review of Education*, 5, 97–115 (reprinted in. Barnett & Maxwell, 2008, pp. 1–19).
- Maxwell, N. (2008). Do We Need a Scientific Revolution?. *Journal of Biological Physics and Chemistry*, 8(3), 95-105.
- Maxwell, N., 2011, A Priori Conjectural Knowledge in Physics, in *What Place for the A Priori?*, ed. Shaffer M. & Veber, M., 211-240 Open Court, La Salle, Illinois, pp. 211-240.
- Maxwell, N. (forthcoming). Arguing for Wisdom in the University. *Philosophia*, section 1.
- Rogers, P. F. (2006). Peace Studies. In A. Collins (Ed). *Contemporary Security Studies* (ch. 3). Oxford: Oxford University Press.
- Sternberg, R. J. (Ed.). (1990). *Wisdom: Its Nature Origins and Development*. Cambridge: Cambridge University Press.
- Sternberg, R. J. et al. (2007). Teaching for Wisdom: What Matters is not just What Students Know, but How They Use It. *London Review of Education*, 5, 143-158

(reprinted in Barnett & Maxwell, 2008, pp. 47-62).  
Tyndall Centre (Ed.). *Truly Useful*. UK: Tyndall Centre.  
Wilsdon, J. & Willis, R. (2004). *See-through Science*. London: Demos.

## Notes

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<sup>1</sup> For a detailed presentation of this argument see Maxwell (1984; 2007a); see also Maxwell (2004). For summaries of the argument see Maxwell (1980; 1992; 2000; 2007b; 2008; forthcoming). All my articles are available online at <http://philpapers.org/profile/17092>.

<sup>2</sup> See works referred to in note 1.

<sup>3</sup> This argument was first expounded in Maxwell (1974). It is expounded in great detail in Maxwell (1998). See also Maxwell (1984, ch. 5 and 9; 2002; 2004, chs. 1 and 2; 2005; 2007a, chs. 5, 9 and 14; 2011).

<sup>4</sup> See especially Maxwell (1984, ch. 5; 2004, ch. 2; 2007a, ch. 5).

<sup>5</sup> There are a number of ways of highlighting the inherently problematic character of the aim of creating civilization. People have very different ideas as to what does constitute civilization. Most views about what constitutes Utopia, an ideally civilized society, have been unrealizable *and* profoundly undesirable. People's interests, values and ideals clash. Even values that, one may hold, ought to be a part of civilization may clash. Thus freedom and equality, even though inter-related, may nevertheless clash. It would be an odd notion of individual freedom which held that freedom was for some, and not for others; and yet if equality is pursued too singlemindedly this will undermine individual freedom, and will even undermine equality, in that a privileged class will be required to enforce equality on the rest, as in the old Soviet Union. A basic aim of legislation for civilization, we may well hold, ought to be increase freedom by restricting it: this brings out the inherently problematic, paradoxical character of the aim of achieving civilization. One thinker who has stressed the inherently problematic, contradictory character of the idea of civilization is Isaiah Berlin; see, for example, Berlin (1980, pp. 74-79). Berlin thought the problem could not be solved; I, on the contrary, hold that the hierarchical methodology indicated here provides us with the means to learn how to improve our solution to it in real life.

<sup>6</sup> See Maxwell (1984, or 2007a, chs. 3, 6 and 7). See also Maxwell (2000).

<sup>7</sup> The big contrast between social inquiry pursued within the contexts of knowledge-inquiry and wisdom-inquiry is that, whereas the former seeks to assess *theories* by means of experience, the latter seeks to assess *policies* by means of experience. Both are empirical; both appeal to experience. But whereas the former is concerned, in the first instance, to develop and assess *theories* about social phenomena (somewhat as theories about natural phenomena are developed and assessed in natural science), the latter seeks to develop and assess *policies, proposals for action, philosophies of life* that range from the highly specific to the general.

<sup>8</sup> This is a modified version of the list to be found in Maxwell (2004, pp. 119-121).

<sup>9</sup> For more on this point, see Iredale (2007), and Macdonald (2009).

<sup>10</sup> See [www.cei.cam.ac.uk/](http://www.cei.cam.ac.uk/) (accessed 2 December 2011).

<sup>11</sup> See [www.geog.ox.ac.uk/](http://www.geog.ox.ac.uk/) (accessed 4 December 2011).

<sup>12</sup> See [www.ucl.ac.uk/grand-challenges/](http://www.ucl.ac.uk/grand-challenges/) (accessed 5 December 2011).

<sup>13</sup> [www.ucl.ac.uk/research/wisdom-agenda](http://www.ucl.ac.uk/research/wisdom-agenda) (accessed 5 December 2011).

<sup>14</sup> The title of a policy document which can be downloaded from the UCL website: see



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[www.ucl.ac.uk/research/wisdom-agenda/2011-UCL\\_Wisdom-Agenda.pdf](http://www.ucl.ac.uk/research/wisdom-agenda/2011-UCL_Wisdom-Agenda.pdf). There is here, I confess, an input from my own work.

<sup>15</sup> [www.tyndall.ac.uk/about](http://www.tyndall.ac.uk/about) (accessed 5 December 2011).

<sup>16</sup> Tyndall Centre. *Truly Useful*.

<sup>17</sup> [www.ukerc.ac.uk/](http://www.ukerc.ac.uk/) (accessed 6 December 2011, as are the websites referred to below).

<sup>18</sup> [www.oxfordresearchgroup.org.uk/](http://www.oxfordresearchgroup.org.uk/).

<sup>19</sup> For an account of the birth and growth of peace studies in universities see Rogers (2006).

<sup>20</sup> See Wilsdon & Willis (2004).

<sup>21</sup> See [www.kings.cam.ac.uk/assets/d/da/Global\\_Warming\\_bibliography.pdf](http://www.kings.cam.ac.uk/assets/d/da/Global_Warming_bibliography.pdf).

<sup>22</sup> See, for example, Sternberg (1990).

<sup>23</sup> See Sternberg (2007).

<sup>24</sup> See see <http://wisdomresearch.org/>.

<sup>25</sup> <http://wisdomresearch.org/Arête/UserList.aspx>.

<sup>26</sup> [www.knowledgetowisdom.org](http://www.knowledgetowisdom.org).

<sup>27</sup> Subsequently republished as a book: Barnett & Maxwell 2008).

<sup>28</sup> [www.historyandpolicy.org/](http://www.historyandpolicy.org/).

<sup>29</sup> [www.wisdompage.com/](http://www.wisdompage.com/).

<sup>30</sup> <http://plato.stanford.edu/entries/wisdom/>.

<sup>31</sup> <http://en.wikiversity.org/wiki/Wisdom/Curriculum>.

<sup>32</sup> [www.transitionnetwork.org/](http://www.transitionnetwork.org/).

<sup>33</sup> [www.transitionuniversities.org.uk/](http://www.transitionuniversities.org.uk/).

<sup>34</sup> Howard (2011); [www.guardian.co.uk/commentisfree/2011/nov/15/welfare-education-law-occupy-london](http://www.guardian.co.uk/commentisfree/2011/nov/15/welfare-education-law-occupy-london).