From Knowledge-Inquiry to Wisdom-Inquiry: A New Paradigm for Academia

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Harald Wallach's *Science Beyond a Materialist World View* argues that science cannot proceed without metaphysical presuppositions about the nature of the universe. These presuppositions tend to be taken for granted by the scientific community, but in an implicit way, without critical discussion. Wallach argues that if these implicit presuppositions were made explicit, and laid open to critical appraisal and discussion, a broader kind of science might emerge, one that could do better justice to the miracle of consciousness, and to the grave global problems that confront us. "We might be able" Wallach remarks "to create an extended way of doing science that is both more humane and more powerful in serving the needs of our planet as a whole". As it is, as a result of failing to make explicit and discuss its presuppositions, science proceeds in too narrow a way. "It neglects and largely rejects other avenues such as inner experience as reported in spiritual traditions or whole systems of introspective psychology, such as Buddhist or indigenous ways of gaining knowledge through participation in altered states of consciousness".

Some of this gets things absolutely right; but some of it, in my view, profoundly misses the point.

I wholeheartedly agree that science cannot do without metaphysical presuppositions.[1] There are profoundly problematic assumptions concerning metaphysics, values, and even politics (having to do with the social use of science) inherent in the aims of science. We need a new kind of science that makes explicit these somewhat implicit problematic assumptions so that assumptions and associated methods – aims and methods – of science can be improved as science proceeds. For decades I have argued for such a conception of science (which I have called aim-oriented empiricism) that represents problematic aims in the form of a hierarchy of aims, and facilitates the improvement of aims as science proceeds.[2]

But when Wallach goes on to argue that we need to broaden science I cannot help but think that is missing the point. What we really need – desperately urgently – in my view, is a transformation of academic inquiry as a whole so that our problems of living are put at the heart of the enterprise, social inquiry takes up its proper task of promoting cooperatively rational tackling of conflicts and problems of living in the social world, and the basic aim becomes to help people realize what is of value in life – help humanity make social progress towards a good, civilized, enlightened world. The scientific pursuit of knowledge needs to be an integral, subordinate part of academic inquiry devoted to seeking and promoting wisdom – wisdom being the capacity, the active endeavour and the desire to realize (experience and create) what is of value in life, for oneself and others. What we need is a kind of academic inquiry rationally designed and devoted to helping people learn how to live – not just acquire knowledge, however much broadened to include consciousness and the human soul.

This is a message that I have been propounding now for over 40 years – ever since my first book *What's Wrong With Science?*, first published in 1976, and certainly since my second book *From Knowledge to Wisdom*, first published in 1984, which spelled out the argument in detail.[3]

It is increasingly dawning on people that we are confronted by an unprecedented crisis. Grave global problems threaten our future. These include: rapid population growth; the spread of modern armaments, conventional, chemical and nuclear; the lethal character of modern war and terrorism; destruction of natural habitats and rapid extinction of species; gross inequalities of wealth and power around the globe; threats to democracy helped along

by the internet; pollution of earth, sea and air; and perhaps most serious of all, the impending disasters of climate change.

Why have we become burdened with all these global problems? What is the reason for the crisis we now face?

There is an answer, and it can be put like this. Humanity is faced by two great problems of learning: learning about the nature of the universe and about ourselves and other living things as a part of the universe, and learning how to become civilized. The first problem was solved, in essence, in the 17th century, with the creation of modern science. We discovered a *method* for the progressive improvement of knowledge – the progress-achieving methods of natural science. But the second problem has not yet been solved. Solving the first problem without also solving the second puts us in a situation of great danger. All our current global problems have arisen as a result. The astonishing intellectual success of modern science and technology since the 17th century has of course led to much that is of great benefit. It has made the modern world possible. But, in vastly increasing our power to act, it has also led to all our current global problems. Modern science and technology have made possible modern industry and agriculture, modern medicine and hygiene, modern armaments, which in turn have led – in addition to the benefits – to population growth, habitat destruction, loss of wild life and rapid extinction of species, lethal modern war, the menace of nuclear weapons ready to be unleashed at the touch of a button, pollution of earth, sea and air, degradation of democracy, and the looming disasters of climate change. But the immense intellectual success of modern science and technology is not, in itself, the problem. The problem, rather, is modern science and technology *in a world that has not yet learned how to become civilized, enlightened, wise*. The problem is that we have solved the first great problem of learning and so far *have failed to solve the second problem*. If we had solved the second problem, we would live in a world which has the capacity to anticipate bad consequences of new actions engaged in by millions, even billions, and take action so as to nip such bad consequences in the bud before they turn into major global problems. We would live in a world which has the capacity, if such anticipatory action fails, to tackle global problems in a cooperatively rational way, on a global basis, so that they get solved before too much damage is done, too much human suffering ensues, too many lives are unnecessarily lost. But we do not live in such a world. We have solved the first great problem but, so far, we have failed to solve the second great problem of learning – the problem of learning how to become civilized and enlightened. And that is why we face the crisis of our times.

Before the advent of modern science, lack of enlightenment or wisdom did not matter too much. We lacked the power to do too much damage to the planet or ourselves. But now that we do have modern science – now that we have successfully solved the first great problem of learning – lack of enlightenment and civilization has become a menace. We are in a situation of unprecedented peril. Nothing like this has happened in human history before.

The conclusion to be drawn from these elementary considerations is stark. We must learn how to become civilized and enlightened. Now that we have solved the first problem, we must learn how to solve the second one. We have no choice. If we are to survive, we must learn how to make social progress towards a good, civilized, enlightened, wise world – a world that has the capacity and the will to do what needs to be done to solve global problems, and even do what needs to be done to prevent them arising in the first place.

But how are we to learn this all-important lesson? Prophets and philosophers have urged humanity to become wise for thousands of years, with no discernible success. We have perhaps a window of opportunity of three or four decades to achieve this great act of learning; if by the mid-century we have still not learned the lesson, climate change, mass migration and war may so degrade the social-political world that such learning becomes impossible.

What can we do? There is an answer. It has been available in the literature,[4] largely but not entirely ignored.[5] It can be put like this. We need to learn from our solution to the first great problem how to solve the second one. We need to learn from the manner in which natural science achieves such astonishing success in making progress in knowledge how we can achieve success in making social progress towards a good, wise, civilized world – a world, at the very least, that can deal successfully with its global problems.

I am not the first person to have this idea. It was the basic idea of the 18th century Enlightenment, especially the French Enlightenment.[6] Unfortunately, in putting this idea into practice, the *philosophes* of the Enlightenment made three blunders, and it is this defective version of the Enlightenment programme, inherited from the past, that is still built into the institutional/intellectual structure of academic inquiry in the 21st century.

What, then, needs to be done to put the great Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world properly into practice? What were the blunders of the *philosophes*, still built into academia as it exists today? And what needs to be done to put these blunders right?

It is essential to get the following three steps right in order properly to implement the great Enlightenment idea.

(I) The progress-achieving methods of natural science must be correctly characterized.

(II) These methods must be appropriately generalized so that they become potentially fruitfully applicable to any worthwhile, problematic human endeavour, and not just to science.

(III) These generalised, progress-achieving methods must then be got into the fabric of personal and social life, into our other social endeavours besides science, and above all into the endeavour to make progress towards as good a world as possible.

The *philosophes* got all three steps wrong. First, they mistakenly held that the methods of natural science consist in assessing claims to knowledge impartially and exclusively by means of evidence. Secondly, they failed to generalize these methods to become a conception of rationality fruitfully applicable to any worthwhile, problematic human endeavour, and not just applicable to the pursuit of knowledge. And thirdly, and most disastrously, they applied rationality, derived from the progress-achieving methods of natural science, not directly to social life, to the great endeavour of making social progress towards a good, enlightened world, but instead to the task merely of improving *knowledge* about the social world. It is this third, monumental blunder that led academic inquiry to be developed in such a way that its primary goal became to acquire *knowledge*, not to help humanity make progress towards a civilized, enlightened world. It led the *philosophes* to set about creating the social sciences: economics, psychology, sociology and the rest. These were developed throughout the 19th century, often outside universities, by J.S. Mill, Karl Marx, Max Weber and others, and were built into universities with the creation of departments of social science in the early 20th century. The outcome is what we have today: academic inquiry devoted intellectually to the pursuit of knowledge, as far as both the natural and the social sciences are concerned.[7]

What then ought to be done to put the above three steps of the great Enlightenment idea properly into practice – and so learn from our solution to the first great problem of learning how to solve the second one? By far the biggest blunder of the Enlightenment was made at step (III). Instead of applying progress-achieving methods, generalized from those of science, directly to the institutions and endeavours of *social life* so that social progress might be made towards an enlightened world, the *philosophes* made the disastrous mistake of applying such methods to the task of creating social *science* – to the task of improving

knowledge of social life. The proper primary intellectual task is to articulate, and improve the articulation of, our problems of living, and propose and critically assess possible and actual solutions; knowledge needs to be sought as a secondary activity, to facilitate these primary intellectual tasks. But step (III) was not the only mistake. Let us now look at all three steps in turn.

Step (I): We ordinarily recognize that science is of value in two ways: intellectually or culturally; and practically or technologically. The great Enlightenment idea of learning from scientific progress how to achieve social progress towards an enlightened world exploits a much neglected *third* way in which science is of value: it is of *methodological* value, of value because of what it has to teach us about how to make progress whatever we may be doing. But, in order to exploit this third methodological value of science to the full, it is essential that we get the progress-achieving methods of science sharply into focus.

Scientific method does *not* select theories impartially with respect to evidence, as the *philosophes* thought, and as scientists still think today. Physics only ever accepts fundamental theories that are *unified*, even though endlessly many disunified rivals can always be concocted to fit the evidence even better. (A theory is unified to the extent that what it asserts about the phenomena to which it applies is the same throughout.) These endlessly many empirically more successful, disunified rival theories are ignored – and that means physics makes a big, highly problematic assumption about the nature of the universe: it is such that all disunified theories are false. There is some kind of underlying unity in nature. The universe is physically comprehensible.[8]

This assumption exercises a profound influence over both the search for new theories, and the acceptance of existing theories. It is, however, a pure conjecture about the ultimate nature of the universe, about which we are profoundly ignorant. The specific version of the assumption, accepted by physics at any stage in its development, is almost bound to be false. Such assumptions made by physics in the past have, again and again, turned out to be false. It is vital that this profoundly influential, profoundly problematic, implicit assumption be made explicit within physics, so that it can be critically assessed – so that alternatives can be developed and assessed – in the hope of improving the specific assumption that is made. As I have already indicated, we need a new kind of physics – and a new kind of science – that represents the metaphysical assumption of physics in the form of a hierarchy of assumptions. As we go up the hierarchy, assumptions become increasingly insubstantial, and so increasingly likely to be true, and increasingly 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 unproblematic, stable assumptions, and associated methods, at the top of the hierarchy, within which much more substantial, problematic and influential assumptions, and associated methods, low down in the hierarchy, that are almost bound to be false, can be improved in the light of which seem to be the most empirically fruitful (in being associated with empirically successful physical theories). Physics improves its assumptions and associated methods in the light of improving theoretical knowledge and understanding. As we improve our knowledge of nature, we accordingly improve the nature of science. There is something like positive feedback between improving theoretical knowledge, and improving assumptions and methods. This aim-oriented empiricist conception of scientific method has in fact been put into scientific practice since the time of Newton, but only in a furtive, constrained way, severely handicapped by the dominant assumption that evidence alone decides what theories are accepted.[9]

Step (II): The progress-achieving methods of aim-oriented empiricism need to be generalized so that they become fruitfully applicable, potentially, to all worthwhile human endeavours with problematic aims. It is not just science that has a problematic aim – the aim

of discovering truth conjectured to be unified, or explanatory. In life, too, our individual, social and political aims are all too often problematic. Above all, the aim of achieving a good, civilized, enlightened world is profoundly problematic, for all sorts of more or less obvious reasons. Aim-oriented rationality (arrived at by generalizing the progress-achieving methods of science) requires us to represent problematic aims we pursue in life as a hierarchy of aims, thus providing a framework for the progressive improvement of specific, problematic aims (and associated methods) low down in the hierarchy, as we act, as we live. Aim-oriented rationality is designed to help us improve aims, ideals, actions, policies, ways of life, political programmes, philosophies of life, as we live.

Step (III): The great task then becomes to get aim-oriented rationality into all our other social endeavours with worthwhile, problematic aims, besides science, so that we may begin to make social progress towards a more enlightened, civilized world in a way somewhat comparable to progress achieved by science. We need to get aim-oriented rationality into politics, industry, agriculture, economics, finance, law, the media, international relations, and our individual lives. In so far as social inquiry has, as its basic task, to help implement this third step of the great Enlightenment idea, it needs to be developed, not as social *science*, but rather as social *methodology*, or social *philosophy*, actively seeking to help humanity develop institutions and social endeavours able to discover problems associated with aims in fact being pursued, and able in response to modify aims and methods, social actions, accordingly. Social inquiry proposes and critically assesses, not fundamentally items of *knowledge*, but rather possible and actual *actions*, policies, political programmes, philosophies of life, from the standpoint of their capacity, if enacted, to help us realize what is of value in life. A basic task is to help humanity discover unforeseen bad consequences inherent in new actions made possible by science and technology and, even more important, develop the social/political *muscle* required to modify what we do so that we nip the bad consequences in the bud before they become serious – or, failing that, progressively decrease serious bad consequences until they are eliminated. A basic task, in other words, is to help humanity learn how to avoid creating new global problems, and solve those that already exist.

As I have argued at length again and again over the decades, if academia is to put steps (I) to (III) properly into practice, thus correcting the blunders we have inherited from the Enlightenment, we need to bring about a revolution in academic inquiry, a change of paradigm for academia.[10] Almost every branch and aspect of academia need to change. Natural science needs to change so that it puts aim-oriented empiricism explicitly into practice. Social science needs to change so that it becomes social *methodology* and actively seeks to help humanity transform our institutions and social endeavours so they come to put aim-oriented rationality into institutional, social practice (knowledge being sought as a secondary activity, to facilitate these primary tasks). The relationship between natural science and social inquiry needs to change so that social inquiry becomes intellectually more fundamental. The relationship between academia as whole and the social world needs to change so that the former actively seeks to help the latter resolve those conflicts and problems of living that need to be resolved for the social world to make progress towards a better, more enlightened state of affairs. A basic task of academia needs to become public education about what our problems are, and what we need to do about them, by means of two-way discussion and debate. The basic aim of academic inquiry needs to change so that it becomes, not just to acquire knowledge, but rather to seek and promote *wisdom* – wisdom being understood to be the capacity, active endeavour and desire to realize (experience and create) what is of value in life, for oneself and others, wisdom in this sense including knowledge and technological know-how, but much else besides.

So, to sum up, we do need a more rigorous kind of natural science more sensitively responsive to human needs and aspirations. But, of far greater importance, we need a transformation in the whole of the academic enterprise, so that it becomes devoted, primarily, to helping us resolve conflicts and problems of living in increasingly cooperatively rational ways.

The two great problems of learning I indicated above can be fused into one problem, our most fundamental problem of all, encompassing all other problems of thought and life. It can be put like this:-

> How can our human world, the world as it appears to us, the world we live in and see, touch, hear and smell, the world of living things, people, consciousness, free will, meaning and value - how can all of this exist and best flourish embedded as it is in the physical universe?

This problem, encompassing all others, ought to be put at the heart of academia and education, everyone being encouraged at some point to explore possible solutions imaginatively and critically – that is, rationally. Academia needs to be so organized that active discussion of this most fundamental of all problems influences, and is influenced by, all more specialized and particular problem-solving, in both thought and life. Half of academia, properly constituted – the intellectually most fundamental half, namely social inquiry and the humanities – would not be science, or would not primarily be devoted to the pursuit of knowledge. Their task, as I have said, would be to help people solve those conflicts and problems of living that need to be solved so that we may realize what is genuinely of value in life. Half of academia would be devoted to the discovery and realization of what is of value, not primarily devoted to the pursuit of knowledge.

The kind of inquiry that I argue for – wisdom-inquiry – puts people at the heart of inquiry. What really matters, and what needs all our attention, is the thinking we engage in as we live, individually and together, seeking to realize what is of value as best we can. Academia is a specialized bit of fundamental personal and social thinking in life, devoted to helping us improve our life-thinking, and so our lives.[11]

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Notes

[1] See Maxwell (1974; 1998; 2004; 2017a; 2017b).
[2] See Maxwell (1976; 1984; 2004; 2014; 20017c).
[3] See note 2.
[4] See note 2.
[5] For critical assessment see https://www.ucl.ac.uk/from-knowledge-to-wisdom/reviews .
[6] See Gay (1973); Israel (2014).
[7] See Farganis (1993, introduction); Hayek (1979).
[8] In addition, as I have already indicated, there are problematic assumptions concerning values and politics inherent in the aims of science that need to be made explicit so that they can be critically assessed and, we may hope, improved: see Maxwell (1984; 2004; 2014; 2017b).
[9] This argument, first formulated in Maxwell (1974), is spelled out in detail in Maxwell (1984; 1998; 2004; 2017c); see especially Maxwell (2017a and 2017b, ch. 5).
[10] See note 2.
[11] See especially Maxwell (1984).