

THE VERY IDEA OF A UNIVERSITY: ARISTOTLE, NEWMAN, AND US

by ALASDAIR MACINTYRE, *University of Notre Dame, Indiana USA*

I

The case that hostile critics have urged against Newman's *The Idea of a University* is impressive. J.M. Roberts wrote nearly twenty years ago that 'it is no longer possible to write a book with such a title ... no general doctrine of universities is possible' ('*The Idea of a University revisited*' in *Newman after a Hundred Years*, edd. Ian Ker and Alan G. Hill, Oxford: Clarendon Press, 1990, p. 222). And Bill Reddings later argued that Newman's conception of the university curriculum reflected a kind of literary culture that 'held together diverse specialities in a unity', a type of culture that no longer exists and that it is impossible to recreate (*The University in Ruins*, Cambridge, Mass.: Harvard University Press, 1996, p. 167). Those two critics could not have been more at odds with each other, Roberts being a distinguished member of the British University establishment, yet the two of them in agreement on Newman's irrelevance.

What is held to make Newman irrelevant to the concerns of those now at work in universities are three of his central affirmations, each entailing the denial of a conviction central to the functioning of contemporary universities. So why does that make Newman's claims irrelevant rather than just false? It is because, on the view taken by his critics, it is not only that Newman's idea of a university fails to hold true of contemporary universities, but that anyone who thought that it might hold true would have grossly misunderstood the nature and functioning of the contemporary university. To criticise contemporary universities from Newman's standpoint would be, on their view, like blaming a jet engine for not having the excellences of a windmill.

What then are the three matters on which what Newman says is taken to be at once false and irrelevant? The first is his conception of the unity of knowledge, or more accurately of the unity of understanding, of how each academic discipline contributes the knowledge of some particular aspect or part of the universe, so that in the

search for understanding we need to study not only a number of different disciplines – physics, physiology, history, literature, mathematics, psychology – but also how each of these bears on the others, what the relationships between them are (*The Idea of a University*, ed. Martin J. Svaglic, Notre Dame, Indiana: University of Notre Dame Press, 1982, Discourse III, pp. 33–35 and Discourse VI, p. 103). Newman was careful to emphasise that it is not just the study of a number of disciplines that educates (Discourse VI, p. 98). What educates is knowledge of several disciplines, such that one comes to understand both the indispensability of each for an overall understanding of the order of things and the limitations of each. The superficial generalist is as much the product of a defective education as the narrow specialist.

It is a commonplace that Newman in 1852 not only did not foresee the rise of the modern research university, first in Germany, then in the United States, but took it for granted that research was a task for institutions other than universities. What puts Newman in opposition to the research university, however, is not just this but, above all, his claim that intensive specialisation and narrowness of intellectual focus deform the mind, that the qualities characteristic of the minds of successful researchers are qualities incompatible with those of an educated mind. This claim follows from Newman's affirmation of his conception of the unity of knowledge, of the unity of understanding, together with his view of the effects of the academic division of labour. 'There can be no doubt,' Newman wrote, 'that every art is improved by confining the professor of it to that single study. But, *although the art itself is advanced by this concentration of mind in its service, the individual who is confined to it goes back*' (Discourse VII, p. 127).

That you may tend to injure and deform your mind by developing a narrowness of vision and a onesidedness in judgment, if you devote yourself wholeheartedly to a life of scholarly research, is a thought that the protagonists of the twenty-first century prestigious research university are scarcely capable of entertaining. We might exaggerate somewhat, if we formulated Newman's view in contemporary terms by saying that the possession of a Ph. D. or a D. Phil. is too often the mark of a miseducated mind, but we would come close enough to it to make it clear why Newman must seem not just irrelevant, but offensive to such protagonists.

Consider now a second way in which Newman is held to have disqualified himself from participation in our debates. He insists not only that theology is among the disciplines that must be taught in any university worthy of the name, but that it is the key discipline, that unless theology is given its due place in the curriculum, the

relationships between disciplines will be distorted and misunderstood. Since nobody in the twenty-first century thinks that an institution from which theology is absent cannot legitimately call itself a university, and since, even in universities where theology is taught, it is treated as simply one more specialised discipline among others, Newman's claims must sound eccentric to contemporary ears. We might be tempted to say that, for the vast majority of our academic contemporaries, it is their belief that universities are secular institutions that leads them to reject Newman's thesis about the place of theology in the curriculum. Yet Newman too held that universities are secular institutions. His claim is that it is *qua* secular institution that the university needs what he takes to be the secular discipline of theology. So what can this need be? Newman's answer returns us to his conception of the unity of understanding.

Without a recognition of theology as the key discipline, the university curriculum, so Newman argued, will disintegrate into a fragmented multiplicity of disciplines, each self-defining, each claiming autonomy in its own sphere. Some disciplines will of course continue to draw on each other, as physics does on mathematics, geology on chemistry. But there will be no conception of a whole to which each discipline contributes as a part. And of course this is just how it has become in the contemporary university, a condition one of whose symptoms is the great difficulty that university teachers generally have nowadays in arriving at agreement on what, if any, general education requirements should be imposed on undergraduates. University teachers are no longer members of an educated public constituted by agreements on what books every educated person needs to have read and what skills every educated person needs to possess. For now there is no such public inside or outside the university, as Bill Reddings rightly insisted. I am not suggesting that the principal cause of this condition is the absence of theology from the curriculum or its treatment as just one more specialised discipline. But it would have been Newman's view that the fragmentation of our curriculum is a condition that needs to be remedied and that only an acknowledgment of theology as the key unifying discipline can adequately remedy it.

Newman therefore with his judgments that the knowledge of God is a part of our secular knowledge and that such knowledge is the key to understanding affronts the secularised thinkers of our time, just as he affronted the secularising thinkers of his own. Part of what affronts them is that Newman was well aware that belief that God exists is contestable and that there are no knockdown arguments, equally compelling to every intelligent person, for the existence of God. But it is characteristic of contemporary unbelievers to believe

that, only if they were offered some knockdown argument whereby belief in God would be incontestable, would they be rationally entitled to believe that God exists. To which the theist has to respond that any being whose existence was thus justified would not be God. It is not that there are not arguments sufficient to justify the theist's assertion of the existence of God, but that the soundness of those arguments will always be open to contestation, just because of the nature of God and of His relation to His creation.

Newman's idea of a university is then taken to be irrelevant to the contemporary university not only because of the overwhelmingly dominant place that the acquisition of specialised knowledge through research has in the contemporary university, and not only because no discipline could be accorded the place that theology has in Newman's scheme, but also because the claim that the knowledge of God is at once contestable and yet genuine and indispensable secular knowledge is at odds with the present day secular university's understanding of the secular.

A third respect in which it seems to many that Newman's views cannot be brought to bear on the contemporary university concerns how a university education is to be justified, both to those who are invited to become its students and to those whom it invites to sustain it financially, whether private and corporate donors or governments. Universities today would not survive, let alone flourish, if they were not able credibly to promise to their students a gateway to superior career possibilities and to donors and governments both a supply of appropriately skilled manpower and research that contributes to economic growth. Universities, that is to say, promise to be cost-effective enterprises. For Newman, by contrast, the activities that contribute to the teaching and learning of a university have goods internal to them that make those activities worthwhile in themselves. It may of course be the case that incidentally universities do contribute to career success and economic growth. But, on Newman's view, a university can succeed in both these respects and yet fail as a university. So there are three major issues that put Newman at odds with the contemporary research university's understanding of its mission: its pursuit of highly specialised knowledge, the secular university's understanding of what it is to be secular, and the university's self-justification by appeal to considerations of social utility. If we recognise that, given these three characteristics, no contemporary university could exemplify anything like Newman's idea of a university, should we simply agree with Roberts and Reddings in taking Newman's claims to be not only false, but also irrelevant?

II

I want to suggest three lines of thought which separately and jointly give us reason to take Newman's central claims seriously. Each of them begins from asking a set of Aristotelian questions and ends with an answer drawn from Newman. And about this we should not be surprised. For it was Newman who declared that 'while we are men, we cannot help, to a great extent, being Aristotelian' and that 'In many subject-matters to think correctly is to think like Aristotle' (*Discourse V*, p. 83). To think *like* Aristotle, for the questions from which I begin are perhaps not Aristotle's own, but they are questions which, if one presses an Aristotelian enquiry beyond a certain point, one is bound to ask. They are also – and Newman's remark on why he is an Aristotelian is very much to the point – questions that are inescapable for any sufficiently reflective human being, so that, even if Newman had never written *The Idea of a University*, we should have been compelled to raise them.

The first is this: What is it that we need to understand, if on some occasion the outcome of our practical deliberations has been perhaps disastrous, or at least very different from what we had expected? What are the different ways in which we may have gone astray? If our conception of practical reasoning is in general Aristotelian, there are several ways in which our deliberations may have been defective. Consider for example the kind of decision that will alter the course of someone's life, perhaps too the lives of others close to her or him, such choices as that to emigrate or not to emigrate *or* to change the land use of one's farm in some drastic way *or* the choice between participating in rebuilding one's town after some natural disaster and starting anew somewhere else.

Bad decisions may result from some failure to identify or rank order correctly the goods at stake in choosing this rather than that. And such failure may in turn derive from some misconception of what the agent's final good *qua* human being is. Or they may result from a failure to identify correctly the actions that in these particular circumstances would have to be undertaken to achieve the relevant goods. These two kinds of error will have been made in the course of formulating the premises of the agent's practical syllogisms. But they are not the only types of error of which we need to beware. For all such practical reasoning, whether successful or not, presupposes two sets of background assumptions about the natural and social contexts in which the reasoning and the actions that flow from that reasoning take place. Each of these types of assumption can also be a source of practical failure. What are they?

There are first of all assumptions about the present and future stability or otherwise of different aspects of our natural or social environments. So we all of us make assumptions, generally tacit, about the probability or improbability of the occurrence of earthquakes, volcanic eruptions, droughts, floods, disruptions in food supplies, famines, breakdowns in transportation, changes in the crime rate, breakdowns in tribal or family life, the strength or weakness of social and moral traditions, the functioning of the stock market and of the economy more generally – the list goes on and on. A second set of assumptions are about how others in the present or future will be likely to respond to our actions, so as either to further or to frustrate our intentions. Those – also generally tacit – assumptions concern not just the nature of their decision-making, but also the significance that our actions may have for their decision-making, among them their assumptions about our assumptions about them.

I have noticed in both cases that such assumptions are generally not spelled out. What is of crucial importance for the soundness of our practical reasoning is that we should be able to recognise when some of our assumptions do need to be made explicit and put in question and which type of assumption it is that we need to examine on this or that particular occasion. What would it be to be able to do this and to do it well? It would involve knowing both how to draw on the relevant findings of a range of disciplines and how to evaluate the reliability of those findings. So what kind of education would someone have to have received in order to do this? What kind of mind would such a one have?

It is in trying to answer these questions that we find ourselves returned to Newman's text. For the education of such a one will have to have included a more than superficial engagement with several disciplines, each with its own subject-matter and its own ways of viewing that subject-matter, as, for example, in understanding human beings and their activities we need to treat of them, says Newman, 'as physiologists, or as moral philosophers, or as writers of economics or of politics, or as theologians' (Discourse III, 3, p. 36). But Newman adds that, in evaluating each of these disciplinary contributions, 'the mind never views any part ... without recollecting that it is but a part' (Discourse VI, 6, p. 103), a part contributing to the understanding of a whole. If the mind fails to do this, it will be apt 'to give undue prominence to one' or more disciplines and 'to unsettle the boundary lines between science and science' (Discourse V, 1, p. 75), so that for example, it may attempt to understand the distribution of wealth in different parts of a city in purely economic terms, neglecting other social and moral dimensions, or it may treat some psychological

disorder that involves lack of self-knowledge as though it were only a biochemical phenomenon.

Such confusions too often mark the public discourse of our present day culture. They make too many of us victims of the expertise of those trained to see things only in the narrow focus of their own discipline. Newman took it that what he called the constrained and contracted mind of the specialist characteristically expressed itself in opinionated and boring conversation (Discourse VI, 6, p. 104). And so it still does. But such minds have now become more dangerous because more apt to set on foot large-scale consequences. And the range of disciplines that we may need in order to achieve the kind and degree of understanding that issue in sound practical reasoning has increased. Sometimes we need to correct what economists tell us by appealing to the historians, and sometimes of course vice versa. Sometimes we need to correct what neurophysiologists tell us by appealing to psychologists, and sometimes vice versa, and sometimes we may need as well or instead to go to novelists or dramatists. Note too that in many cases no evaluation of the claims made for this or that finding of specialised enquiry will be possible for those innocent of the relevant mathematics. We all of us therefore need to be schooled in a number of disciplines, just because each has its own methods, insights and standards. To be educated is, on this view, not only to know how to bring each discipline to bear in appropriate ways, but also how to respond to the unjustified claims made in the name of each. And for this we need not the contracted mind of the specialist, but a different sort of mind.

From this perspective Newman's enterprise begins to look somewhat different and the accusation that his conception of a university is irrelevant to universities as they now are misses the point. For perhaps the principal question that Newman was posing was not, as he supposed, 'What is a university?', but 'What is an educated mind?', a question which he answers in Aristotelian fashion by saying that everything has its own specific perfection, that there is a specific perfection of the intellect (Discourse V, 9, p. 92), and that the end of education is the achievement of that perfection, that 'true enlargement of mind which is the power of viewing many things as one whole, of referring them severally to their place in the universal system, of understanding their respective values, and determining their mutual dependence' (Discourse VI, 6, p. 107). To develop highly specialised knowledge only in one particular sphere, to focus one's mind on only one subject-matter, may certainly be valuable, but it will not enable the mind to achieve its specific perfection and is apt to prevent the mind from doing so.

The irrelevance to the contemporary university of Newman's prescriptions is thus cast in a new light. It is an indictment not of Newman, but of the contemporary university. For, if this irrelevance is as great as his critics claim, then whatever universities are achieving, they are not producing educated minds or, to put matters more justly, they are doing so only incidentally and accidentally. And, if they were to be able to rebut this accusation, it could only be because they had drastically revised their undergraduate curriculum, so that every student was introduced and somewhat more than introduced to, say, the calculus and the mathematics of probability, to historical and literary studies, to some parts of physics, certainly to thermodynamics, to the elements of biochemistry, and to ecological and evolutionary biology. Yet whatever disciplines we name in this catalogue, there always has to be something more, namely the communication of an understanding of the various ways in which the findings of those disciplines bear upon each other and so contribute to a larger understanding than any of them by themselves can provide. We should notice too that the teaching of this kind of curriculum will require a corresponding kind of education for teachers, since we shall need teachers of literature who are well informed about biochemistry and teachers of physics who are able to think historically, all of them being at home with the relevant mathematics.

III

To this proposal there will of course be a number of objections, of which here I consider only one, merely, that whether or not this is an account of what education is or should be, it is not or not yet Newman's account, and this in two different ways. First, in elucidating Newman's conception of understanding I began by considering some features of practical reasoning. But, it may be said, Newman's conception is of understanding as achieved by theoretical enquiry. So I may seem to have started in the wrong place. What matters, however, is that the conception of understanding at which we have arrived, although presupposed by successful practical reasoning, is itself a conception of the mind's theoretical grasp of the relations of parts and aspects to the whole. What this involves can be brought out by noting how questions that Newman takes to be central to theoretical understanding go characteristically unasked in the fragmented curriculum of the present day.

Consider Newman's suggestive discussion (Discourse III, 2, pp. 35–36) of how the different disciplines enable us to understand ourselves. We are, according to physics, composed of particles interacting with

each other and with our environment. Chemistry tells us that we are sites of a variety of reactions; biology, as Newman was shortly to learn from Darwin, that we are in key part what we are because of the evolution of species. Sociology and economics characterise the structure of our roles and relationships; history informs us that we are what our past has made us and what we have made of our past. And theology views all these same features from a very different perspective. The crucial questions are: In what then does the unity of a human being consist? And what is it about human beings that enables them to ask this question about themselves? But these are questions, in Newman's idiom philosophical questions, which can only be asked by students who have a more than superficial grasp both of the relevant disciplines and of how they relate to each other. And they are questions that go unasked in the contemporary curriculum.

One respect in which this account of Newman's conception of multidisciplinary understanding does indeed fall short is the absence so far of any discussion of Newman's thesis that, if the curriculum is to have the unity that it needs to have, if it is to disclose the unity of the order of things, then the discipline of theology is indispensable. For it is theology that provides the curriculum with its unity and we will not understand the bearing of the other disciplines on each other adequately, if we do not understand theology's bearing on them and theirs on theology.

The theology of which Newman spoke was not specifically Catholic theology, but a theology shared with all theists, with all those for whom, as Newman put it, the word 'God' 'contains ... a theology in itself' (p. 27). God, as understood by theists is 'an Individual, Self-Dependent, All-perfect, Unchangable Being; intelligent, living, personal and present ... who created and upholds the universe ... who is sovereign over, operative amidst, independent of, the appointments which He has made; One in whose hands are all things, who has a purpose in every event and a standard for every deed, and thus has relations of His own towards the subject-matter of each particular science which the book of knowledge unfolds, who has ... implicated Himself in all the history of creation, the constitution of nature, the course of the world, the origin of society, the fortunes of nations, the action of the human mind; and who thereby necessarily becomes the subject-matter of a science ...' (Discourse II, 7, p. 27).

This surely states a doctrine unacceptable to the contemporary secular academic mind, although perhaps what that mind rejects in taking itself to reject this doctrine is not in fact this doctrine. Whether that is so or not is a question that I shall approach indirectly by developing a second line of thought about what it is to understand.

When we bring one or more of the particular disciplines to bear upon some event or state of affairs that we need to understand, say, the explanation of the incidence of bubonic plague in medieval Europe, and the part that it played in shaping social and economic life, or the varying causes of climate change during the earth's history, or the phenomena of neutron oscillation, the explanations at which we arrive are always partial and incomplete in that they always direct our attention to something more, to something needing further enquiry. Sometimes this is because certain questions are still left open, sometimes because that to which the explanation refers us as cause or causes itself stands in need of explanation, and sometimes because there is an appeal to principles or laws that have application in this particular sphere, but we do not as yet understand why those principles or laws must take the form that they do.

Moreover, as our enquiries proceed, we move towards unifying our various explanations, both those which lie wholly within one particular discipline and those which have a bearing on explanations in other disciplines. And this enables us to understand increasingly the place of this or that occurrence or state of affairs in the overall order of things. Yet our explanations are always imperfectly unified, just as they always remain in some respects incomplete, and so our enquiries never terminate, are never final. What they presuppose is twofold: first, that we are indeed directed towards a final, if unattainable end, that we do have a conception of what it would be to have achieved a kind of understanding that is perfected and completed – for it is only by contrast with this conception that we characterise our present explanations as partial, imperfect and incomplete – and secondly, and correspondingly, that the order of things, although indefinitely complex, has an intelligible unity that is gradually and increasingly disclosed by our enquiry and that will continue to be disclosed by those enquiries, no matter how far we carry them.

What is involved in having such a conception of the order of things as an intelligible unity, a conception that medieval Aristotelians, at least, would have confidently ascribed to Aristotle? It is to take it for granted that the further we carry our enquiries the nearer we come to understanding every part and aspect of the universe in relation to every other, just because of an indefinitely sustained underlying ordered unity. To move towards understanding on this view is to move towards achieving what scornful and sceptical critics have sometimes spoken of as a God's eye view of things, thinking thereby to discredit this conception of the achievement of understanding. But by so doing such critics have revealed an insightful grasp of what is at stake in accepting or rejecting this conception of understanding

and indeed in accepting or rejecting the counterpart conception of an ordering power that is not itself a part or aspect of the finite order of things, but one without which the universe could not present itself to our minds as an intelligible unity, an ordering power that has the defining characteristics of the God of theism.

What this line of thought suggests is that about one thing at least Newman is right, namely that, if theology were not to be granted the place in the curriculum that he assigns to it, then the secular disciplines could not stand in the relationships to each other that he assigns to them. His defence of theology is integral to his conception of the unity of the order of things and to the unity of the curriculum. They stand or fall together. Take away theology and the curriculum will be fragmented into a series of specialised disciplines, leaving at best the possibility of some kind of factitious unity imposed by social agreement. It turns out therefore that from Newman's point of view his attack upon specialisation in the curriculum and his attack on the removal of theology from the curriculum are one and the same attack.

That there is an impressive philosophical case to be made *against* the theological conception of understanding that I am ascribing to Newman no one at work in a contemporary university is likely to be unaware. But the philosophical case *for* that conception has its own interest and it is important to distinguish the line of argument that leads to it from three other lines of argument with which it may easily be confused. First, it is not only different from, but incompatible with the so-called argument for or from intelligent design, whether in Archdeacon Paley's eighteenth-century version or in more recent versions. For that bad argument begins from an attempt to identify examples of natural phenomena whose complexity is such that, so it is alleged, they cannot be explained by the natural sciences. By contrast the line of thought that I have sketched begins not from contentions about the limits or failures of scientific enquiries, but rather from the continuing success of such enquiries and the justified confidence of those engaged in them. Newman's early reading of Hume had led him to be suspicious of the claims advanced by eighteenth-century proponents of intelligent design. I do not think that he would be any more sympathetic to their unfortunate contemporary heirs.

A second contrast is between R.G. Collingwood's account of the metaphysical presuppositions of scientific theorising and the account that I am defending, although I am certainly indebted to Collingwood. Collingwood understood that in different periods the intelligible unity of the order of nature had been conceived in different and

incompatible ways, the post-Aristotelian and Ptolemaic conceptions of the late middle ages giving way to Galilean and Newtonian conceptions, and these in turn to quantum-mechanical and relativistic conceptions, each of which had, so Collingwood contended, its own distinctive metaphysical presuppositions and commitments. But on the view that I am taking the underlying presupposition of scientific enquiry is that, even although each of these particular attempts to characterise the intelligible unity of nature has either already failed or may at some point in the future fail, there is at a deeper level a unity yet to be discovered and an understanding yet to be achieved, so that we are committed to presupposing belief in an ordering power without which the concept of a continuing intelligible and unified order would be empty.

A third contrast is with the positions taken by Nicholas Maxwell in his *The Comprehensibility of the Universe* (Oxford: Clarendon Press, 1998). Maxwell treats the intelligibility and unity of the physical universe as something to which our commitment is inescapable, once we have understood the theoretical aims of physical enquiry (see especially pp. 180–181). And I am also indebted to his discussion of these issues. Moreover he provides impressive reasons for holding that the best conjecture as to why the physical universe has the intelligible unity that it has would be that God exists, if only the concept of an all good and all powerful God were not, on Maxwell's view, rendered wholly implausible by the facts of human and natural evil. The two crucial differences between my – and Newman's – line of thought on the one hand and Maxwell's on the other are: first, that Newman, like other theists, did not find the objection to theism posed by the problem of evil insuperable, and, secondly, that for Newman, like other theists, belief in God *cannot* be a conjecture and is in relation to scientific enquiry, we might be tempted to say, an inescapable presupposition.

Inescapable? That must surely not be so. Newman himself noted of natural science that a 'vast multitude of its teachers ... have been either unbelievers or skeptics' (Discourse IX, p. 167) and periodic surveys of members of the American Academy of Science during the twentieth century have shown that the numbers of believers in God among them, never large, steadily dwindled to about five percent. But what then is the antitheist's alternative to Newman's position? It is that there is some noncircular inductivist justification for inferring from the characteristics of the universe to date to the unity and continuing intelligibility of the universe. That scientific enquirers who are antitheists badly need just such a justification, if their claims are to be sustained, is clear. That such a justification can be

provided remains far from clear. And the onus for providing it is on the antitheist.

IV

I turn now to the third area of contention between Newman and the protagonists of the contemporary university. The contemporary university, as I noted earlier, boasts that it is socially useful and often justifies itself by citing as an example of its usefulness the provision of skilled manpower. By contrast, Newman's view was that what matters about an educated individual is not primarily any set of useful skills that she or he may happen to possess, but her or his capacity for judgment, judgment both in putting these skills to work and in acting 'as a friend, as a companion, as a citizen', and in domestic life and in the pursuits of leisure (Discourse VII, 8, p. 129). Newman is quoting from the argument advanced by John Davison – one of the reforming Fellows of Oriel in the early nineteenth century – in defence of a curriculum that introduces the student to 'religion (in its evidence and interpretation), ethics, history, eloquence, poetry, theories of general speculation, the fine arts, and works of wit', studies which, so Davison had claimed, are 'such as give a direct play and exercise to the faculty of judgment' and thus educate 'the active and inventive powers' (Discourse VII, 9, p. 132). The question that readers will want to put to Davison and Newman is: What then are the marks of judgment? What is it to possess or to fail to possess it? And of course in putting this question to Davison and Newman, we are close to asking of Aristotle, 'What is *phronēsis*?' and of Aquinas 'What is *prudētia*?' Let me consider then just one aspect of judgment, one that throws additional light on Newman's proposed curriculum, and suggests that without something like that curriculum we will not only be defective practical reasoners, but will even be apt not to know what we are doing.

Human action always has several dimensions. 'What are you doing?' we ask. 'Solving an equation; predicting next week's stock prices; pleasing my employer; working late in the office; absenting myself from dinner with my family; alienating my oldest child.' Or perhaps 'Digging a hole; building a condominium tower; constructing a new competitor for scarce water resources; ignoring some of the relevant geological facts; endangering lives in twenty years time.' Even examples as sketchy as these bring out some salient features of action: first, that what we are not doing or are failing to do by doing what we do may be as important as what we do; secondly, that ignorance of relevant facts from a variety of disciplines may make us unable to

recognise aspects of what we are doing; and thirdly that, by focusing on particular aspects of what we are doing we may conceal from ourselves other aspects. There always may of course be aspects of our actions of which we remain unaware through no fault or defect of our own and some of them may be such that we have no need to be aware of them. But the range of facts of which we may at some point badly need to be aware, if we are to know what we are doing, is clearly wide and requires, as we have already emphasised, some knowledge of a number of disciplines.

Evidently of course such academic knowledge, although necessary, is insufficient for an agent to be able to answer the question 'What are you doing?' She or he needs also to know how to deploy that knowledge when and as it is required and this ability can be developed only through engagement in a range of practices. Yet, lacking an education that has introduced agents to a sufficient number of disciplines, they will be unlikely to develop that ability. And they will also need another characteristic that cannot be acquired through academic study, that of valuing the quality of knowing what they are doing and of valuing that quality in others. One can of course know what one is doing and nonetheless do the wrong thing. But even to begin to say what is involved in judging and acting rightly would be to open up questions too large for this occasion. What has already been said is sufficient to establish the connection between Newman's account of the curriculum and his conviction that what it is to have an educated mind is one thing, what it is to have professional skills something else, even if it is important for the exercise of professional skills that those who exercise them have educated minds.

If we are to take this line of argument further, we must do so in two directions, one of which involves us in rejecting an assumption of Newman's, an assumption shared with most, if not quite all of his educated contemporaries. It is that the type of university education that he commends is suitable only for a small and privileged minority. Yet, if in fact in the contemporary world this kind of education is needed in order to know what one is doing, then everyone needs it and not only the makers of large-scale social and economic decisions. Indeed it is crucial for plain persons that they should have this type of education, so that they can begin to recognise when those who exercise power over their lives no longer know what they are doing. But the question of how such an education might be made widely available is yet another that I put on one side. I do so in order to make a claim whose truth or falsity is of crucial significance in the debate between the followers of Newman and the protagonists of the contemporary research university.

V

That claim is that a surprising number of the major disorders of the latter part of the twentieth century and of the first decade of the twenty-first century have been brought about by some of the most distinguished graduates of some of the most distinguished universities in the world and this as the result of an inadequate general education, at both graduate and especially undergraduate levels, that has made it possible for those graduates to act decisively and deliberately without knowing what they were doing. Examples of such disasters include: the Vietnam War, the policies of the United States towards Iran for more than half a century, and the present world economic crisis. Of course I cannot here argue adequately for such a contentious claim. But I can illustrate it by considering some salient features of the genesis of the present economic crisis.

Too many people have already forgotten the great forerunner of this crisis, the collapse of the hedge fund, Long-Term Capital Management, in 1997, a collapse so massive that for a short time it threatened the entire financial system. Long-Term Capital Management had on their board two Nobel Prize winning economists, who made use for the first time of certain complex mathematical models that, so they confidently believed, enabled them to enter into large-scale derivative contracts with measurable risk and without significant danger. And so far as both the mathematics and the economic theory was concerned they knew very well what they were doing (see Roger Loewenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, New York: Random House, 2000). What they lacked was historical knowledge of two different kinds of contingency: knowledge in depth of the histories of risk-taking firms and of the vicissitudes encountered in those histories and knowledge of the politics of the different cultures within which markets operate, so that, most notably, they misinterpreted events in Russia and were taken wholly by surprise when the Russian ‘government simply decided it would rather use its rubles to pay Russian workers than Western bondholders’ (Loewenstein, p. 144).

The collapse of Long-Term Capital Management had about it something of the character of a farce, of a story of experts ludicrously victimised by their own expertise. Its successor, our present crisis, has instead some of the characteristics of a tragedy, a tale of characters who self-confidently take themselves to be farsighted walking, as if blindly, over a cliff, and in their *hubris* taking all too many others with them. For it was cohorts drawn from the most highly educated among us who trusted in sophisticated mathematics whose applications the

vast majority of them did not understand, who relied upon conceptions of risk that they had never adequately analysed, who went down historically well-marked roads not knowing that those roads had been already travelled more than once, and who lacked the dramatic imagination that could have told them just what kind of a play it was in which they had allotted themselves roles. They lacked, that is, just what Davison's – and Newman's – curriculum might have given them. It is small wonder then that they were also oblivious to what they might have learned from Newman's Aristotelian contemporary, Karl Marx.

VI

What we have to learn then from Newman is first of all that undergraduate education has its own distinctive ends, that it should never be regarded as a prologue to or a preparation for graduate or professional education, and that its ends must not be subordinated to the ends of the necessarily specialised activities of the researcher. But it is not just that undergraduate education has its own ends. It is also that undergraduate education, when well conducted, is in key part an education in how to think about the ends of a variety of human activities and, that is to say, in how to evaluate, among others, such activities as those of the specialist and the researcher, the activities of those dedicated to the ends which the contemporary research university serves. The danger is therefore that in research universities the ability to think about ends, including the ends of the university, will be lost and with it the ability to engage in radical self-criticism, so that the leadership of those universities will become complacent in their wrongheadedness. How unsurprising it is then that so often from their point of view Newman's lectures should now appear not only false, but irrelevant.

Correspondence

Professor Alasdair MacIntyre
University of Notre Dame
Indiana
USA
E-mail: amacinty@nd.edu