

Can Education Still be Critical?

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The article investigates how two different conceptions of the edifying potential of education attempt to take into account the normative dimension of scientific knowledge. In the first conception it is the demand for truth that is edifying, whereas in the second concept it is a distinctively ethical demand. It is argued that the first concept in the end implies the subjection of education to the 'brutality of facticity', under which it risks losing its critical point. The second conception, drawing on Levinas and Arendt, tries to safeguard this critical point. It conceives education as a process through which scientific knowledge is made subject to reflection, and is thus confronted with the ethical challenges and demands of society.

INTRODUCTION

Probably never before has scientific and technological progress provoked questions of such moral compass. Such progress has brought with it reductionist and objectivist ways of looking at the world, which in some quarters have aroused disquietude and moral indignation. While some have seen such reactions as hopeful signs that sensitivity to certain fundamental values indeed survives, others fear that the essential humanity of our world is nevertheless in grave danger. Current discussions concerning the limitations that should be placed on the genetic manipulation of human life attest to this anxiety and urgency. There is a widespread call for the limitation of the ever-increasing intrusion of science and technology into all domains of human life. According to Mittelstrass the development of our understanding of aims or ends (*Orientierungswissen*)—that is, our ethical understanding—remains far behind the enormous increase of our technical-scientific knowledge (Mittelstrass, 1989, pp. 36–37). Confronted with this unprecedented situation to which science and technology have brought us, and because of the inability of traditional ethics to respond to this, Hans Jonas pleads for a new ethics. Such an ethics should not have *virtue* but *responsibility* as its principle. According to Jonas, an ethics of virtue cannot keep pace with the dynamics of modern society: 'Finally released, Prometheus receives from science

powers totally unknown before, and calls for a new ethics which through voluntary restraint prevents those powers from becoming a disaster for humankind' (Jonas, 1979, p. 7, my translation).

It might seem that this issue of the impact of science and the implications of technology has to be treated in two stages: first, by moral theory and philosophy (philosophy of science, political philosophy), and then afterwards, in a second and subsequent step, education and educational theory would come in to address the question of how to translate the results of philosophical, ethical and political reflections into the concrete organisation of educational processes and their content. Thus education would contribute to the implementation of new and effective values and attitudes. To address the question of education *after* having addressed the question of ethics or morality, however, shows the continuing power of the traditional way of viewing things. In this scheme of things education is basically seen as an instrument or a means and its edifying¹ (or distinctively educational) quality is exclusively related to its preparatory character (education being seen as a preparation for personal and social life in society after education). It is particularly surprising that this pattern reappears so regularly. Since Plato's *Protagoras* we have known that it is a highly disputed question whether moral education is possible at all. And there are good reasons for the conviction that moral education is only 'a well-meant but completely vain activity with a misleading function', at least when it attempts to be more than the teaching of moral theories (Fischer, 1996, p. 21, my translation).

In my view this implicitly technical characterisation of the edifying function of education is related at a very profound level to the development of science and technology. I would like to call this structure into question. I do not want to deal with the question whether we need a new ethics or not and how education could help to implement or realise such an ethics. Rather, I would like to show how a totally different conception of the edifying character of education, and hence of education itself, can open up a different perspective on the issue that I mentioned at the start. My reflection remains strictly in the field of educational theory: it is a reflection on the concept of edifying education in relation to the meaning of science and (ethical) judgement.

My question therefore concerns how a different conception of the edifying function of education might take into account the normative dimension of scientific knowledge (or scientific rationality). It seems to me that this cannot be done by teaching a new ethics separately (in addition or as a kind of conclusion) from the other (scientific) contents of education, as a technological way of thinking encourages us to suppose. Taking into account the normative dimension is possible, however, when scientific knowledge and scientific rationality are subsumed under a process of thinking that confronts them with the ethical challenges and demands of society. In what follows I shall draw out the distinction between these two conceptions of edifying education. I shall argue, to put it baldly, that it is not the demand for truth that should be at the heart of

an edifying education, but the ethical demand. To avoid misunderstandings it should be noted that I do not want to introduce any *particular sort* of morality as a normative basis for education, but rather to elaborate another meaning of the ethical aspect of education.

EDUCATION AND THE CLAIM TO TRUTH

The disquietude concerning the meaning and impact of the sciences and technology that I mentioned at the beginning contrasts sharply with the general hope of the Enlightenment: that it was precisely the progress of science that would lead to political and moral progress. 'Science edifies' (*Wissenschaft bildet*), writes von Humboldt. In various ways, until roughly the beginning of the 1970s, this hope went hand in hand with the idea of a science-oriented education (Menze, 1980; Schilmöller, 1995). The essence of this is that, quite apart from its instrumental uses, the edifying value of education for the individual as well as for society lies in the acquisition of scientific knowledge. Through such an introduction to true knowledge, persons—and persons qua citizens especially—can be provided with a sound basis for future judgement and action. Rational, scientific knowledge is a precondition of acting and judging in a way that can be generalised and so enables human beings to live together. In this way the individual is prepared for participation in society through an initiation into knowledge that is general and universal—valid for all indiscriminately, that is, and free of partiality. In this way society itself acquires a solid foundation. Thus scientific education is always practical and not only technical, and it develops the potential for critical judgement upon actual social developments and claims. Education in the sciences draws its educational (edifying) force from the unifying, totalising and at the same time critical potential of scientific reflection, as access to truth in its universal validity. It is not surprising that, at the start of the Enlightenment, the science seen as having a generally edifying dimension is described as fundamentally philosophical, and that philosophy is regarded as the discipline that determines the extent to which an activity can be called truly scientific (Habermas, 1986; Menze, 1980; Pleines, 1988).

In this conception education as edification always implies an 'intellectual and moral sovereignty over the constraints of the world and of practical life' (Schelsky, 1979, p. 478). Or, as Ruhloff notes in relation to Humboldt, it always includes the 'independence of human will and action from natural and social constraints' (Ruhloff, 1997, p. 2). Levinas suggests that education in this sense always entails the claim that has been attributed to philosophy from the very beginning, the claim to make possible the living of a life lived in such a way that one is not simply subjugated to given social, economic, cultural, political or religious imperatives and developments, and not simply a victim of ideology. Philosophy was always concerned, as Levinas says, with the potential to say 'I' and thus critically to judge external imperatives, developments and ideologies; and perhaps in the end it should continue to be conceived thus (Levinas, 1978, p. 502).

This concept of edifying education as subjection to the claims (or demands) of universal truth has its clear critical point in that it enables judgement to be passed on social developments and situations. It is this critical potential of 'rational' or 'scientific' education that needs to be safeguarded in the face of the dangers perceived by radical critiques of rationality: to wit, science and scientific rationality have so extended themselves that the Enlightenment has turned into its opposite (see Adorno and Horkheimer, 1971). Let me say something more on this matter.

It seems that scientific rationality itself has become the problem. The development of the modern sciences has brought a methodological ideal of procedural rationality that undermines the claims of universal world views. Truth has become a purely regulative idea and has lost its absolute character. The claim of a truth that could be grasped intuitively has been replaced by the claims of an intersubjective procedure of testing and justification. The development of modern science has led to endless specialisation, the fragmenting and 'disenchanted' effects of which are all too evident. Especially important in this context, it reveals the fundamental technical-instrumental character of scientific rationality. This instrumental character manifests itself in the development of scientific technology and in the erosion of the difference between science and technique, in the sense that every science works experimentally, testing whether the possibilities offered or opened up for intervention in reality are effective. This paradigm of the natural sciences has now replaced philosophy as the measure of true science. Increase of rationality now means extension of empirical knowledge, extension of the capacity to predict and of instrumental and organisational control over empirical processes.

This development of the sciences has also undermined the presuppositions and basic assumptions of the old concept of education as edification. The introduction to science and scientific rationality as such does not seem to contribute any longer to the edification of the individual and of society, because it no longer has an integrative role. Instead it leads rather to fragmentation and to the instrumentalisation of all values (a development criticised almost at its inception by Schiller, 1960, first published 1801; see also Peukert, 1984). Above all, it no longer provides measures for action and judgement that are generalisable (or that can be universalised). Scientific reflection seems to have become unable to offer the basis for a critical way of life, because it has itself been unmasked or denounced as the expression of limited and particular interests: especially the interest in control over nature, both human and physical. Therefore no introduction to scientific rationality can itself be value-neutral. As Habermas writes: 'The concept of rationality implies in the end a complete organisation of society, in which an independent technology even dictates, in the name of value-neutrality, a value-system—its own values-system—to the domains of praxis that it usurps' (Habermas, 1971, p. 322, my translation).

At the point when, currently, the sciences themselves to a great extent determine developments in society, at the point when they intrude deeply

into our practical lives, touching upon the convictions and expectations that ground our speaking and acting, at the moment it becomes clear that these sciences are founding a prevailing instrumental rationality—at that very moment it seems that edifying education must enable and guarantee a distance vis-à-vis scientific rationality. (This is not to say that this critical distance must spring from pure emotion—although in my view it has something to do with being moved by emotion.) At the beginning of the 1960s Schelsky put this very clearly:

If education (as edification) relates to an intellectual and moral sovereignty over the constraints of the world and of practical life—and all other concepts of education miss the very core of the traditional claim for education and are pragmatic or accommodating adaptations—then today it cannot be gained (or achieved) any more through science. On the contrary: as practical life itself has become scientific, the claim to be educated leads today precisely to the task of distancing oneself from science in the same way as once the education of the humanists and idealists distanced itself from practical life. Education of the person consists today in mentally [*geistig*] transcending science—precisely in its technical-constructive dimension. But it does not work *without* science either . . . only when we pass *through* the sciences can we reach the threshold from which the question of critical education can be formulated again. (Schelsky, 1979, pp. 478–479, emphasis added; my translation)

We see here that the bond between science and education as edification is broken, dissolved. At the same time, however, education risks being reduced to personal self-development and to giving up the claim to general or universal validity and therefore, in the same move, it seems to have to resign from the work of critique.

At this point perhaps Habermas offers us the means to protect the idea of rational education by stating that in the development of our modern societies there is not only an instrumental but also a communicative rationality at work. This communicative rationality integrates the life-world and enables critical judgement, since, according to Habermas, it remains essentially oriented towards the guarantee of general validity or universality (against one-sidedness and particularity)—that is, towards truth. This general validity is guaranteed by a communicative procedure that imposes certain conditions (freedom or the absence of power; the possibility of critique, of argumentation and of supplying foundations) and certain demands upon participants (mainly a hypothetical attitude towards validity claims). Habermas finds this communicative procedure (which can also be characterised as a democratic procedure) in all domains of the rationalised life-world, in the ethical and aesthetic, and of course in the scientific domains. And in this scientific domain he finds it in the communicative forms of scientific argument. From this perspective, initiation into the sciences can keep its edifying and critical function because it involves a subjection to the demands of communicative reason. One learns that the validity of judging and acting is connected indissolubly to intersubjective rules and

one acquires a post-conventional (hypothetical) attitude which is of great importance for negotiation processes in which conflicts are solved without violence. According to Habermas, initiation into the sciences enables the development of the communicative competence that is essential for a society in which, so he argues, communicative rationality not only is the motor of individual and social development but offers the normative basis for critique (which is in turn the basis on which to limit the consequences of the ever-increasing impact of science).

Habermas's conception can be criticised on the grounds that formal communicative procedures imply a very limited and specific rationality and ignore the essential role of traditions. Furthermore Habermas's concept of communicative rationality (with its characteristics of generalisability, the possibility of supplying foundations and a hypothetical attitude as core of the communicative procedure) can be seen as, in some senses, positivistic—at least, that is, if one understands positivism as the canonisation of science and as the refusal to accord the aesthetic and ethical domains their own rationality (Dunne, 1993). Habermas's emphasis on the different validity claims and their treatment in the communicative procedures in the life-world seems to confirm rather than to refute the first premise of positivism: that all true knowledge must be modelled on the modern sciences and meet their criteria (*ibid.*). For example, Habermas underscores the hypothetical attitude towards claims of validity as essential moments and writes of:

a hypothetical approach to phenomena and experiences, which are isolated from the complexity of life-world contexts and analysed under experimentally varied conditions. This is equally true for the states of an objectified nature, for norms and modes of acting, and for the reflective experiences of an 'unbound' subjectivity (set free from the practical constraints of everyday life). (Habermas, 1985, pp. 206–207)

Habermas also connects the development of democratic competence to this hypothetical approach, as I have said before. But the 'edifying' interpretation here is heavily disputed: the hypothetical attitude could lead to relativism and indifference (Korthals, 1990). This 'scientific' attitude threatens to pervade and devalue all life domains and to valorise only the wills of isolated individuals (together with other isolated individuals) as resources of values. That would imply that the values and aims of the tradition in which one lives must be tested by the critical idea of what anyone in rational agreement with any other person wants of his or her life. Against this assumption it is argued that the capacity to judge and act is not developed through critical scientific thinking but by embeddedness in particular traditions and in the convictions in which one is socialised.² An educated person is not so much a person who engages with others rationally in order to determine or decide values or norms, but a person who inscribes herself in a particular tradition and acts and judges out of particular values and norms. Emphasis is put on practical rationality, which enables acting and judging and requires not

only competencies but also virtues. (Communicative rationality as Habermas conceives it, in contrast with instrumental rationality, misses this element of practical rationality.) The unavoidability and fertility of prejudices embedded in particular traditions ('prejudices' in Gadamer's sense), which are not based on any individual *decision*, are underlined. A strategy for the limitation of scientific rationality is based on this.

The educational or edifying task is no longer related to the (critical) handling of knowledge, but to the transfer of values and convictions—that is, to socialisation as appropriation of a specific historical cultural identity. If education wants to be edifying it cannot limit itself to an initiation into the sciences, but should also cultivate those values and introduce those attitudes and activities that can restrict rationality. For example, Brezinka writes, it should include a values-education that prevents 'the exclusive determination of consciousness by the spirit of Enlightenment, of science, of analytical and critical reason' (Brezinka, 1992, p. 58). Here teaching becomes essentially a matter of transfer and education, as edification becomes socialisation, which always includes an affirmative relation to tradition. However, critical judgement of one's actual cultural and historical identity seems thus to become impossible, so that the critical point of the concept of edification is lost.

This becomes even clearer where the humanities (*Geisteswissenschaften*) are accorded the important role of conserving tradition and performing 'a spiritual overcoming' of positivist science. This overcoming seems to consist mainly in limiting and compensating for the loss of meaning (*Sinnverlust*). It 'fills up the holes and faults', as Habermas says (Habermas, 1986, p. 706), or as Benner remarks, referring to Marquard:

The humanities have to compensate for the losses connected to the increasing intrusion of science and modernisation in all domains of human life, and especially for the loss of meaning in the life-world, through a sort of *ersatz* enchantment. According to this view it is the task of the humanities to tell stories that sensitise, respect tradition and counter the dangers of disorientation, to enable identification with new traditions and to make bearable the distancing which is connected to processes of modernisation. (Benner, 1990, pp. 603–604, my translation)

But, as Benner rightly remarks, this is essentially a plea for something besides or something-in-addition-to, for compensation or limitation. The *critical* function of education seems to be lost. It is reduced to socialisation. Education no longer enables the critical judgement of social developments; it provides merely an affirmation of particular traditions in order to compensate for the losses that come with the developments that I have referred to.

So it looks as if the only way to preserve the critical point of the concept of edifying education is to hold on to the claim of truth (in the formal or substantial sense), even if one accepts that this truth can no

longer be found without problems in the dimension of science itself. Let me draw on Schilmöller (1995) to clarify this.

Schilmöller (1995) states—in line with Herbart's formula of the *erziehenden Unterrichts* (educational instruction)—that education can only be edifying if it not only concerns the transfer of knowledge and abilities, but also touches upon the issue of their meaning for life: if it addresses, that is, the question of the meaningful use of this knowledge and of the just application of these abilities. According to Schilmöller, the sciences themselves cannot answer the question of meaning. But what, then, could count as supplying such an answer? On the one hand one might answer in terms of the culturally *given*, in the form, for instance (following Brezinka) of basic values.

However, this is a pure affirmation of the given that starts from the premise that what is should be, and that education should be an initiation into this given. On the other hand, and this for Schilmöller is the only real alternative, there is the principle of self-determination. Education is edifying when the subject 'determines herself through and with her value judgements'. The ultimate criterion of its value is 'the meaning that is (pre)assumed by the individual' (*vom Individuum je unterstellte Sinn*) (*ibid.*, p.48). But, according to Schilmöller, this 'meaning that discovers itself remains under the claim of truth and can unfold in a responsible way only through rational decision on the basis of reasons that can be indicated and proved' (*ibid.*, p.49). Therefore, the discovery of meaning requires a critical-testing (*überprüfende*) and investigative attitude, which, according to Schilmöller, is typical of science as a form of thought. So, in the end, Schilmöller returns to science because for him edification remains bound up with the claim to truth.

In this way Schilmöller makes clear what also characterises Habermas's position, albeit in a different way: namely that in this conception what is true in the sense of testable, or arguable and generalisable, coincides in the end with what can be justified or is meaningful. Meaning and truth are silently merged into each other. Accordingly meaning becomes, as Schilmöller shows, a hypothesis that can be tested (or argued for) critically, and therefore remains bound to the critical-testing attitude of the sciences (or even of philosophy as far as it is characterised by doubt and *skepsis*). However, this testing can only be a testing with regard to some actual given (given opinions, what is accepted or reconstructed rules or procedures, as for example Habermas's communicative procedure), the normative character of which is disguised. This means that the given becomes normative in one way or another (for example, for Habermas communicative rationality is normative because we *are* speaking beings that rely on communication). Thus, we can say with Ciaramelli that what actually happens is subjugated under the brutality of facticity (Ciaramelli, 1995). Edifying education that orientates itself towards the claims of truth as (potential, expected, presupposed, anticipated) general validity or universality (or even 'evidence'), risks being at the mercy of this brutality and in the end

losing the critical point that it wants so much to preserve. If we want to preserve this critical point we must gain a distance from *what is*. In my opinion, this raises ethical issues, where the question arises whether that which is valid (for example, what is right according to a certain procedure, or intersubjectively recognised or accepted as valid) necessarily coincides with what is 'just'. It could be said that what is at stake here is an experience through which it becomes clear that *meaning is no hypothesis*, even if we cannot describe this meaning without ambiguity. It is an experience in which we are reminded that validity is a construction that entails a judgement which is not the application of this construction, but a judgement *upon* the construction. In the light of these reflections I would now like to sketch another concept of education as edification.

A DIFFERENT CONCEPT OF EDIFYING EDUCATION

In this conception the edifying function is not related to the introduction or implementation of a new ethics that would be taught separately in addition to or as a completion of other courses. It is related to a process of thinking in which scientific knowledge is engaged in confrontation with the (ethical) challenges of society. The edifying function is not a separate process from the actual handling of knowledge, neither is it located in the passing on of established bodies of knowledge or in the subjection of education to the claims of truth. The edifying character of education shows itself neither in a separation of moral education and the teaching of facts, nor in an amalgam of both, but in a drawing of the attention towards another relation to knowledge, a relation that must be kept live. Such a different conception of knowledge and its value can arise out of confrontation with the question of its meaning—confrontation, that is, with an ethical demand. In this conception it is not truth claims but ethical claims that edify and open up possibilities of new action and judgement.

What do I mean by ethical claims here? What I want to point to are those aporetic situations in which every *cognitive* coping with the world fails, situations that involve therefore an ethical experience. The experience of such situations cannot be subsumed under given or known schemes (or even any possible future cognitive scheme): in such situations knowledge about rules, laws or norms is not applicable.³ These are situations that address our responsibility because every application of knowledge, schemes or procedures falls short and is in danger of being unjust in the sense of failing to do justice to the situation. The risk of injustice lies in the presumption that such situations are already grasped and understood, and that nothing meaningful could happen *that would not fall under these schemes, rules or procedures*. The avoidance of injustice requires us to recognise our responsibility not only to judge on the basis of our prejudgements, but also to judge these prejudgements in the light of what the situation

demands of us—situations that are in a radical sense ‘open’ or ‘overdetermined’ and therefore essentially disturbing.

In such cases we have to find out what the situation demands of us. Such challenges or demands therefore can be edifying in a real sense, a sense that affects and addresses the subject himself. In this sense, the sovereignty of which Schelsky writes, the capacity to speak as ‘I’, which since the beginning has been recognised by philosophy as its mission, is not bound up with objective knowledge or communicative competence, but to the experience of an unavoidable responsibility, the experience of something that is unique and cannot be replicated. I do not mean here to point to ethical claims in the sense that certain situations appear to us problematic in the light of some given norm or some moral principle (postulated, for example, as a regulative idea), but to situations in which our responsibility to judge manifests itself in an unavoidable way, because judgement according to accepted or given rules appears to be impossible. In such circumstances, we cannot speak of ethics—at least, not of an ethics of rule-governed sets of principles. As Levinas says, ‘*La situation éthique de la responsabilité ne se comprend pas à partir de l’éthique*’ (Levinas, 1974, p. 191). It is precisely in situations that are experienced as predicaments where ‘everything is possible’ or everything is ‘obscure’ (*Unübersichtlich*: Habermas)—where the understanding we derive from our historical experience does not measure up to the mark or simply fails—that the potential for human action and judgement is made clear. Action and judgement as intersubjective activities are never faultless deductions of consequences from premises. The fixing of these premises themselves (for example in the form of rules) is always at stake. The binding force of rules works always and only *through* judgement. This judgement cannot rest on intersubjective rules, because it includes a critical judgement of these rules themselves. As von Förster puts it (1993, p. 153), ‘Only those questions which are undecidable in principle, can be decided by us’ (my translation).

I am pointing to situations, in which, as Ciaramelli says, it is impossible to appeal to traditions or common sense to assess what happens, situations that escape every understanding and cannot be grasped under a general rule. In such situations the only way not to surrender to the brutality of facticity is to engage in the responsibility of judging *at the precise moment that judgement according to accepted rules or criteria seems to be impossible*. This is like the desire or the demand to speak that appears precisely at the moment in which an inexpressible uneasiness manifests itself. This uneasiness ‘speaks’ of being affected by a ‘meaning’ that urges us to speak without, however, the possibility of articulating this meaning. These are situations in which we know ourselves confronted with the question of meaning. This question inscribes uncertainty in knowledge and transcends rationality. It is this question that enables change and hence the edification of the individual and of society.

Ethical claims that cannot be understood as laws or rules and that break through the ‘weight’ of given claims to truth always come from

outside and cannot be treated programatically. According to this (my preferred) conception of education, it could be seen as the task of all persons involved in education to clarify these claims, to attempt to think them through and to explore new possibilities for action in relation to them. In education, seen as the time and space that society gives itself to reflect on itself when confronted with the new generation, one should try to *apprehend* these claims and to *realise* them. And then, on this basis, thinking must be understood in a different way from the conception of edification as grounded in the force of knowledge and truth.

Claims of this kind must be *apprehended*, and this apprehension is not, as Mittelstrass says, the attempt 'to see reality in the light of ideas' (Mittelstrass, 1989, p. 38, my translation), but the attempt to find out what is demanded of us in the situation—what the situation has to say to us. This thinking is only possible in relation to tradition and to the particular moment. Judgement is always situated and always mobilises 'prejudices' (the values and norms of a tradition and the presuppositions of science—and nobody today would endorse the idea of a science without presuppositions). They are unavoidably there, when we perceive the situation. Therefore we can point—with Heidegger and Gadamer—to the fertility of prejudgements and the inevitability of an initiation into a tradition. However, judging a situation properly entails on the other hand also judging the prejudgements themselves. Otherwise tradition would become frozen, and responsibility merely a technical application of a pre-given disposition.

Education mobilises the 'prejudices' of a life-world tradition as well as of the sciences and makes it possible for 'prejudices' to become judgements. The knowledge that is the concern of education is knowledge of the life-world that has become made explicit and salient. In this thematisation of knowledge, which grounds our action, science plays an important role; the sciences are not completely separated from the life-world (Peukert, 1984a). Scientists have accepted that their science is not without 'prejudices', but it is also always embedded in the life-world. On the other hand it is clear that our life-world is increasingly a scientific one and that science continually changes our convictions and expectations. Education offers a reading of reality that is scientifically founded but that nevertheless remains a construction. It is precisely this character of construction that is revealed by ethical claims. Thematized knowledge becomes reflexive when it is confronted with something that lets us think or sets us to think. At such a moment the interpretative or constructive character of science becomes clear: for then it is not at all obvious what we have to do in order to act in a 'just' way; for then we are thrown back on our responsibility. But while such moments of conflict can be neither programmed nor avoided, they can nevertheless be ignored. As I said before, it is precisely the task of education to preserve these moments and not to allow them to be ignored.

The reflection that I have in mind here can find its content only in knowledge that is mobilised and activated. Education must take up the task of translating scientific knowledge back into the life-world and of

mobilising this knowledge and the knowledge of the life-world in confrontation with the new generation in order that it can be judged and therefore changed.⁴ This enables new action and judgement through which the future is opened up because in this way knowledge and expectations can change. Education offers a reading of the life-world in which teachers take up responsibility for the world (Arendt, 1994). The future is opened but not determined because the reading has the character of a dialogue, which can only find its meaning in a response.

These claims must also be *realised*. Responsibility always needs know-how as an indispensable element. Therefore 'realisation' includes on the one hand transfer of knowledge and skills, but on the other hand also innovation and the elaboration of new answers. In our society this is not possible without the sciences. However these sciences have to be conscious of the limitations of a different kind of rationality. Realisation, here, does not mean 'forming or constructing reality according to ideas' (Mittelstrass, 1989, p. 39, my translation); it means *action*. And, as Wimmer makes clear, action is not in the first place the execution of a plan or the aiming at some end or goal. It is not the realisation of an idea, because 'in the moment that it happens action transcends the borders of the symbolic community and puts the validity of conventional opinions out of order. Action changes in the first place the actor herself, because she has to respond' (Wimmer, 1996, p. 253).

In this context I would like to suggest that the edifying meaning of education (edifying for the individual and the society) does not have to do so much with the fact that education prepares pupils for future participation in society, but precisely with the fact that, in education, scientific and life-world knowledge is confronted with social challenges (with, that is, the question of their meaning); such knowledge is brought into a process of personal and shared thinking in which it can become available to be judged and evaluated. Therefore the edifying function of education lies neither in the example it offers vis-à-vis future society, nor in the acquisition of competencies or virtues, but in the actual contribution a society offers the new generation in terms of responding and accounting for itself to them. This response belongs not only to the order of truth but also to the order of justice.

School and education are not outside society. Society does not exist only at the end of education. It does not halt before the gates of the school. (Such is a very common implication of educational theories according to which education essentially prepares for future participation in 'the real world'—even reproduction theories seem very often to hold this view.) The formula 'education and society', like the formula 'humankind and women', does not imply mutual exclusiveness because the one is inseparable from the other. It is wrong to speak here of some interaction, whereby one presupposes two entities that first exist independently and are only subsequently related to each other. I want to formulate matters in this way: that education is the space and time that society gives to itself to reflect on itself (which does not imply that education is the only place and time available for this reflection). As far

as the school is concerned, education happens in a certain place and has a beginning and an end (for example a school year, a school day, a course, a lesson . . .). On the basis of these breaks (or ruptures) school has another time, a time that is not the same as time outside the school, and this implies a relative autonomy. It is precisely this 'other' time that makes it possible for education to escape the whirl of social time and to build in time for reflection.

This reflection of society upon itself in confrontation with new generations is edifying for the individual because the individual only becomes a person through engaging with a tradition and with the given. The tradition and the given are by no means limitations, but conditions of the possibility of becoming a person. And this means also in this case a new beginning of the world and history in response to the situation. On the one hand one inherits a tradition, but on the other this inheritance is not the gift of a property that one then 'has'. To inherit means to affirm (or negate) and to be responsible. We receive something, but what we receive must be deciphered and confirmed. The inheritance does not tell us what to do in the light of the particular situation. This reflection of society upon itself is also edifying for society because it can renew itself in confrontation with a new beginning. This new beginning is always also a demand on society, and in education society responds to this new beginning.

I hope that I have shown how education, as the place and time where society conducts itself *responsively* and *responsibly* towards the new generation, can address the problems that I sketched at the beginning of this article. This is not a simple matter of transfer or implementation or initiation or socialisation into a new ethics, but of knowledge and competencies being placed in question in such a way that they are no longer protected from problematisation. Science and scientific rationality can only be questioned from outside, and education tries to retain this possibility. Edification is something *unnatural* through and through; it is alien to us as natural beings and therefore should be *given* to us. It is this gift that education of a certain sort can confer.⁵

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NOTES

1. I use 'edifying' to refer to the German *bildend* and 'edification' to refer to the German *Bildung*. In this I follow Richard Rorty (Rorty, 1979, p. 360).
2. Dunne argues that this line of argument is also present in Habermas although only in the margins of his work (Dunne, 1993, p. 209).
3. This is not the problem of rule-following or application of general rules or principles—not even in the sense of Aristotle's *phronesis* where one could say that knowing and applying cannot be separated. It may, however, be possible to make some connection, at least, with Kant's idea of 'reflective judgement'.

4. This translation of scientific knowledge back into the life-world is not in the first place seen here as part of teaching or informing pupils and students so that they can later participate in the debate. On the contrary, I consider that such translation contributes to edification because in translation as action scientific knowledge is made 'fluid' and vulnerable to problematisation.
5. This article is a reworked and translated version of my *Der andere Wert des Wissens*, *Zeitschrift für Pädagogik* 45, 1999, 549–566.

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