Traditionally, research has been seen as a process in which particular cases are studied in order to produce generalisations that can later be applied to other situations. This is arguably the case, for instance, of plain statistical generalisation from samples to populations, but also of grounded theory, local theory and democratic theory. Other research approaches, such as case study research and action research, have challenged this conception and have formulated a process in which transfer takes place directly from particular cases to other particular cases, thus bypassing generalisations. Nevertheless, I argue that, even in research on single cases, and regardless of whether it is descriptive, explanatory or normative, any piece of research unavoidably produces, supports, modifies, qualifies or refines generalisations in the course of a research project. These generalisations are constitutive of the very descriptions, explanations and normative justifications used to talk about the particular. Nevertheless, they vary in their degree of explicitness, certainty and complexity, as well as in the substantive dimensions they generalise on. The neglect of this characteristic in the educational literature may stem from the inductive assumption that knowledge in research is produced when one first finds something about one or more cases or situations, and then generalises (or does not generalise) the results to other contexts. But generalisation exists all along the process.

I INTRODUCTION

Among the many current debates on the nature of educational research, one that has attracted important attention for a long time concerns the role of research in the production of knowledge of a general nature: that is, ideas that apply to many cases rather than only to a single case or to a few. The traditional way of obtaining this knowledge of the general comes from the natural sciences: studying what happens in an appropriately chosen sample, and then generalising the conclusions—with a certain statistical confidence—to the population that the sample came from.
Importantly, the procedure should control—as far as possible—the effect of other variables, and thus the suggestion is that use is made of experimental designs in which sampling is randomised, or of designs that resemble experimental ones as closely as possible (quasi-experiments). However, as has been broadly argued in the literature, the complex nature of educational situations—or, generally, of social situations—makes this model inadequate as the paradigm for research. Consequently, other approaches—such as case study research and action research—have opted for studying particular situations in depth, attempting to grasp their holistic richness and complexity. But then, there arises the issue of whether the results or findings of this sort of research can be of any use to other cases, in other contexts and situations, or for policy making on levels that go beyond the local. In this discussion, proponents of case study research and others have argued that knowledge transfer from the research situation to new ones can occur in a direct way, instead of by means of formal propositional generalisations. The transfer would come about when a practitioner finds elements in the situation researched that trigger new ways of understanding her own particular situation. This process would presumably skip generalisations as intermediaries between particular cases, and thus it would be a direct case-to-case transfer.

Nevertheless, I shall argue in this paper that generalisations are always unavoidably present in any reports on any single case, regardless of whether these reports are conformed by descriptions, explanations, or even normative judgements. In some cases, those generalisations are constitutive of the contexts of meaning within which observations are produced. However, in some others, those generalisations are modified, refined, or even created, as part of the observational research process. And in this sense they are end results of research.

Furthermore, I intend to show that both sides of the aforementioned discussion—between those who suggest that research should look at single cases in order to then infer generalisations that can later be applied to other cases, and those who advocate the more direct case-to-case transfer—base their positions on the common assumption that research into a single case only produces in a first instance, knowledge of that particular case. Generalisations, according to this common assumption, can only be inferences made later out of such knowledge of single particular cases. The controversy would only centre on the issues of whether such inferences can be made that are correct as well as relevant, and of whether they are necessary if practice or policy are to be supported in new situations.

II ISSUES ABOUT GENERALISATION IN EDUCATIONAL RESEARCH

General propositions that have a universal character—variously called universal laws, or scientific laws—are generally discarded as a possible product in the social realm; or, at least, it is claimed that whichever such laws can be found would be so trivial as to be of no interest or relevance to
practitioners (Bassey, 2001). Nevertheless, a more moderate possibility for the research activity would be the pursue of statistical laws; general propositions that do not claim universality, but quantify the degree—usually in percentage terms—to which some relation, causal or otherwise, applies. And randomised control trials would be the mechanism by means of which such laws could be obtained. By looking at a rather large number of cases randomly chosen—either from the entire population, or within the various groups or strata that the population can be divided into—one would presumably get a certain quantifiable confidence in the results obtained. Nevertheless, as Paul Smeyers has argued (2008), such a type of research design is not free of problems, one of the most important being that the richness of the situations studied is ignored in favour of precision and an emphasis on commonalities between cases. By using large samples in randomised control trials only a few factors can be taken into account, and most of what is important will inevitably be excluded. But, furthermore, the holistic complexity of the situation will be missed altogether:

It seems that in educational contexts it is not so much factors or elements that have to be studied as such, but the complex relationships between them. Here the presence or absence of something may change the whole picture and, consequently, the conclusions that can be drawn from a particular setting (Smeyers, 2008, p. 79).

Considerations such as these seem to have been at the basis of the emergence of other research proposals, and especially those that attempt to take both a broader—in terms of the number of aspects considered—and deeper look into the complexity of educational situations. The general framework of ethnography and of qualitative inquiry in general seems to take up the task of capturing such complexity; although it does not have to preclude the possibility of using quantitative methods in a complementary way (Goetz and Lecompte, 1984; Elliott and Lukes, 2008). Additionally, action or teacher research is also seen as a reaction to various failures of traditional forms of research, among which is that ‘generalisations derived from much educational research based on large samples may be positively misleading, since findings derived from large scale studies are not necessarily reflected in the much smaller numbers that teachers are concerned with’ (Foreman-Peck and Murray, 2008, p. 145).

One price to pay is, of course, that the effort required for broader and deeper studies of educational situations prevents them from being carried out on large numbers of cases. And then, they attract a criticism about the impossibility of generalisation: How to obtain conclusions about populations when only one or a few cases have been studied?

There has been plenty of discussion on this issue. There are various differences in the positions, as well as some commonalities. Before the possibility of restricting educational research to pure description of the singular cases studied, some authors like Peter Woods (1992) have reacted by arguing that research should go beyond description—even if it is of the
sort that Clifford Geertz called ‘thick description’—and move on to the construction of theory. In this spirit, various authors have suggested ways in which less pretentious versions of theory can be constructed by means of a long-term accumulation of experiences of single cases, but without any attempt at quantification (e.g. Bassey, 2001; see also Lecompte’s idea of local theory, in Schensul et al., 1999; and for a critical discussion, see Hammersley, 1992). Theory construction, here, would be about a progressive refinement of the categories that are involved in the hypotheses that explain and/or predict behaviour or events in educational settings.

For some other authors, however, the irreducibility of singular situations would be a good enough reason to declare that educational theory that attempts to generalise is simply not possible and that it should be completely rejected as a desired end product of research. This way, for instance, Wilfred Carr says that the formulation of theoretical generalisations about education ‘can never be achieved because, far from being ‘universal’ or ‘general’ such theoretical generalisations are always abstractions from the malleable world of practice and thus always shaped by the very features of practice – its particularity and contingency – educational theory claims to transcend’ (Carr, 2006, p.147; see also Thomas, 1997, and 2002). But what, then, would be the point of doing research? Various authors have converged in the idea that a certain generalisation can take place even if research only tackles single cases or a reduced number of cases. But this generalisation would not be of the same kind as that intended by randomised control trials, and various authors have rushed to assign it an adjective so that it is made clear that there is a difference: analytic (Yin, 1984), retrospective (Stenhouse, 1980), or naturalistic (Stake and Trumbull, 1982), among others. Other authors have preferred to drop the term ‘generalisation’, and replace it with another one: for instance, illumination (Pring, 2000), relatability (Bassey, 1981), or transferability (Lincoln and Guba, 1985). The general idea is that a rich description of a single case or of a reduced number of cases, if of a good quality, will help other practitioners see aspects of their own situations reflected and judge for themselves what is applicable in their own practice. In Stake’s words,

To assist the reader in making naturalistic generalisations, case researchers need to provide opportunity for vicarious experience. Our accounts need to be personal, describing the things of our sensory experiences, not failing to attend to the matters that personal curiosity dictates. A narrative account, a story, a chronological presentation, personalistic description, emphasis on time and place provide rich ingredients for vicarious experience (Stake, 1995, p. 87).

Those generalisations, as Stenhouse remarked, would not be a matter of calculation by the researcher, but of judgement by the practitioners who are part of the audience (1978). Interestingly, the responsibility for this process of knowledge transfer is effectively displaced, in these accounts,
from the researcher to her readers. The former is only in charge of producing good quality reports on the single or few cases that she studies.

In both positions, let us notice, it is being assumed that accounts of single cases and generalisations are two distinct and mutually excluding categories of knowledge. That is, it is deemed that a proposition can be either of the singular or of the general, but cannot be both at the same time. And, additionally, research into a particular situation is deemed as directly capable of yielding knowledge of that situation only. Knowledge of the general would only be constructed later, if ever. However, I shall argue in what follows that in research, this kind of knowledge of the general appears at the same time as knowledge of the particular, and that they both are manifested not only simultaneously but also in an intertwined way.

III CONCEPTUAL, EXPLANATORY AND JUSTIFICATORY GENERALISATIONS

I shall be discussing three types of generalisation that can be present in end results of research. These are generalisations in the production of concepts, of explanations and of justifications for the normative.

IIIA Conceptual Generalisations

This kind of generalisation stems from the fact that research, as something that occurs in language, is necessarily expressed by means of concepts. And concepts are about the general. Colin Evers and Echo Wu have already argued about its existence; but, curiously, they have called it empirical generalisation. According to them, it ‘arises from the fact that many of the terms used in the description of particular phenomena or events, are general terms’ (Evers and Wu, 2006, p. 512). Indeed, most of them are. But the important issue here is that whatever concepts are used to talk about some situation, will be part of theories that make general claims about them. Descriptions of critical thinking, autonomy, motivation, engagement, second language learning, understanding, and so on, in particular educational situations, will inevitably be part of theories that specify what those concepts refer to and how they relate to other concepts, in a general way; that is, in a way that is at least relatively independent of the context they are applied in. For instance, if I take critical thinking as being, among other things, about thinking with reasons (see, for instance, Norris and Ennis, 1989), then I am claiming in a general way that it involves reasons regardless of the context or particular situation I may be investigating. It is, inevitably, a generalisation, of a conceptual kind. Now, in this example it is universal; but conceptual generalisations can also have some dependence on the context, and be relative in this sense. However, they cannot be exclusively applicable to a singular case or situation, for otherwise understanding even at a minimum level would be impossible.
A possible objection to this conclusion comes from invoking a distinction between definitional propositions and others that do make some claim about a state of affairs. According to this possible view, conceptual generalisations would not be problematic because they only involve a stipulation of a definition, but do not claim anything about how the world of education is. Let us notice, however, that this corresponds to the old Kantian distinction between analytic and synthetic judgements. However, Quine has already showed why this distinction is inadequate (Quine, 1953). Those propositions that we take as definitional do claim something that can eventually, legitimately, be deemed false if reasons suggest so. We only tend to treat them as if they did not, because we, presently, cannot even imagine any way in which they could be refuted or even tested (see also Putnam, 1965). The distinction between conceptual generalisations—such as ‘critical thinking necessarily involves reasons’—and other generalisations—such as ‘most students taking courses based on assignments in which they need to employ critical thinking develop high levels of motivation”—is therefore not strictly of type, but of degree in our certainty and capacity to envision ways in which they could be false. Accepting that conceptual generalisations do make claims that can eventually be challenged is to believe that our understanding of the very notions or concepts that we use, can be improved or refined and not simply stipulated in different ways.

So far, however, it may seem that I have only rehearsed and perhaps reworded a conclusion that is relatively well accepted in the literature, especially that of the qualitative kind: that there cannot be theory-free observations; that observations are theory-laden. But can these conceptual generalisations be end results of research, or are they only inputs that influence or frame research? The second option—a framing role— is not too controversial. It corresponds to the view of theory as the lens through which the researcher sees social reality. But it is the first option that I am mostly interested in, because it seems to have been largely neglected in the literature: conceptual generalisations that are constructed or refined—or, more generally, developed—as a result of the research process. Arguably, in an extended, reflective, form of empirical research, conceptual development is possible. Furthermore, there are various examples in the literature that suggest that it is so. One of them is reported in a paper by Kal Alston. Here, she presents three classroom experiences, and then attempts to show how they led her to question prevailing conceptions of critical thinking. In her words,

These teaching experiences, for me, provided a basis to criticize what I view as a flat and narrow conception of critical thinking. In these experiences came revelations about the need to recuperate ‘critical thinking’ talk from a skilling perspective, as well as to question my own reliance on dispositions as the lone mode of enlarging critical thinking concepts (Alston, 2001, p. 28).

The point is that Alston is not simply taking the dominant conception of critical thinking to be one possible way of stipulating its meaning. She has
criticised it based on teaching experiences in which she finds reasons to suggest that it is inadequate. And the way in which the expression ‘critical thinking’ is now used in her description of those experiences reflects this new understanding of what critical thinking is about.

The argument does not imply, of course, that conceptual development always takes place in any empirical research project. It may occur to a lesser or a greater extent, or to no extent at all.

IIIB Explanatory Generalisations

Some authors argue that research on single cases should provide explanatory accounts of how events unfold in particular situations. These explanations have to take account of the particular complexity of each situation that makes it unique. For instance, Marilyn Cochran-Smith and Susan Lytle, quoting Karen Zumwalt, have argued that ‘rather than laws about what works generically in classrooms, we need insight into the particulars of how and why something works and for whom it works within the contexts of particular classrooms (Cochran-Smith and Lytle, 1993, p. 15).

Michael Bassey has suggested that the construction of explanatory theory from the study of single cases could develop through a gradual accumulation of studies that progressively refine the conceptual categories involved in theoretical hypotheses, expressed as fuzzy propositions that do not attempt to quantify the relations. A summarised version of his proposed process (Bassey, 2001, pp. 10–12) is the following:

1. Suppose that in a situation $s1$, in $y$ circumstances, it is found that carrying out action $x$ leads to result $z$.
2. Suppose that a couple of replications are carried out in chosen situations $s2$ and $s3$ and it is found that in both, $x$ leads to $y$.
3. The fuzzy proposition is drawn that in other situations like $s1$, in $y$ circumstances, it is possible that $x$ may lead to $z$.
4. Suppose that in a further replication at $s4$ it is found that $x$ does not lead to $y$.
5. The researchers examine in detail not only what happened in $s4$, but go back through $s1$, $s2$ and $s3$ and try to modify the description of $x$ or of $y$, to draw a new fuzzy generalisation either as:
   - In situations like $s1$, in $y$ circumstances, it is possible that $x'$ may lead to $z$.
   - In situations like $s1$, in $y'$ circumstances, it is possible that $x$ may lead to $z$.

There are at least two related difficulties in this formulation. One of them concerns the idea of replication of the action $x$. As Olson (2004) has argued, this proposal rests on the assumption that the concept of treatment—which has been borrowed from the medical sciences—can appropriately be applied in the educational domain. A treatment is fairly
well defined, and there is a good deal of certainty that the relevant aspects that define its implementation can be controlled so as to guarantee that all the applications of the treatment are the same. But what are the boundaries within which an educational treatment is to be defined? What aspects count as being part of the definition? Of course, it is within the rationale for the process that, by going from \( x \) to \( x' \) in step 5, that definition is refined; and thus one might think that there is no need to have it well defined from the start. However there is, as a minimum, the requirement to have some specification of what the action \( x \) consists of, because otherwise it would not be even possible to claim that the same action has been applied in a second situation; that is, that it has been replicated. But then, any specification of any action that can meaningfully be said to have been replicated would be so simplifying of the actual educational processes, that from the start we would be giving up the possibility of grasping the holistic richness of the situation. This is so because when a certain level of detail and richness is reached in the definition of an action, no two actions can ever be determined to have been the same in educational situations. And the same applies to the specification of circumstances \( y \) and of result \( z \): only at the cost of great simplification of the rich complexity of life in the social domain, can it be said that the same circumstances or the same result have been obtained in two different situations.

The second difficulty concerns the implications of formulating the very first element in the process, which involves a causal relation: ‘in a situation \( s_1 \), in \( y \) circumstances, carrying out action \( x \) leads to result \( z' \)’ (see also Hammersley, 2003). Because the discussion on generalisation in Bassey’s proposal focuses on moving from postulating a causal relation in one or a few situations, to doing it in other similar situations, it takes the determination of the original individual causal relation for granted, as something that is independent of the generalisation, and that takes place (or does not) before the latter. However, as I intend to show now, the causal expression ‘leads to’ already carries with it the generalisation that in Bassey’s formulation was only drawn in a subsequent step. In other words, the fuzzy proposition in step 3 (‘in other situations like \( s_1 \), in \( y \) circumstances, it is possible that \( x \) may lead to \( z' \)’) cannot be false if simultaneously the finding in step 1 (‘in a situation \( s_1 \), in \( y \) circumstances, carrying out action \( x \) leads to result \( z' \)’) is true.1 We can see why this is so by considering the possible objections that there could be for the assertion that in a particular situation \( s \), \( x \) led to \( y \). And here we can broaden the limits of \( x \), so that it is not necessarily an action, but can be any event in general. What possible objections could there be for this causal assertion? Suppose that it has been determined that events \( x \) and \( y \) did take place. In a first objection, it could be thought that \( x \), generally—according to our understanding of reality, both social and otherwise—cannot be causally connected to \( y \). This, we may think of as an intrinsic objection. A second one is that \( x \) can be causally connected to \( y \), but the explanation may be insufficient, because \( x \), on its own, does not have the capacity to produce \( y \) under normal circumstances. This might be termed an extrinsic objection. When confronted with this reply, the researcher may have to modify—
enrich, or completely replace with a new one—her description of the event \( x \), thus constructing \( x' \). Let us notice that both the intrinsic and the extrinsic objections have been based on a questioning of the generalisations about the capacity of \( x \) for producing \( y \) in some or all the possible situations. All this means that the claim that in \( s \), \( x \) led to \( y \), unavoidably involves the generalisation that \( x \) has a general power for producing \( y \), even if this power is restricted to a range of situations. More generally, for it to be meaningful, the claim that in \( s \), \( x \) led to \( y \), must be taken as constituted by generalisations that combine in a singular case or situation.

**IIIC Normative Justificatory Generalisations**

Apart from descriptions and explanations, a report on a single case may also involve normative claims, or judgements about what ought to be in that situation. This may be much less common, especially given the various calls for it not to be part of research (see for instance Hammersley, 2003; Munn, 2005; and Suter, 2006); but it is no less important given the applied nature of knowledge in education (Bridges and Watts, 2008). This normative knowledge should not be confused with that about the values and principles for action that people involved in a situation hold, such as what is sometimes obtained in research projects with a hermeneutic or interpretive stance. The latter indeed address a normative dimension; but nevertheless, in them, the researcher does not commit to and take up the burden for the justification of those ought-to-be claims.

For normative judgements, the structure of my argument about the unavoidable existence of generalisations is very similar to the one presented for explanations in the previous section. But this time, instead of the postulation of events as causes, here it is reasons that justify a certain judgment about what ought to be or ought to have been in a situation.

David Bridges and Michael Watts have remarked that there are various different sorts of things that we may refer to when talking about educational policy (Bridges and Watts, 2008, pp. 48–49). From their list, I now draw two that are, perhaps, more appropriate for this discussion, and transform them into direct normative claims. Their basic structure, when referring to a single case or situation, might be something like this:

- In the situation \( s \), actor \( a \) ought to perform action \( x \), because of reason \( r \).
- In the situation \( s \), result \( y \) ought to be pursued, because of reason \( r \).

The argument in the previous section is mirrored here. Without repeating it, let me just mention that when a reason \( r \) is specified for justifying the desirability of either an action \( x \) or a result \( y \), we understand that a quality in \( r \) has a justificatory power in relation to \( x \), or \( y \), *in a general way*; for otherwise we could not understand it as a reason.

If the normative appears explicitly—and not just in the form of underlying assumptions—in a research report on a case, then we can think of at least two ways in which that may happen. One of them corresponds
to what is sometimes actually known as ‘normative research’, whose ‘research questions go beyond description and require that the information generated in response to the descriptive research be compared with some standard or expected observation’ (Mertens, 2005, p. 108). In this case, normative claims appear in the form of those predefined standards (‘this is what ought to be aimed at in this situation’), and of judgements about the proximity of the situation or events studied to those standards (‘this is how far/close the situation is from where it ought to be’). Their justifications are generalisations, which here only play a framing role (see above Section IIIA). The second mode of presence of the normative refers to the creation, discovery, finding, construction, refinement, improvement, or whatever we may want to call it, by the researcher as part of the research process, of what ought to be in the situation. This kind of involvement of the normative is noticeably absent from most of educational research, with important exceptions in proposals like John Elliott’s view of teacher or action research as a moral science (1987 and 2000), and Carr’s conception of educational practice (1987). Importantly, here research is seen as able to produce or refine, rather than just use, normative justificatory generalisations.

IV RELIABILITY OF GENERALISATIONS IN PARTICULAR CASES

In the previous section I have tried to show that any report on a single case inevitably implies generalisations, that may have been there in a framing role, but that may also have been produced as an end result of research. Now, not any generalisation is warranted, and even the acceptable ones should be seen as fuzzy and, of course, fallible. Conceptual generalisations are about the use of concepts or expressions and their relevance across situations of different kinds; but they should not be confused with a claim that whatever describes a situation will describe all. For instance, claiming that in a classroom situation critical thinking was present because of the constant use of and asking for reasons, by the students, to support conclusions, implies a generalisation about critical thinking being at least partly about the use of and the asking for reasons. But of course, this is not a generalisation about the presence of critical thinking in many or all classrooms. A similar conclusion can be drawn for the cases of explanatory and normative justificatory generalisations.

Now, one may ask how it can be possible that general ideas—such as those of concepts, or the postulation of general causal or justificatory powers—can be obtained out of the study of single cases. Martin Hammersley, for example, commented on Bassey’s proposal for fuzzy generalisations (discussed above in Section IIIB): ‘Is the assumption that causal relations can be perceived in situ? . . . The idea that causal relations are observable is not defensible’ (Hammersley, 2001, p. 222). Hammersley is here arguing, as I did previously, that Bassey’s formulation actually assumes the finding of causal relations in single cases. But he is also adopting a Humean position by arguing that that is not correct; that
the idea that causal relations are observable is not defensible’. For reasons of extension, I do not intend in this paper to argue at length against Hammersley’s position, and will only formulate the basis for a possible line for contesting it. What is at stake is the idea that we can just observe single events, and only later relate them in our thinking, but cannot observe the relations themselves. This idea arguably comes from a problematic, representational, view of what it is to make an observation. According to this view, observations of particular local events would be possible because those events would be there, whereas relations would be constructed. If, on the contrary, observation is understood as a causal—and not representational—process without logical or justificatory import in itself—as in the position of philosophers like Wilfrid Sellars (1956), Richard Rorty (1979) and Donald Davidson (1990)—then there is nothing that logically prevents observation from producing ideas of a general or of a relational nature. The deception possibly arises from the practical fact that we have learnt that it is usually—but not always—descriptive observations of singular events that we as observers are in direct contact with, which are most reliable. But from this practical fact, a qualitative distinction between in principle reliable observations of events on the one hand, and in principle unreliable observations of relations, is not warranted. What we can appropriately draw from this discussion, is that the process of observing cannot conform any justification per se, and that this burden necessarily falls on the arguments the researcher can produce to justify those observations—just like any other non-observational claims. In the case of singular descriptive observations, we frequently skip asking the observer to produce such arguments (that could include, among other things, knowing that the light or noise conditions for the observation are appropriate; see Sellars, 1956), because we trust the observer’s ability to properly take them into account.

What this implies for the production of conceptual, explanatory or justificatory generalisations in empirical research is that they should not be accepted at face value, that they cannot take the role of ultimate judges for other beliefs, hypotheses, or theories, and that they still need to be argued and reflected on if we are going to adopt them. But it does not imply that those generalisations cannot, or should not, be produced.

V AUDIENCE AND KNOWLEDGE TRANSFER

As mentioned in Section II, various proponents of case study research have suggested that the researcher’s responsibility is that of providing a rich enough report of the case. With it, the practitioner would have the possibility of a ‘vicarious experience’ out of which she can enrich her understanding of the situations she faces in her teaching practice. The responsibility for the transfer, in this view, now falls entirely on the practitioner. One very strong reason for this position comes from the idea of the complexity and uniqueness of any educational situation: It is the
practitioner who knows best her own situation and therefore what can and what cannot be transferred or generalised.

This assertion, nevertheless, must be qualified. And it is here that perhaps the role of the generalisations that I have referred to in the previous sections can best be appreciated. The starting point is the idea that, literally, there is an infinite number of things that could be reported about a case. But what the researcher actually reports must in a sense be related to what she feels or thinks is most relevant, as well as, of course, to what she has actually been able to appreciate. Now, if we think about what ‘most relevant’ can mean, many different issues may come to our minds. Clearly, the researcher has some particular concerns that have made her turn her attention to some events and aspects of the situation, rather than others. But even within the frame of what may possibly be relevant for some particular concern, there are still infinite possibilities. A further consideration that may be useful is that whenever the researcher postulates some aspect of a situation as relevant, she is contrasting that situation with some other possible ones that she can envision, in which that aspect is not present or appears differently. For instance, if the researcher reports that in a classroom most of the students are girls, she is contrasting the case she is studying with other possible ones in which that is not the case, and hinting that that characteristic might be useful for understanding whatever occurred in that situation. She would surely not be inclined to report that the students are actual people, and not, say, robots. But what about other not-so-extreme possibilities? Would she be willing to report that all the students usually come to class having had dinner the previous night and breakfast on the same day at home? It may depend on the types of situations that occur to her as possible, as well as on the audience she can imagine she will have for her report. If she can imagine that in her audience—including herself—there will be teachers whose students may come to class, regularly, without having had dinner the previous night and breakfast the same day in the morning, and that this fact may be relevant for what happens in the situation, it may be more likely that she will include that aspect or something similar in her descriptions, explanations and justifications when reporting about the situation. Just who the researcher can think her audience are, will determine her mode of address (Ellsworth, 1997). Any aspect that cannot be imagined by the researcher as useful for contrasting different possible situations for her audience, will not enter the explanations of events or justifications for normative judgements either.

But let us notice that this brings back on the researcher part of the responsibility for the generalisations implied or declared in the study of a case, and therefore for the possible knowledge transfers to other situations. To produce a research report that is good enough for such knowledge transfers is not simply to provide an exhaustive account of a situation. Exhaustiveness about a situation just cannot be made sense of in the absolute: it at least depends on concerns and on imagined audiences and situations by the researcher. Now, if it is granted that social and educational situations are complex, then this complexity prevents such
exhaustiveness from being achievable. This is why, unavoidably, the burden has to also be the practitioner’s. But in general, the responsibility for knowledge transfer is best seen as lying midway, on the point of contact, between the researcher’s and the practitioners’ capacities to envision possible classroom situations. Intelligent—and not just exhaustive—writing of a research report is needed as much as an intelligent reading of it.

VI CONCLUDING REMARKS

I have tried to show the extent to which generalisations are already present in research, even that which focuses on single cases. I have also argued that those generalisations should not be seen only as constituting a frame within which research takes place, but that they are its legitimate possible products. And this is so, in similar but not exactly the same way, in descriptive, explanatory and justificatory normative accounts of the situations inquired on.

The difficulty so far may have emerged, in my opinion, from the assumption that one first constructs some knowledge about a situation, and then generalises it—or not—to other contexts and situations. And this assumption, in turn, may be the result of the attempt to have neat rational processes of knowledge construction that fit well into simple and therefore attractive logical processes—such as induction and deduction—that we can try to reproduce, as if in a method. But knowledge construction processes may occur in ways that will continue to escape from our full understanding.

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NOTES

1. I am not using any radical notion of causality, such as that specified by both necessity and sufficiency, but a moderate one (see Smeyers, 2008).
2. Here we are coming back to the elements in Bassey’s formulation of the process. But it should be noted that there is a difference, in that my account does not rely on the establishment of the relation between the same action \( x \) and the same result \( y \) in a variety of situations.

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