

ON DIDACTIC TRANSPOSITION THEORY: SOME INTRODUCTORY NOTES

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1. ON DIDACTIC THEORY

1.1. *From facts to phenomena*

Experience shows that the theory of didactic transposition is an easy prey to misunderstanding. To begin with, therefore, I shall devote some preliminary considerations to the general role of *theory* in didactics. For their greater part, these considerations will not be peculiar to *didactic* theory. But it is unhappily necessary to emphasize that they apply also to didactic theory.

The first question to be disposed of in this respect concerns the nature of the “things” that any scientific field is interested in. It has become a commonplace to say that science concerns itself with *facts*. I shall maintain that this is a very unsatisfactory description of science in general. More than that, I regret to say, it is a seriously misleading portrait of its functioning and an image which wanders far from the deeper logic of scientific activity. That scientific theories start from facts and should, in the last resort, go back to them cannot be denied. There is nothing special about that, and in everyday life we can all claim to do the same. But science has its own way from facts to facts – which makes all the difference.

Facts are the stuff that the journalist's or the policeman's world is essentially made of. This is a perfectly legitimate position to take. Science however views the world differently. It concerns itself with *phenomena*, not facts. When a tile falls from a roof on your head, that is a fact, just a fact, be it a very distressing one. But science is not interested in this particular event. Physics, to take a case in point, studies the phenomena pertaining to the fall of heavy bodies; and medicine studies yet other phenomena relevant to the consequences of the tile's falling on your head...

Let me stress the case of physics. In studying the fall of heavy bodies, it will seek to establish the laws that govern this phenomenon. But, precisely in trying to do so, it will have to go some way from the mere *facts* that initiated the enterprise, because the world of phenomena, as seen by physics, displays many more relationships than our own straightforward familiarity with the world of facts would lead us to recognize. That there exists a profound relationship between the rolling of a small ball on an inclined plane and the free fall of any object whatsoever, may be a surprise to the man in the street. But, in the physicist's view, it is much more than that. To relate these two facts is a sound method, and a *theoretically* justified one, of advancing the *physical* understanding of a wide range of empirical facts.

1.2. *The actor's point of view and the didactician's plight*

The distinction between phenomena and facts is no less central to didactic theory. However, in this case, it raises special difficulties that the natural sciences will not usually meet. There is indeed a major difference between the natural sciences and the sciences of culture to which the didactics of mathematics belongs. In the latter case, the systems we are seeking to

understand and explain on a scientific basis are, so to speak, “anthropological systems”, i.e., systems which intrinsically involve human beings. You may happen to get involved in a physical system, as the case of the falling tile shows. But the first step in trying to establish the science of physical systems has always consisted in expelling from the physical scene any human being whatsoever. In this respect, every one of us will, by definition, have to stand outside the system under scrutiny and will at best be relegated to the status of outside observer. Such is the lot that we must necessarily accept in so far as we seek to achieve scientific objectivity.

Now, when it comes to anthropological systems, scientific objectivity cannot fail to be a moot point. Not only, as is usual in scientific life, can it be called into question by those who, by profession, are in charge of its advancement: their supposedly objective explanations often prove to be at variance. But, much worse than that, the outsider’s views will at times be threatened *from inside*, by precisely those persons intrinsically involved in the structure and functioning of the system in question – by those persons whom, for short, I shall call *actors* of the system. In fact, whenever they have a say in the matter, the actors within the system will be inclined to dispute the outsider’s description of their sayings and doings. And some of them will even challenge his very right to proffer such descriptions, on the grounds that he does not in fact participate in the system.

There is no easy way out. That our allegedly objective descriptions and explanations turn on human matters can certainly not be avoided: whatever may happen, this is the stuff that our days and works are made of. It is worthy of note however that the actors whose logic we try to understand have very uneven reactions. This may suggest an easy way out – but a slippery one. Those among us who “specialize” in pupils for example will usually elude bitter rejoinders from their so-called “subjects”. Pupils will not protest at our tentative descriptions of their conduct, if only because they are uninformed about them – a quite gratifying situation in itself. This situation, allow me to remark, simply reiterates the traditional situation that for centuries the explorer of the human world has been accustomed to – be it with the poor at home, with so-called primitive people in remote countries, or, in the classroom and elsewhere, with that recurrent epitome of foreignness and barbarism in the heart of civilization, the child.

This of course is not really a satisfactory solution. Or, to be more precise, it is a solution that amounts to denying the problem that is posed, by simply confining oneself to the case in which the problem can be easily avoided, that of the pupil. Unfortunately, our willingness to ignore their reactions notwithstanding, such a way of solving it can no longer be maintained in the face of those other actors, the teachers, especially when they are members of the teaching system’s intelligentsia, i.e., members of what I call the *noosphere*. In this latter case, our descriptions will be confronted with the views spontaneously held by those who live within the system and who, at times, will step out of it to think and speak about what is going on in it, not infrequently claiming to speak on behalf of it.

The feeling of legitimacy that actuates such interventions may vary in degree according to the question under discussion. From this point of view, noospherians are never more sensitive than when it comes to the analysis of the organization of teaching and, even more precisely, of the destiny of knowledge within the teaching system. They may refrain from commenting on our interpretations of pupils’ responses, but they will readily react to our endeavour to account for the concrete situations, i.e. the “facts”, which they are confronted with in their everyday experience of the teaching world.

The major problem that the didactician must then come to grips with can be formulated in simple and universal terms. While he will try to give a description of the didactic world in terms of *phenomena*, those actors whom he faces in this ambitious pursuit will almost always rejoin in terms of *facts*. To the alleged *science* of the teaching system, of which didacticians would like so much to avail themselves, the system's actors will firmly oppose the *lore* of the scholastic world to which their intimate familiarity gives them easy and straightforward access. Such is the plight of the didactician.

1.3. Didactic phenomena

In my view there is no escape. Those critical attitudes and denials that we would sometimes like to shun are indeed part and parcel of our object of study. The didactics of mathematics does not only deal with the way Johnny learns, or fails to learn, mathematics. In trying to achieve such an apparently well-defined goal, we are sure to come across facts not obviously akin to it, but which in a deeper study will show their intrinsic relatedness. Experience thus proves, if anything, that the didactics of mathematics must indeed be concerned with every aspect of didactic life. The reason for this, again, can be put in terms of facts vs. phenomena. If it remains true that our inquiries into the world of didactic phenomena start from bare facts, we are nevertheless not free to decide which facts will be relevantly subsumed under one and the same kind of phenomena. We cannot decide that, because as facts they seem far apart, the fall of bodies in vacuum and the fall of bodies along an inclined plane are not accountable in terms of one and the same physical model; or, conversely, because the fall of bodies in vacuum and their fall in fluids have much in common as facts, that both of them are, so to speak, answerable to the same physical theory.

As didacticians we must seek to understand not only the pupil's answer to the question put to him and the teacher's response to the pupil's attitude, but also what the teacher will, on occasion, declare about both the pupil's behaviour and his own conduct in the face of it. We are not free to dismiss the intricacies inherent in the didactic world. Contrary to the physicist, who is content with explaining how and why stones fall, we are left with the burden of explaining how people explain the fall of stones...

The above considerations should give relevance to the question I shall now tackle: what is a didactic phenomenon? In contradistinction to the notion of a fact, a phenomenon cannot be defined on an empirical basis. Phenomena are *theoretical constructs*. To put it simply, I shall say that the realm of phenomena is the theoretical counterpart of the multifarious world of empirical facts. But phenomena refer to those facts precisely that the theory allows us to *define* in its own language and concepts. Whatever its stage of development, no scientific field can thus reasonably claim to account for the whole diversity of empirical facts that, ideally, it should be able to ferret out. But, taking the opposite course, it is worth adding that, except perhaps at the earlier stages of its history, the theory will invoke phenomena which are certain to have no obvious analogue in terms of the actor's experience with facts, and whose description will more often than not sound odd and recondite to his delicate ear.

Theory starts from facts but rapidly soars up to a universe of its own. Didactic theory is no exception. To the uninitiated, its discourse may seem now high flown, now downright plain, according as the facts on which it appears to hinge are matter-of-course and familiar or far removed from the actor's ordinary experience. This, I'm afraid, is still more characteristic of didactic transposition theory. I am therefore inclined to think that my presentation will provide an excellent illustration of these preliminary remarks.

2. THE ORIGINS OF DIDACTIC TRANSPOSITION

2.1. *Introducing the didactic relation*

The concept of the didactic relation is a case in point. It should throw some light on the inescapable discrepancy between the language of facts and the language of phenomena. What we can see and apprehend as a fact when observing any mathematics class is the relation that joins together teacher and pupils, i.e., the teacher-pupil relation. Empirically, and to the hurried observer at least, this relation seems to be a binary one. But it is my view that, in order to make out even the most elementary facts relative to the binary teacher-pupil relation, didactic theory must from the start posit, as a theoretical entity, a *ternary* relation, which I call the *didactic relation*. The didactic relation unites three, not two, “objects”: to wit, the teacher, the taught and, last but not least, *knowledge*; or, to be yet more precise, *the knowledge taught*. This is a minimal definition, one which needs further comment.

The reason why we must introduce knowledge into the didactic relation is that very little of what takes place between teacher and pupils can be understood solely in terms of the teacher and the pupils conceived, so to speak, as context-free persons. Decided efforts have been made to expatiate upon the teacher-pupil relation which have in the end proved vain. One might as well try to explain the relationship between the pianist and his audience, or the waiter and the customer, by ignoring the music or the food! Certainly *some* facts can be explained on such a narrow basis, e.g. in terms of group dynamics. But such an approach can yield nothing more profound concerning the specific structure that we are interested in.

Above all, however, these counterexamples should give us food for thought. The real problem that arises here is not so much to decide whether we shall or not include knowledge in the didactic relation. The main issue that confronts the didactician at this point lies in the fact that most teachers and noospherians apparently avoid the question of knowledge. Why do they tend to elude this question? Or, to put it in more explicit form, why do they spontaneously ignore knowledge and their own personal relation to knowledge, and focus only, not so much even on the pupil’s relation to it, as on their relation to the pupil’s relation to it?

This is already quite an intricate situation, but I warned you. In fact, it is a situation which echoes a major problem of the didactics of mathematics; namely, that of the *processing* of knowledge within the teaching system. Certainly, it is only one facet of that problem. For unbiassed observation shows that knowledge is at once the essential ingredient of didactic life, and the most fragile and concealed of its constituents, to be referred to only allusively and indirectly. Oddly enough, knowledge, in the teaching system, seems to generate ambivalent attitudes on the part of those who are in charge of it – those actors who are really *agents* of the system. There is thus more than a touch of sacredness and awfulness in the reactions it inspires, as if something about it ought to be kept secret. To put it plainly, knowledge is the skeleton in the cupboard. And it is precisely the task of didactic transposition theory to disclose what, if anything, may have gone wrong.

2.2. *The didactic intent*

Our definition of the didactic relation remains thus far unsatisfactory. There are indeed other kinds of social situations of interaction between two persons in which a body of knowledge is

implicated. Whenever you ask a garage mechanic to repair your car, or call in your doctor to take medical advice, you engage in a ternary relation in which knowledge of some kind is involved. (Most human relations are in fact ternary relations, involving some kind of knowledge.) However, neither the garage mechanic nor the doctor will ever think that you have come to him to learn medicine or car mechanics. The way these bodies of knowledge interfere in the situation is defined beforehand. It is, more exactly, *implicitly defined*, and the concrete individuals who come to share the situation are not in a position to lay down the rules of the game. What characterizes the situation is imposed on its protagonists by society, in the form of a *social contract*. To a decisive extent the contract dictates and controls the behaviour of both protagonists. Thanks to the contract, both partners know that the knowledge around which the particular interaction revolves is – in the cases in question – neither to be taught nor learnt. It is knowledge that should be *used*, that should be made use of by the garage mechanic or the doctor in order to repair your car or restore your health.

Let me remark further that even in those cases where knowledge is drawn upon only to be used, not taught, it remains true generally that one of the two persons involved knows more than the other. The sheer coming together of one who knows and one who does not know is therefore not characteristic of the didactic relation. What really distinguishes the didactic relation from all those ternary relations in which some definite body of knowledge is involved, is something yet to be posited. It is *didactic intent*, i.e., the intention to teach. One of the two protagonists must have the intention to teach the other one, and to teach him *something*, e.g. mathematics. Let me stress here that the didactics of mathematics is, in essence, concerned with the *teaching* of mathematics. One may *learn* mathematics without being taught mathematics, or even without being aware of learning mathematics. It does happen, however, that the learning of mathematics is central to the didactics of mathematics, for at least two reasons. Firstly because most of what makes up the teaching process is entailed by the desire (on the part of the “teacher”) to have the student *learn* (which is the essential content of the didactic intent). Secondly, because on closer analysis of the didactic process, it becomes obvious – and this proves essential – that the student learns many things *that have not been explicitly taught to him*. For these reasons, teaching cannot be actually separated from learning. But whether learning takes place or not remains a problem, whereas teaching depends fundamentally on the *existence* of some intention to teach – albeit “bad teaching”. Accordingly, the didactics of mathematics cannot be reduced to a theory of learning, even if it is concerned with *facts* of learning – for which it will have to account in terms of didactic phenomena.

2.3. From knowledge used to knowledge taught

The previous formulations must however be slightly rectified. They leave too much to the individual as a private person. Didactic intent in effect has something transcendent about it. It cannot be reduced to the individual’s intention to teach. It is really a matter of society. *Society* as a whole, i.e. society expressing itself through its *culture*, must first recognize the supposed body of knowledge as *teachable* knowledge. Some bodies of knowledge are, in a given society at a given moment, tacitly regarded as unteachable; or, to put it the other way round, there are always somewhere in society some people striving to secure teachability for some previously untaught bodies of knowledge, with a view to establishing a socially legitimate didactic contract relative to them.

We are now drawing closer to the main issue that didactic transposition theory addresses. It is only because of our early cultural conditioning that we usually take teachability for granted.

Teaching is certainly as old as the oldest civilizations: the Indo-European root words *dek*, *dok*, *dk*, and the Greek variant *dak*, from which words like *doctor* or *didactics* derive (as well as lots of others, like *doctrine*, *discipline*, *disciple*, *docile*, *dogma*, *document*, and so forth), bear witness to the long-established institution of teaching. But teaching has never been an easy and natural business. I shall consider a little further on why so many people simply do not see things in this way. However that may be, the main reason for the hardships and vicissitudes of teaching, the source of its uncertainty and fragility, although most often overlooked, is almost self-evident. Bodies of knowledge are, with a few exceptions, not designed to be taught, but to be *used*. To teach a body of knowledge is thus a highly artificial enterprise. The transition from knowledge regarded as a tool to be put to use, to knowledge as something to be taught and learnt, is precisely what I have termed the *didactic transposition* of knowledge.

3. THE TEACHING VENTURE

3.1. *To know or not to know*

Although long-established, teaching, or the project to have someone *learn* some *knowledge* and *know* it, is therefore a peculiar undertaking. The very first predicament that faces this undertaking is related to its *definition* as a social reality. In defining itself, teaching must draw on culturally accepted concepts. Essentially it defines itself as a process by which people who *do not know* some *knowledge* will be made to *learn* it, and thereby come to *know* it. Such is the *social contract* by which the teaching institution, whatever its concrete institutional forms, binds itself to society.

The promise thus made to society of making people *know* is, however, a bold one. Although my own formulations may do violence to syntax, they refer to a covenant formulated in terms that society can certainly understand. But these terms prove to be a trap of sorts. *To know* or *not to know*, and, in the latter case, to *learn* in order to *know*: the engagement expresses itself in words that sound familiar to ordinary culture, to the culture of, so to speak, *the laity* – the sphere of those standing outside the teaching sphere, as opposed to the “clerics”, i.e. the *agents* of the teaching system. This seeming consonance makes for the strength and taken-for-grantedness of the teaching institution throughout history. But the use thus made of these apparently familiar words is, again, peculiar, and will explain in part the permanent fragility of the teaching enterprise. For a slight but decisive shift in meaning takes place as we go from one sphere into the other. This, as I shall now try to show, is an intrinsic flaw not easily removed.

3.2. *Where the problem lies*

We are accustomed in everyday life to think of most situations in binary terms. This man *knows*, that one *does not*. Thinking in opposites is a simple but efficient way of describing most situations of life that we deal with. Such descriptions however are usually tightly *context-bound*. To know, most often amounts to the capability of performing such and such a task, or of achieving such and such a goal. A word of wide use, with seemingly universal meaning, is thus applied only in particular and circumscribed situations. To say that this man *knows car mechanics* simply boils down to saying that he *can repair your car*. And to say that a young lady *knows French* means only that she *speaks French*, or that she *can speak French*, or – even more pragmatically – that, should you address her in French, she would most

certainly reply in the same idiom. All this is good enough stuff, to be sure. But a step further, and we shall bump into the main difficulty.

You may think on reliable evidence – especially if you are from an English – speaking country that your humble servant *knows* French. This is a reasonable opinion; all the more reasonable, in fact, if you yourself *do not know French* and feel like an outsider in matters of French language. It is however a belief that can be questioned. For I know of very respectable French persons who certainly *speak* French but who, in my opinion, cannot be said to *know* French. This is precisely where the problem lies. Of the unidentified young lady I could have said – knowing that she is not French-born – that she knows (and speaks) *some* French. But such a qualification would not apply to a truly well-educated French person about whom I would however maintain that he or she does not *really* know French. Things seem to be getting serious here. But you should not be alarmed, as you have been duly warned.

3.3. *What the problem is: declaring knowledge*

The process by which some body of knowledge comes to be taught cannot refer only to the effective uses that are made of it in the multifarious social practices that actually draw upon it. Two main reasons impose this restriction. The first reason is that, as an ingredient of effective social practices, no body of knowledge retains its full shape and substance. In most cases and, to speak bluntly, in all cases but one, a given body of knowledge will appear only in fragments. Only parts of it will be clearly identifiable in the miscellany that effective social practices usually display. The first step in establishing some body of knowledge as teachable knowledge therefore consists in making it into a *body* of knowledge, i.e., into an organized and more or less integrated whole.

Many different ways of achieving this goal might have offered themselves. But it happens that, in traditional western cultures, a dominant solution has been applied generally. For many bodies of knowledge taught at school the integrated whole required existed *outside school*. School mathematics, for example, has *essentially* evolved from mathematicians' mathematics. More generally, taught bodies of knowledge have been derived from corresponding *scholarly* bodies of knowledge, as I call them. Scholarly bodies of knowledge, in effect, tend to achieve a comparatively high degree of integration, in so far as they boast a mode of organization that I referred to earlier as *theory* – a mode of organization for which mathematics expressly provided the historically fundamental paradigm as expounded in Euclid's *Elements*.

This historic solution has had far-reaching consequences and has sustained noteworthy developments. In the case where no adequate scholarly body of knowledge exists, the intention to teach has often resulted in, or accompanied, an attempt to create a scholarly or, rather, a *pseudo-scholarly* body of knowledge, from which the intended taught knowledge could be shown to derive. (Accounting and its corresponding body of knowledge, accountancy, are a case in point.) These facts of *counter-transposition* speak well for the stability of the solution thus secured. The question remains however of why such a solution was, and still is, so widely embraced. Again, the explanation lies in the difference between *used knowledge* and *taught knowledge*. As long as you only *use* knowledge in doing something, you need not justify nor even acknowledge the used knowledge in order to endow your activity with social meaning. Its meaningfulness derives from its outcome, judged by pragmatic standards. Knowing something, in this case, is close to, and even inseparable from, knowing *how to do* something. Knowledge and know-how enjoy the status of means to an end, which is the standard by which their *relevance* as tools of the trade will be judged. In

contrast, teaching requires the social acknowledgement and legitimation of the knowledge taught. In going from used knowledge to taught knowledge, relevance gives way to *legitimacy*. Teaching some body of knowledge cannot be justified only on the grounds that the knowledge taught could be useful in such and such social activities. For even in the case of vocational training, a gap opens that cannot be filled between *learning*, or even *learning to use*, and *actually using*. To some extent, the knowledge taught must speak for itself and must appear socially as a means to an end which, in the last instance, is nothing other than *to know that knowledge*. It is not for grammatical reasons only that one is said to teach someone *something*, that one does not simply *teach*, but *teaches something*. Grammar only records and bears out a social situation defined on a ternary basis, that of the didactic relation. No contract can be concluded with society in this regard unless each of the three terms involved – who teaches *what* to whom? – is made clear. No less than the two other terms, knowledge must therefore be *declared* beforehand. *Being declared* is part of teachability.

3.4. *What the problem is: the change in context*

The second reason I shall mention is all the more fundamental as it applies even in the case where a corresponding scholarly body of knowledge exists. Let me note in passing that scholarly knowledge is nothing other than knowledge *used*, both to *produce* new knowledge and to *organize* the knowledge newly produced into a coherent theoretical assemblage. Teaching is thus faced with a permanent problem. The knowledge to be taught, and every “piece” of knowledge that it comprises, exist only in contexts than cannot be faithfully replicated within school. As already remarked, in so far as it is effectively used, any piece of knowledge comes enshrouded in a specific environment, characteristic of the uses made of it, within which it is so to speak entangled in haphazard combinations. These environments are not only generally irrelevant to the teaching project: they will not usually survive the transition from the specific social practice to the teaching institution. Consequently, a proper didactic environment will have to be rebuilt from scratch. It would thus be unreasonable to expect the so-called set theory taught at the primary school level, with its naïve machinery of arrows and Venn diagrams applied to the manipulation of finite sets and cardinals, to reflect faithfully a theory which originated in an effort to do away with age-old paradoxes of the infinite. This, one might object, is a rather far-fetched example, if not the exception that proves the rule. But it is not. Whatever resistance such an idea may provoke, a deep change actually takes place whenever knowledge happens to force its way into the teaching system. The *ecology* of taught knowledge is governed by specific laws, because it is shaped by *conditions* and *constraints* peculiar to the didactic relation – which it is the task of didactic theory to bring to light.

The way in which knowledge lives its life as taught knowledge has unexpected and unlooked-after consequences. The legitimacy of any teaching institution derives in part from its promise to represent faithfully the knowledge that it claims to teach. In this regard, the teaching institution is supposed to act on behalf of society. But society itself is not a thing in one piece. In almost every case, at least some segments of society will happen to hold and proclaim decided views on the knowledge to be taught. Now these views will often be at variance – simply because the way the knowledge in question is *used*, or more generally the way people *relate* to it, differs from one segment to another, i.e., from one social practice to another. In carrying out its mission, the teaching system is therefore compelled to come to terms with divergent views. And it will do so by imposing on society as a whole a common authorized version of the knowledge to be taught.

This, it should be emphasized, is a somewhat unfeasible plan. And, should it be carried out successfully, it would result in a feat of symbolic violence. For the opinions and representations held by the various social groups to which the teaching institution ideally owes fidelity have no reason to be consonant. In simply going about its business, the teaching system will certainly fail to come up to the expectations of society. Far from meeting its *demands*, when it proclaims its allegiance to them, it will simultaneously, inevitably and secretly *betray* them. By establishing a truth of its own and claiming it to be the ultimate truth, the teaching system will indeed render illegitimate any other claim. It is therefore no surprise that society, or rather many different segments within society, react. The teaching system will be accused of being cut off from the rest of society – from the so-called *real world* as noospherians naïvely call it. It will be charged with arrogantly ignoring the *needs* of society, i.e., with failing to replicate in an exact manner the untouchable mores of such and such groups that have secured a say in the matter.

4. DIDACTIC TRANSPOSITION AND THE QUESTION OF TEACHING

4.1. *The tragic side of the story*

Teaching is a dubious battle in which knowledge and society's ambiguous relation to it are at stake. This is exactly what teachers and most noospherians try to conceal. This is first and foremost what they usually conceal *from themselves*. This is the reason why, as soon as they leave the classroom, teachers tend to avoid questioning knowledge. Knowledge must be taken for granted, it should not be called into question and, for that matter, it should not even be mentioned, *because it is highly questionable*. This is also, allow me to note, the reason why didactic transposition theory has sometimes been attacked. This theory discloses precisely that which, for the sake of the cause, must remain hidden: teaching is founded both on a *contract with society* and on a *breach of that contract*. School is an ill-fated utopia in the heart of society.

4.2. *Didactic phenomena revisited*

The opposition between the actor's point of view and the didactician's theoretical constructions does not cease as we enter the classroom. It is in the classroom that we can best discover those conditions and constraints that make up the specific ecosystem in which the teacher has to handle knowledge. The way is open to the analysis of yet more didactic phenomena. The breach of the didactic contract that we have seen to be central to teaching in its relation to society remains the fundamental moving force in the classroom. Teaching someone something entails a contract and, in the same breath, *breaches* of that contract – a view far apart from the usual idyllic representation. Just as the relation to any piece of knowledge differs from group to group outside school, so the student's official relation to that knowledge will change as time or, to be more exact, as didactic time, goes by. The authorized version, as I called it earlier, may change, and in fact does change all the time: it nonetheless remains, at any moment, the ultimate truth, which the student is urged to learn to attain salvation. The very conflict on which teaching rests as a social institution thus extends far into the didactic relation proper. It is the task of didactic theory to throw light on the mechanisms which make teaching and learning both possible and improbable. It should be its central aim to increase our command, both theoretical and practical, of the teaching and learning process, to our societies' best advantage. Didactic transposition theory allows us to take a step forward in that direction.