

What Psychology can do for Education

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Educators too often rely upon misleading models to account for educational phenomena. These models owe their existence, at least in part, to the failure of philosophy and psychology to work together. Key words often signal that a person has adopted one or more of these models: "skill," "process," "problem-solving," or "domain." Each model is either misleading or useless.

Ordinary language, however, does contain a more useful model for educators—the teleological or purposive model. The teleological model, like the others, pervades talk in the field of education, but conflicts with and contradicts the others in subtle and unrecognized ways.

A remarriage of philosophy and psychology is needed. In cooperation with educators, a subsequent program of research—however imperfect in conception—should be built explicitly and deliberately upon one of the logics of explanation found in ordinary language. Research of this kind would follow from careful analysis of such concepts as achievement, polymorphy and, above all, reception. This latter concept could serve as the basis for a new model of pedagogy, the pedagogy of receptions, to replace the ill-conceived now-dominant pedagogy of skills.

Les éducateurs se fient trop souvent à des modèles trompeurs pour expliquer divers phénomènes éducatifs. Ces modèles doivent leur existence, du moins en partie, à l'absence de collaboration entre philosophes et psychologues. C'est souvent la présence de certains mots-clés, tels *compétence*, *processus*, *résolution de problème* ou *domaine*, qui révèle qu'un individu adhère à l'un ou plusieurs de ces modèles. Or, chacun de ceux-ci est soit trompeur, soit inutile.

Le langage courant offre un modèle utile aux éducateurs, à savoir le modèle téléologique ou intentionnel. Le modèle téléologique, comme les autres modèles, se trouve partout dans le monde de l'éducation, mais il entre en conflit avec les autres modèles et les contredit d'une manière subtile et qui passe parfois inaperçue.

Un remariage de la philosophie et de la psychologie s'impose. Il convient de bâtir, en collaboration avec des éducateurs, un programme de recherche qui, même s'il présente des défauts de conception, serait explicitement et délibérément axé sur l'une des logiques explicatives que nous fournit le langage ordinaire. Une telle recherche viserait à analyser soigneusement des concepts comme l'accomplissement, la polymorphie et, surtout, la réception. Ce dernier concept pourrait contribuer à un nouveau modèle pédagogique, la pédagogie de la réception, qui viendrait remplacer la pédagogie des compétences, qui, bien que mal conçue, est actuellement souveraine.

To increase the relevance of empirical research for educators, a remarriage of psychology and philosophy is needed, along with the organization of joint research programs framed under certain mental concepts of ordinary

language. Two features of these concepts—their intimate connection with purposes, and the centrality of the logic of perception to their meaning—demand radically different conceptions of empirical research. The chief focus of such research should be on mental abilities that are or involve receptions.

INTRODUCTION

I want to argue that psychologists and philosophers could, in principle, work well with people in various fields of education, but that as things are now typically conceived, organized, and pursued, they are likely to offer much less than they could if they were working together. What is needed, I believe, is the remarriage of philosophy and psychology, and, in teamwork with educators, the subsequent imperfect conception of a program of research built explicitly and deliberately upon one of the logics of explanation found in ordinary language. It would, to coin an ugly phrase, be *telic-dependent pedagogy*. Roughly, the logic of such a program would be as follows. Psychologists and philosophers would collaborate to tease out the complex interconnections and subtleties of sets of concepts from ordinary language that are used to describe or explain human behaviour. Each group would use the standard methods and research techniques of its own discipline. Together they would then design experiments to uncover what, in fact, are the empirical parameters of actions of people when their actions are analyzed using these concepts. Finally, the conceptual analyses and the empirical studies would be used to offer advice to teachers and others—both to clarify their grasp of crucial “mental” concepts and to enable them to apply the generalizations in their teaching, program design, and other areas of responsibility.

I would not want to restrict this mode of research to philosophers, educators, and psychologists, but I will restrict myself to them in advocating that old saw, interdisciplinary research.

I believe that educators generally have fallen into misleading models in their efforts to account for educational phenomena and that these models owe their existence, at least in part, to the failure of philosophy and psychology to work together. Key words which often signal that a person has adopted one or more of these models are *skill*, *process*, *problem-solving*, and *domain*. There are models implicit in these terms that pervade the educational literature and interact with one another in a variety of complex ways. I believe that each model is either misleading or useless. Ordinary language contains an alternative and more useful model for educators—one aspect of the teleological or purposive model. The teleological model, and the aspect I consider of particular interest, also pervades talk in the field of education (and even talk *about* education), but without recognition of some

of its more subtle features and of the ways in which it conflicts with and contradicts the other models.

The teleological model pervades educational talk because it pervades ordinary language—and most educational talk is carried on *in* ordinary language. The skill, process, problem-solving, and domains models are, in fact quasi-technical offshoots of ordinary language. In each case, however, the basic features or possible scope of the model, or both, are misconstrued. The results are that: (a) the skill model is misapplied; (b) the power of the problem-solving model is wildly exaggerated, and its central features are misunderstood; (c) educators fail to see that the use of the term *process* puts one onto a slippery slope toward confusion; and (d) while the domains model confounds feelings, dispositions, and values and creates imaginary gulfs (for example, between the *cognitive* and *affective* domains, to name only one of its confusions), it also embodies an elaborate but essentially confused system of potential educational objectives.

I am using the term *model* here to refer to the central metaphor in a view someone adopts in talking about something. Three models are now under consideration, each of which embodies a view of what one acquires when one learns. It is, depending on the model, a skill, an ability and inclination to solve problems, or one of three very different things depending on the domain to which it belongs (and the differences are built into the domains system). But, while these three may *be* models, I do not believe that the term *model* is appropriate to deal with the way *process* is used—in spite of the fact that the use of the term *process* is more pervasive than any of the key terms of the other three. The term *process* is virtually always simply redundant in educational talk, as is, not entirely tangentially, *behaviour*. There is no difference between *reading* and *the reading process*, or *creativity* and *the creative process*—apart from an abysmal set of confusions that accompany the addition of the term *process*. Another way to put (and explain) this is to say that thile there may be (albeit inadequate) *reasons* for adopting the skill, problem-solving, or domains views, there is only a possible explanation why people have adopted the use of process so widely. But let us take a look at the reasons why someone might have fallen into using the problem-solving or skills models.

If we could find some one thing that, if properly taught, would enable students to do all, or even many, of the things we believe they should, we would undoubtedly leap to use it. To many educators, some of the ideas of John Dewey suggested such a panacea. The panacea is purported to be the *problem-solving* or, as it is sometimes called, the *inquiry method*. What Charles Pierce had offered as an abstract account of what good scientists must do to be original and Dewey proffered as an account of the mind in action, many people took (and take) to be an educational holy grail. What gives

staunch supporters of the problem-solving method their enthusiasm for the approach is a belief in the wide generalizability of its purported outcomes. This interpretation of Dewey's view has been so widely accepted that it has taken on the air of an unquestionable pedagogical truth. However, the logic of the properties needed to successfully engage in problem-solving has been profoundly misunderstood, possibly by Dewey as well as his acolytes.

The skills model has, I believe, a more complex rationale. It is clear that development of skills involves practice and that practice implies repetition. In addition, much skill research has been about the *transfer of training*—wherein, if A learns to do x , A can, as a result, also do x , or even y . The interest in transfer is the interest in Dewey writ small—limited generalizability of skills. Nonetheless, it offers a powerful attraction—in part, perhaps, just because it does not commit one to the excessive claim of universal applicability. I suspect, however, that an argument from repetition is at least as powerful with those who advocate the pedagogy of skills. Practising implies repetition; it is thus implicitly and invalidly assumed that repetition implies practice. With skills of the mind, this is a disastrously misleading error.

Not only do we routinely talk of mental skills, but we also notice that, just as with physical skills, most people need to engage in repetitive efforts to use the skill to become proficient users of it. It does not require a great leap of inference to lump together mental and physical skills. Just as we acquire physical skills by practice, so, it is assumed, do we also build up our repertoire of mental skills. The pedagogy of practice, it is presupposed, fits both kinds of skill. But the logical and, therefore, the pedagogical qualities of mental skills differ radically from those of physical skills. Problem-solving is not like jumping, although it has a great deal in common with looking and seeing. To believe that problem-solving is like jumping is to commit a category mistake of large and significant proportions. Although we can practise jumping, it is logically absurd to talk of practising problem-solving. And it is no less nonsensical to talk about practising looking and seeing.

In my opinion, these and other category mistakes encourage us educators to adopt inappropriate pedagogical models, to fail to notice what it is that we do right in teaching, and to carry out irrelevant research studies. I believe that at the heart of these confusions is a widespread failure of empirical and conceptual researchers to work together to develop a full appreciation of the complex and subtle teleological model that is central to the view which ordinary language takes of persons, and I want to address this by focusing on one crucial subset of such concepts—perception concepts.

My argument is that perception concepts are central to any adequate account or theory of education. In a sense, many educators and educational theorists have argued this way. But my view is, I think, more radical. I want to argue that the concepts used to express virtually all of the goals of education and the accomplishments that comprise education have the *same* logic

as do the central and basic concepts of perception. And I want to argue further that these concepts offer a different and probably more fruitful way of trying to answer pedagogical problems.

Let me try to indicate what would be involved in doing this by drawing attention to several concepts that are good examples of the sorts of concepts that would be central in any psychological research that one hopes might be of some use in education: person, action, intention, realize, polymorphy, and reception. Although I will make some use of the former three, I will focus on the latter trio.

CONCEPTS OF A PEDAGOGY OF PERSONS

I *want* to argue a hypothesis which says that using concepts such as these is the *only* way to try to describe or explain persons. But I think the most I can do is to try to show why it is a *plausible* way to view people if you are engaged in a research program. What is needed is a psychology and pedagogy of persons. And what that means, as I will shortly explain, is an educational research program into the conditions that are optimal for people to have receptions of a defensible kind. This could lead to a respectable pedagogy of receptions—which is, I believe, the central feature of an adequate pedagogy of persons. Production of each requires the procedures and aptitudes of both psychologists and philosophers—the Sigmund Kochs and the Gilbert Ryles.

Let me first explain what is intended by telic-dependent. Some concepts are clearly and unambiguously teleological concepts. I have just used one—wanting. But many, probably most, of the concepts used to describe and explain the actions of persons are not blatantly teleological. Nonetheless, their fundamental logic depends upon their application to creatures assumed to be, at least on occasion, purposive. These concepts I call telic-dependent.¹

An example of such a concept is the concept “to realize.”² It is not itself used to express goals and the like; but only teleological, and perhaps linguistic, creatures can realize things—because realizing presupposes awareness of goals and presupposes that the person who realizes *x* also has at least one other available description of *x*. When I realize that cashing the cheque will put me in debt with the bank, I must first have some way of characterizing what I did—cashing the cheque—and come to some *further* description of that act—overdrawing my account. And unless I were the kind of creature who could have goals and intentions, I could not have either description of what I did.

Now coming to realize things is a very important goal of education. We commonly teach things in order to get students who have one description

of something to come to have *another* description of that same thing. We may want them, for example, to realize that the multiplication tables they learned in Grade 1 comprise a list of examples of the principle of transitivity or to realize (if we believe Marxist sociologists) that the inclusion of a subject in a school curriculum is a form of legitimation of beliefs. When we “realize the significance of x ,” we must previously have been aware of x under some description. What we realize is something *further* about x .

Notice another feature of realizing: it is an *outcome* or *upshot* term. When I run a race, the outcome may be that I win, lose, draw, or do not finish. When I look for the bird camouflaged against the forest, I either see it or fail to do so. Running the race and looking for the bird are activities in which I engage and which take place *through* time; the outcomes are not some further thing that I do but upshots that happen at a point in time. Realizing is like winning; it is an outcome that happens when I recognize something further about an item. And both recognizing and realizing are even more like seeing the bird than they are like winning the race. All four—winning, seeing, recognizing, and realizing—are upshot terms, but the latter three have in common an additional feature: they all are instances of receptions—outcomes that involve either the successful use of our senses or else the successful use of our mind. Realizations are receptions that follow upon (and presuppose) other, earlier, upshots.

Realizing is something that persons do. What are persons?

ASPECTS OF PERSONS

Although many attempts have been made to give an account of what a person is, I find the one by Dennett (1976) to be the most credible. He says, in effect, that persons not only have goals, desires, and so on, but also have *second-order* goals and desires—desires to change desires, and so on. Thus, animals are not persons; young children are potential persons. Let me give a very brief sketch of the sorts of things persons have, do, or undergo that together indicate why having receptions is such a central part of being a person and some of the linkages between the fact of intentionality of persons, the polymorphy of central mental concepts, and a pedagogy of receptions. Persons have intentions, concepts, and precepts; they have whole sets of stable features (personality and character, for example) that, because stable, make learning both difficult and worth doing; they are social creatures of a special kind. Things go on literally and figuratively “inside” them, and they engage in actions.

In part because we are creatures, we have wants. However, because we also have concepts and precepts, our wants are far more complex than most creatures’. We have desires, intentions, aims, goals, fears, values, and

a host of other explicitly teleological features. In addition, we have such things as desires to amend our desires, fears, and aims. And we have telic-dependent features—features that, though not directly and explicitly teleological, nevertheless exist only because we are basically teleological creatures. No, doubt the major source of our teleological nature is the fact that we possess language. Possession of language enables us to have a vast array of intentions, to have and understand precepts, to make distinctions, and to perceive an indefinitely large array of things. Self-awareness, goals, and our social life enable us to have an extremely complex preceptive structure ranging from rules, principles, and norms to precept-dependent activities like making promises, signing contracts, and imposing penalties. But we can not do any of these unless we first possess a language. Possession of language is the key to personhood. Language enables us to be self-aware; it is our reflexive tool. Without it, no standards, values, norms, or rules can exist, and no second-order wishes. Language is also the framework for our receptions. Although other creatures can see, hear, and use their other senses, without language they cannot see the world we see. The centrality of language to what we perceive can help explain the “non-skill” nature of receptions and help us to understand why we need a pedagogy of receptions.

Although processes go on in (and around) us, persons also *act*, do things on purpose, engage in tasks with the intention of attaining goals, and try to achieve things. A standard summary way of referring to what persons do deliberately is to call them all actions. There are innumerable ways to classify actions. For our purposes, three kinds seem particularly important—physical actions, linguistic actions, and acts of attending to things. Again, the three types are not mutually exclusive. Most human beings have a fairly extensive range of movements under their control, and we have extended our capacity for physical control far beyond what muscles and bones can themselves enable us to accomplish. Using our language encompasses speech, writing, signing, and so on—indeed, any physical movement (or product resulting from movements) we make that enables us to communicate. Perhaps the best way to talk in summary terms about this is to refer to *speech acts* as analyzed by, for example, John Searle (1969). It seems clear to me that speech acts are central features of the lives of persons.

In addition, we have the ability deliberately to pay attention to things around us and, indeed, to things going on inside ourselves. We can thus orient ourselves to have receptions. And much of a pedagogy of receptions will involve getting people to pay such attention—as teachers have always known.

Persons have *personalities* and *character*. The latter term summarizes all those enduring traits (inclinations and capacities) we have in relation to our moral life; the former encompasses all of our persisting propensities and

abilities. Persons possess dozens of kinds of features that persist through extended portions of their lives and give to each person a personality and character. Each of us has, for example, values, attitudes, belief systems, habits, principles, intelligence, and knowledge. These are, as James put it, the “flywheel” of our life.

Fortunately, these enduring features can be altered. We can learn, although often only with great difficulty. For instance, because we have precepts and thereby second-order goals, we can try to amend our traits to be more in accordance with our precepts. We can also attempt to increase our knowledge and improve our ability to respond intelligently to the world in which we live. And, perhaps most central, we can improve our ability to see the world. We do so chiefly by amending our conceptual structures. Of course, any or all of these can happen to us without our (or anyone’s) intending or even wanting them to happen.

We go through and bring about events. We watch the scenery; images of past events flash by. Moods overwhelm us; itches pester us; emotions sweep us; aches, either localized or pervasive, burden us. We walk, shout, turn our heads, and throw balls. Our hearts beat and peristalsis winds along our intestines. We age. All of these are events taking place through time, some of them in us; some caused by us. Some are processes; others are actions. Processes happen *to* us; we *do* actions.

As intentional creatures, we are centrally interested in bringing about certain outcomes or upshots. Sometimes these involve literally getting somewhere. We want to reach the top or, on other occasions, to reach the bottom. But often our goals involve changing ourselves or others—getting them or becoming ourselves able to see the point of an argument, recognize racism, or realize why unjust societies endure. These latter upshots are all dependent on possession of concepts. Upshots can also be subdivided in many ways. Let me mention here three kinds of upshot, again not mutually exclusive: achievements, receptions, and realizations—all of them at the heart of education. Achievements are upshots that presuppose difficulty and thus commonly require skills to complete and involve us in efforts—or, as we sometimes say, tasks. As has been pointed out in many places, the concept of teaching has task-achievement ambiguity: sometimes it is used to pick out the task of trying to get someone to learn; at other times it refers to the successes we have had in getting people to learn. Receptions are, as I have indicated, upshots of sensate creatures and, in the case of humans, of cognitive creatures. And coming to realize is coming to have a reception under particular circumstances—namely, that we come to see some thing under a new light. It is entirely natural that education is so embroiled with efforts toward amendments in our personalities or character that, when attained, are properly regarded as achievements.

The upshot concepts of natural languages focus on goals that are of interest and/or of great importance to persons. Even such apparently simple notions as baking embody human purposes. Whether it is dough or clay, what counts as baked is what serves our purposes. The processes of baking sometimes do go beyond (or fall short) of what we want, and the result is unwanted upshots—cast-iron bread or frayed china. The realization, reception, and achievement terms serve to embody and express our purposes and goals. If our nutritive and sensitive bases were radically different, we would have radically different upshot concepts. But, as long as we deal with purposive creatures, we will have upshot terms to characterize success or failure in terms of the purposes they seek.

POLYMORPHY AND INTENTIONS

We can now see why so many of the concepts we use to describe and explain human behaviour are *polymorphous*. Polymorphous concepts are to be contrasted with what might be called *generic* or *descriptive* concepts. If I say that Jones is scratching her head, I say something very different from saying that Jones is thinking—at least if by thinking I mean the problem-solving sense of thinking (it has several other senses). The expression “scratching her head” describes a fairly specific series of movements that Jones is carrying out; thinking has no direct relationship whatever to the physical movements of Jones or anyone else. It tells, instead, about the *context* in which Jones is doing whatever Jones is doing in that context; it tells us something crucial about Jones’ intentions. It tells us that Jones has (or believes she has) a problem and is doing something to try to solve it—just what she is doing we do not know, at least from the concept of thinking. It is upshot-oriented. She might be scratching her head, writing notes, talking to Smith, reading books, or whatever. The standard notions of operational definition or behavioural analysis in the case of such concepts can hardly make sense. We need a new kind of research enterprise if we are to address questions raised by the intentional and polymorphous logic of a vast array of crucial concepts. If, for example, we want people to become better able to think, we logically cannot use modes of empirical research which presuppose that thinking is some set of movements or processes which when described constitute an operational definition of the concept of thinking—because the concept of thinking does not refer at all to any specifiable set of movements or actions. Thinking *cannot* be either a process or a skill because the concept picks out not a movement (or even an action) but a context and (at least implicitly) intentions.

But, to return to the proposed explanation of the very existence of such concepts, we can, it seems to me, give it in two ways. First, the number and

kind of physical actions we can undertake comprise a relatively limited list. We can, for example, move various parts of our body and move the whole body itself. We must make this limited number of movements serve an indefinitely large number of functions. If we want to attract attention, vote, exhibit glee, or hang up the washing, we can do so (at least in part) by raising one or both of our arms. If our language had only literal descriptions of movements, we would be hard pressed to explain or even state the difference between voting and attracting attention. Thus our language has not only devices to describe movements but also a host of concepts to set out the vast array of intentions and telic-dependent actions in which we engage.

To put this another way, polymorphous concepts are the other side of the coin of teleology. That we have goals, desires, and precepts and engage in a great variety of rule-governed activities is embodied in our polymorphous terms. They enable us to express the fact that persons are social, linguistic, and rule- and purpose-saturated creatures. And what is needed to make empirical research relevant for educational purposes is programs to address the questions and concerns we have which are expressed in that sort of language.

RECEPTION CONCEPTS

Paradigmatic instances of skills include mixtures of movements and receptions or, as we sometimes say, the "coordination of hand and eye." Of course, the *eye* itself is not always involved, but some receptor is. This coordination of movements and receptions is definitive of the category of skills. Soccer players require skill to deflect the ball at exactly the right angle to pass or score; their eyes and legs must be especially well coordinated. But consider sprinters, milers, or marathoners. They do not possess the *skill* (or skills) of running the dash, mile, or marathon. As with soccer players, their legs and leg movements are crucial, but no special movement-reception coordination is required. Successful runners need certain kinds of muscles (x for sprinters; and y for marathoners) and arduous and appropriate training. They also may need some strategic knowledge—whether, for example, it is better, given one's capacities and opponents, to sprint to the lead in the race or hang back for a final push. But we rightly do not talk about skilled or skilful runners. Skills are the successful intertwining of receptions and movements. Although they are central *in* skills, receptions themselves are not, therefore, skills of any kind.

Although there well may be features in the logic of the concept of seeing that are somewhat different from the logical structures of other sense modalities, I shall use seeing as paradigmatic of receptions. As Soltis (1966) shows, there are several levels of seeing. Let me briefly note two quite different kinds of seeing: *literal seeing* and what, for want of a better term, I shall

call *cognitive seeing*, such as seeing an injustice. Suppose what we literally see is a hummingbird (not an easy thing to do). In order to see it cognitively, we must at least: (a) have our eyes operating in sufficient light and so on; (b) discriminate it from or against its background; (c) see its shape, colour, texture, and other salient characteristics (and perhaps acquire a *perception recipe* that will enable us to recognize it later, at least as “that thing we’ve seen before”; and (d) see it under some label(s) or description(s). (We might see it as a bird, a large bee, a flying thing, an iridescent bird, a hummer, or a member of the family Trochilidae—depending on the type and sophistication of our conceptual apparatus.) This is “seeing *x* as *y*.” Our linguistic-conceptual structure here determines what we *can* see. A host of factors, particularly linked up with our new mind “set,” determine what we *do* see.

Mind sets exist, of course, for cognitive seeing. Racists fail to see racial injustice because the categories with which they view people divide and separate people into real people and subhumans—named pejoratively as, for example, wogs, breeds, hunkies, honkies, gooks, chinks, or whities, to cite only a few. And when we *realize* something, we become able to see *x* as *z*, having already been able to see it as *y*.

Notice that when we say “see *x*” we make a claim to have something right. We claim there really is an *x*. *See* is like *know* in this respect. If we claim to “know *x*,” we claim to be correct. We thus make a much stronger commitment than we do if, for example, we say that we “believe *x*.” We may, of course, be wrong, but our *claims* to see are claims of veracity. The same holds for the cognitive uses of see. When we claim to see an injustice, we aver that there is injustice to be seen. And, of course, there are ways of noting our failures to see: “didn’t notice,” “completely missed,” “was unaware of,” “am ignorant of,” “don’t know,” “didn’t think of,” “overlooked,” and so on. When we *see* racial injustice, we see circumstances (actions, social arrangements, precepts, and so on) having negative impact on persons for no good reason or, indeed, for very bad reasons—such as some discernible feature of colour, language, dress, or the like. To perceive injustice, we must have at least the following: (a) some fairly well-developed understanding of the principle of equality; (b) some notion of what persons are; and (c) some ability to see causal connections and what is likely to happen to persons under various arrangements. Such arrangements might include cases where a person or group of persons is harmed or potentially harmed while others in the same circumstances are not being harmed (or where benefits are inequitably distributed) or the absence of any ethically generalizable and relevant reason for the difference in treatment.

What is important for anyone interested in *educational* research is that none of these conditions calls for the exercise of a skill. The latter two conditions are features of the situation—an unjustifiable event or arrangement.

The others are possession of either concepts (equality, persons, harm, and causality) or empirical knowledge (of harm and causality). They are acquired neither by practice nor by problem-solving but rather by the presentation of instances and counter-instances, by the presentation of information about harm and causality, and probably by personal experience. And this, I think, is the central and crucial point about receptions. They are upshots of capacities acquired by acquiring perception recipes, concepts, or both.

Each of us has a vast array of perception recipes and concepts. Consider how, even in a crowd, the slightest glimpse of people with whom we are familiar enables us to spot them. And, once we learn to read, we can hardly help seeing the words flashed at us over and over by advertisers and others. Acquisition of new perception recipes or concepts alters, sometimes quite drastically, what we see. When we learn that a drooping top on a coniferous tree is a sign of hemlock, we no longer see merely an evergreen, but now see a hemlock. When we are shown how the way we talk can implicitly denigrate certain classes of people, we cannot help but see such talk in a radically different way from then on.

RECEPTIONS, POLYMORPHY, AND RESEARCH

I am advocating a program of interdisciplinary research. I cannot offer a knock-down argument in its favour. But I think it is the only game we have. Clearly no one discipline can adequately address the complex questions of education. In addition, so it seems to me, educators are becoming much more sophisticated about their expectations from research of whatever kind. I think it would be absolutely fascinating for people with diverse research backgrounds and practical expectations to jostle their ideas against each other. How would one try to establish the conditions to enable people to have appropriate receptions? How could one find a defensible way operationally to define polymorphous concepts? How are one's receptions affected by social class? All of these, and an indefinitely large number of analogous questions, arise because there are persons and minds.

NOTES

¹ For more on the centrality of teleology in ordinary language see Kovesi (1967) and Daniels (1975).

² This account comes from White (1964, pp. 44–51).

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Zu oft verlassen sich Pädagogen auf irreführende Modelle, um erziehungswissenschaftliche Phänomene zu rechtfertigen. Diese Modelle führen ihre Existenz, zumindest zum Teil, auf das Versagen einer Kombination zwischen der Philosophie und der Psychologie zurück. Schlüsselwörter, wie "Fertigkeit," "Prozeß," "Problemlösung" oder "Fach- und Interessengebiet" signalisieren häufig, daß eine Person eines oder mehrere dieser Modelle übernommen hat. Jedes dieser Modelle ist entweder irreführend oder unbrauchbar.

Die normale Sprache jedoch beinhaltet ein für Pädagogen nützlicheres Modell: das teleologische oder zielbezogene Modell. Das teleologische Modell, wie auch die anderen, beherrscht die Diskussion im Bereich der Pädagogik, kollidiert mit und widerspricht jedoch den anderen auf subtile und kaum erkennbare Weise.

Eine Neuverbindung der Philosophie und der Psychologie ist vonnöten. In Zusammenarbeit mit Pädagogen sollte ein nachträgliches Forschungsprogramm (wenn auch von der Konzeption her unvollständig) ausdrücklich und bewußt auf einem der Grundprinzipien logischer Erklärung, wie man sie in der normalen Sprache findet, aufgebaut werden. Eine Forschungsarbeit dieser Art könnte sich aus sorgfältiger Analyse solcher Konzepte wie Leistung, Polymorphie, und vor allem Rezeption ergeben. Das letzte Konzept könnte als Basis für ein neues Modell der Pädagogik der Fertigkeiten zu ersetzen.

Los pedagogos muy a menudo se basan en modelos falsos para dar cuenta de fenómenos educacionales. Estos modelos deben su existencia, al menos parcialmente, a la imposibilidad de colaboración entre la filosofía y la psicología. Palabras claves a menudo señalan que una persona ha adoptado alguno de estos modelos: "Habilidad," "proceso," "solución de problemas," o "campo de acción." Cada modelo es falso o inútil.

Sin embargo, la lengua común no posee un modelo más útil para los pedagogos—el modelo teleológico o utilizable. El modelo teleológico, como los otros, penetra el discurso en el campo educativo, pero choca y contradice a otros de una forma sutil e imperceptible.

Lo que se necesita es una alianza entre la filosofía y la psicología. En cooperación con pedagogos, debería desarrollarse explícita y deliberadamente un programa de investigación—aunque su concepción sea imperfecta—en relación a una lógica de explicación fundada en la lengua común. Este tipo de investigación se desarrollaría a partir de un cuidadoso análisis de conceptos tales como realización, polimorfía y, en particular, recepción. Este último concepto podría servir como la base para un nuevo modelo pedagógico: la pedagogía de la recepción, que reemplace el defectuoso modelo predominante de la pedagogía de la habilidad.