Dilemmas of Knowing: Ethical and Epistemological Dimensions of Teachers' Work and Development

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In this article Nona Lyons explores the nature and meaning of the dilemmas teachers encounter in their classrooms as they, along with their students, respond to and interpret the tasks of learning. Through analyses of teacher narratives, Lyons reveals how the teachers' perspectives toward knowledge and their view of themselves and of their students as knowers enter into their work and can at times be part of their development. In taking up these epistemological issues, Lyons illuminates features of the student-teacher relationship and offers an alternative perspective to current discussions about teachers' knowledge.

When the philosopher Martha Nussbaum (1986) was exploring the implications of the single-focused value schemes of Antigone and Creon, Sophocles' protagonists, she turned to examine the style of *Antigone*'s choral lyrics. Believing that the enigmatic style of the lyrics revealed the play's complexity, Nussbaum wanted to look at them in light of the play's larger themes. Nussbaum concludes that the lyrics not only point to an issue of interpretation, but also signal the play's assumptions about human learning and reflection. For, she asserts, the style in which matters of human choice are discussed—like the ethical choices in *Antigone*—is not likely to be neutral: it expresses a view of human understanding. Nussbaum identifies what is at work in the lyrics of *Antigone*:

> The lyrics both show us and engender in us a process of reflection and (self) discovery that works through a persistent attention to and (re)-interpretation of concrete words, images and incidents. We reflect on an incident not by subsuming it under a general rule, not by assimilating its features to the terms of an elegant scientific procedure, but by burrowing down into the depths of the particular, finding images and connections that will permit us to see it more truly, describe it more richly. . . . (1986, p. 69)

In comparing this Sóphoclean view of human learning with a Platonic view, one she finds more single-minded, Nussbaum likens the former to Heraclitus's image

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of a spider, sitting in the middle of its web, able to feel and respond to any tug in any part of the complicated structure:

> It advances its understanding of life and of itself not by a Platonic movement from the particular to the universal, from the perceived world to a simpler, clearer world, but by hovering in thought and imagination around the enigmatic complexities of the seen particular (as we, if we are good readers of this style, hover around the details of the text), seated in the middle of its web of connections, responsive to the pull of each separate thread. . . .
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> The image of learning expressed in this style, like the picture of reading required by it, stresses responsiveness and an attention to complexity; it discourages the search for the simple and, above all, for the reductive. It suggests that the world of practical choice, like the text, is articulated but never exhausted by reading; that reading must reflect and not obscure this fact, showing that the particular (or the text) remains there unexhausted, the final arbiter of the correctness of our vision; that correct choice (or good interpretation) is, first and foremost, a matter of keenness and flexibility of perception, rather than of conformity to a set of simplifying principles. (Nussbaum, 1986, p. 69)

Nussbaum presents a powerful and compelling image of human learning. It serves as an unexpected yet needed metaphor for revealing aspects of the complex nature of teachers' work. It is useful too in considering ways to interpret teachers' practical choices, especially the ethical conflicts they see and try to resolve in their professional lives. For as teachers hover in thought and imagination around the needs of their students, a body of subject matter knowledge, and the ways they endeavor to have their students encounter it, they hone a craft responsive to all elements on their horizon. They find in these activities what they call ethical dilemmas. This web of teachers' work can be observed through an examination of teachers' professional experiences and practical choices; like a text, they invite attention to their details, a starting place for understanding and interpretation.

This perception of teachers's dilemmas first emerged from a study of forty-six teachers, including twenty-nine secondary school teachers, who were asked in open-ended interviews to talk about the conflicts of their professional lives—to say how they dealt with them and if they found in them moral or ethical concerns (Lyons, Cutler, & Miller, 1986). The situations reported by teachers revealed several interconnected dimensions.

An experienced history teacher presented one succinct example:

> When I first started as a teacher, I was quite a showman [*sic*]. I was a performer. I could hold ten balls in the air at once. The kids loved it. The parents loved it. I was considered a great teacher. The kids would look up at me and say, "God, I love this course." But they weren't doing history, they were watching the show. It was only after I had been teaching six or seven years that I began to realize that I wanted to [change]. If memory serves me it was a student . . . he shared that ball metaphor with me and he said to me, "You know, you're really wonderful and it's exciting but you have to show people how to do it. When are you going to teach us how to do it?" And that really forced me, it led me to try to do that. [But] I had to make a decision. I could say, "Go away, you bother me. Everybody likes me as I am." The kids had already dedicated the yearbook to me, teaching the old way. I had gotten all this publicity, fame, whatever, from doing it as a showman. . . . I had to make a decision.

But the history teacher acknowledged something more: that responding to his student created what he termed a "moral dilemma," specifically in determining if he should respond. In that acknowledgment he at once illuminated a set of issues embedded in teachers' work and development: the intricate interactions between a teacher's knowledge and values, assumptions about knowing, a craft, and relationships. As the teacher acts to respond to his dilemma, to help his students become historians, he implies other changes as well: changes in his own relationship with his students, in his approach to his discipline and, of necessity, in his teaching practices. Seeing that having students participate in class discussions made them foils to the achievement of his lesson, the teacher sets in motion different approaches to learning, changing his assumptions about his students as knowers and learners. In this reorganization, he comes to a new way to conceive of himself as a teacher. As he says, he did not have to respond, nor did he have to change. Yet he describes himself today as a "person who tries to teach kids how they can do what I can do." As the teacher changes, his students as "historians" will ply a different set of tasks as knowers, shifting to a new way of learning. This situation suggests that practical choices, with ethical uncertainties, which can be part of teachers' everyday interactions, may, in turn, involve their growth and development as practitioners. Here ethical and epistemological issues—issues of knowers and ways of knowing—merge in the web of teachers' work.

Although researchers, educators, and scholars have argued that knowledge and values are important dimensions of teaching, implicit in a teacher's sense of mission and critical to a conception of practice, there is a remarkable absence of good descriptions of how they are involved in teachers' lives or in their growth and learning (Britzman, 1988; Carnegie Task Force on Teaching as a Profession, 1986; Fenstermacher, 1986; Greene, 1978, 1986; Jackson, 1968; 1986; Lightfoot, 1983; McDonald, 1988; Noddings, 1986; Sarason, 1971; Schwab, 1964; Sizer, 1984). Following his discovery of the curious omission of content knowledge from most studies of teacher evaluation and assessment, Shulman (1986; 1987) argued convincingly for new research to describe teachers' knowledge. The knowledge bases and dimensions of teaching are only now being scrutinized and identified. Teachers' thinking was not even a topic in the 1973 state-of-the-art *Second Handbook of Research on Teaching*; it appeared for the first time in 1986 in the third *Handbook* (Clark & Peterson, 1986; see also Calderhead, 1987; Clandinin & Connelly, 1987; Eisner, 1985; Halkes & Olson, 1984; Shavelson & Stern, 1981). Similarly, in spite of continued recognition of the significance of the value and ethical aspects of teaching, and even of their complexity, they have not often been investigated empirically from the teacher's point of view (Berlak & Berlak, 1981; Fenstermacher, 1986; Jackson, 1968, 1986; Lampert, 1985; Lortie, 1975; Sarason, 1971; Strike & Soltis, 1985; Tom, 1984; Waller, 1932/1961). Indeed, McDonald's (1988) recent examination of the new rhetoric of teacher voice argues that it is above all characterized not only by knowledge but also by a tacit sense of mission, one that creates conflict for teachers. Yet exactly how dilemmas occur and reflect teachers' knowledge is not very well documented.

In this article I take up these issues to examine and describe how knowledge and ethical values are implicated in teachers' professional lives and to suggest how they may be part of the dynamics of teachers' professional development. In the first

part, I use examples of ethical dilemmas teachers report to illustrate the diverse ways they may arise in teachers' experience. These examples indicate how values and ideas, teachers' subject knowledge, their craft, their relationships with students, and their conceptions of themselves and of their students as knowers may all be a part of these conflicts. Three case studies of teachers are presented in some detail and aspects of others discussed. A set of ideas emerging from these data are then examined and explored, especially the interaction between a teacher's perspective on knowledge and knowing and students' ways of knowing. This phenomenon, the relationship between students and teachers as knowers, is provisionally characterized as *nested knowing*; that is, students and teachers are considered to have nested, interacting epistemological perspectives. Finally, more speculatively, I outline some elements of the dynamics of teachers' professional change and development. I end with a discussion of the implications of this work for research, theory, and practice.

But to take up this agenda, it seems important to state that this project turned to research traditions not usually employed in the study of teachers and teaching: it joins research from the field of moral psychology with studies of people's natural epistemologies—their ways of knowing—and brings these to the current discussion of teachers' knowledge and the knowledge bases of teaching. Three bodies of research provide a context for this discussion.

Linking Research on Teaching and Teachers' Knowledge with Research on Ethics and Epistemology

Research in moral psychology first connected peoples' ideas of self and relationships with ways they see and deal with practical, ethical conflict (Gilligan, 1977, 1982; Lyons, 1982, 1983. See also Gilligan, Ward, & Taylor 1988). This research, with its open-ended interview design, seeks to capture an individual's own narrative and construction of experience; it provided the starting place and the method for the work reported here. In research interviews with a primary goal of exploring aspects of teachers' experiences revealed through conflict, teachers were asked about dilemmas they faced in their professional lives and whether these had moral or ethical components, about descriptions of themselves as teachers, and about whether and how they have changed over time (Lyons, Cutler, & Miller, 1986). But an examination of teachers' situations of conflict—like the history teacher's described earlier—raised new questions, bringing into focus how teachers' views of knowledge and knowing might be part of their ethical choices and present in their changing practices.

Currently researchers are looking explicitly at teachers' knowledge (Calderhead, 1987; Connelly & Clandinin, 1985; Eisner, 1985; Elbaz, 1983; Feiman-Nemser, 1983; Grossman & Richert, 1988; Noddings, 1985; Shulman, 1986a,b, 1987; Stodolsky, 1988). Some, following Shulman's lead, are beginning to illuminate the depth of teacher content knowledge in the disciplines of history, English, math, and science (Gudmundsdottir, 1988; Smith & Neale, 1989; Wilson, Ball, Grossman, & Roth, 1989; Wilson & Wineburg, 1988), to characterize teachers' pedagogical content knowledge (Smith & Neale, 1989; Wilson, Shulman, & Rickert, 1987) and their knowledge in action, what Shulman calls "strategic" knowledge

(Shulman, 1986b; see also Schön, 1983). Others seek to understand personal knowledge (Clandinin & Connelly, 1987) or to identify knowledge structures (Roehler, Duffy, Hermann, Conley, & Johnson, 1988). But the work reported here, while focusing on teachers' knowledge, needed a different perspective; it raised questions about the teachers' own stance toward knowledge, both within a discipline and toward the student as a knower. The emergence of these epistemological aspects of teachers' practical conflicts in the teacher interviews shifted attention to yet a third line of research, research in epistemology.

The work of Belenky, Clinchy, Goldberger, and Tarule (1986), like that of Perry (1970), explores people's ways of knowing and directly connects them to questions of value—to people's ethical ideas of good and bad, right and wrong. In addition, these researchers identify and describe different epistemological perspectives, suggesting that people can, over time, hold very different views of truth, authority, and knowledge as knowers, moving, for example, from the notion of one truth or one "right" way to the notion of the relativism of all knowledge, that is, that all knowledge is a human construction. It is this work—coupled with recent feminist views of different theories of knowledge (Bartlett, 1990)—which, I believe, provides a useful conceptual framework for interpreting the experiences of the teachers revealed in the interviews. This framework is outlined in detail below.

Here, in what follows, it is my purpose to present through interview data aspects of the ethical and epistemological dimensions of teachers' work and some of the detail of practitioners' reflective conversations with situations that may lead to change. This hovering in thought and imagination around teachers' thinking can, I believe, help to explain why a history teacher finds in a response to a student an ethical dilemma, one that simultaneously made him reflective about his practice and determined to change (Geertz, 1973; Mishler, 1986; Schön, 1983).

Ethical and Epistemological Dimensions of Teachers' Practical Conflicts

Chris Smith, an English teacher in his second year of teaching, articulated what he saw as characteristics of teachers' dilemmas. He paused as he speculated about a dilemma he faced, one not at first glance a likely example of conflict:

> I guess when I think of conflict, I think of an immediate situation where there's a head-on clash. But I think also of this kind of conflict that I think is a lot more like ones that classroom teachers face more frequently; which is a conflict spread out over time, that involves getting to know a student and establishing a relationship, a working relationship, and sort of being in a tenuous situation that by no means is going to succeed. There is no guarantee of success and that sort of requires day-in and day-out input and feedback on your part and also interaction and feedback [from the student], so that you can have at least the slightest hope of getting through the year successfully.

Describing what he termed a moral dilemma, Smith recounted a situation he faced as a new junior high school teacher with a student—a boy, "bright, but easily out of control." The problem was "how to deal with him and keep him directed . . . and, keep the relationship such that, what could easily deteriorate into [something] detrimental to you and to him and to the classroom in general, did not." Smith recognized that he could take a "real low course and allow him to sort of

skate through and not learn and accomplish anything but not disturb you and not be a presence," yet he also believes "you can try and get him to do something and to work through the year so he passes." As Smith describes his struggle to find a way, he reveals how this situation is rooted in his own set of values and how it also relates to his ideas of practice.

"If your obligation as a teacher is not simply to contain children but to help them overcome weaknesses," then, he says, one must search for ways to reach each one, "to find out what areas he could excel in and grow in, allowing him to bend certain assignments." But, he finds, there is not an instant solution. "So what you are dealing with is a situation that you have to try to live with and improve, with no guarantee of success or endpoint." And, as Smith discovered, there are days when the kid falls down, as when a substitute was in and "he did things that were crazy, ripping books and going toe to toe with the substitute," undermining everything that he had done for the entire year. In that situation, Smith sees:

> Your natural reaction is to say, "Yeah, I am going out of my way," and then you have the other feeling, which is to say, "he is a thirteen- or fourteen-year-old kid. He's slipped, but children slip all the time." So you've got two sides of the problem that don't really mesh very well and you as a teacher and an adult have to take up some of the slack and swallow some of the frustration and try to get on with it, you know.

What creates the dilemma for this teacher is his own expectations and sense of integrity; something, he says, that develops out of a perception of the environment, the work he does, and his sense of what kids' needs are nowadays. He sketches his hopes for this student:

> When he leaves here [I hope] that he doesn't perceive it as having been a wasted time. I want him to have a sense of having had a relationship with a teacher that meant something and a sense of trust in someone. I want him to believe that there are people who are willing to help him. He is in a way such a survivor, you know, but it is without outside assistance. . . . I want him to feel that there are other people he can work with . . . that he can trust people.

Smith describes how this dilemma goes to the question of his craft and ultimately to any notion of his change as a professional:

> Well you know, the . . . heart of the question is, am I able to cultivate new styles for dealing with students? In other words, was my working this situation out with him something that was really the result of who I am and what my style is, and did I choose it simply because of that? Or did I really consult the situation, to think what the best way would be and then, whether or not it went against the grain, took that?

In these responses it is evident that any given dilemma is likely to emerge in its particularity because of who the teacher is. As Smith states, in doing his job there is a sense of living up to "who you are: of yourself, your professionalism, your expertise, your values." Because this is so, standards held are not arbitrary but honed out of the teacher's own perceptions of the context of the school in its community, the lives of students, and their needs. Smith can ask himself if how

he dealt with his conflict was really "a result of who I am or if I really did consult the situation," to think of what was the best way. Thus, linking the dilemma with his sense of self, his relationship with his student, and his pedagogical response, he asks if what he did was enough. Did he perhaps not pursue something he in fact saw and knew but needed to acknowledge in order to create an appropriate response to his student?

In his thinking, Chris Smith captures and articulates aspects of dilemmas other teachers have also described: dilemmas that come out of working relationships between people, like those between student and teacher, that are fed by the everyday interactions between them, that happen over time, and that have no real guarantee of success even though they require daily response and action. However resolved, the teacher lives with conflict and is faced with how and if "to take up the slack."

Another teacher, Caroline Brett, a high school history teacher, similarly points to her relationship with a student as the source of a conflict; but, for her, the dilemma is of a different kind. Having recently joined the faculty of a diverse urban high school after some six years of teaching in another school, Brett describes the shift as "tough, coming from a structured environment to one relatively structure free." Teaching a unit in her "World Cultures" class on South Africa and attempting to make sense out of a controversial issue, she finds that "as a Black American," she could not divorce herself from the situation of Black South Africans. Determined not "to give voice to White South Africa," she encounters several dilemmas:

> One is clearly, if a student expects to hear both sides, both sides of an issue, there's one side that is going to be left out and that's the White South African side. And secondly, it is hard to divorce myself as a Black American, as an African American, from the situation of Black South Africans. So that in trying to present all that, in the South African scenario, students may not quite understand the reasons behind the kind of presentation they are getting and some of them would want to question that and that would be okay. But they may not be happy with the answer, they just may not be happy with me.

This in fact proved difficult, because a student did counter her position. Brett presented her view "that Blacks in South Africa had been discriminated against unjustly by White South Africans and that no matter who you were within the White community, you still had privileges above and beyond those a Black South African could hope to have." A student then tried to raise an issue, suggesting that there might be exceptions to that, that there were other situations of unfairness and injustice, like what happened to the Jews. Wanting her student to focus on Black South Africans and their situation only, to see them in their own right and not in comparison with others in situations of oppression, Brett would not allow that comparison. She recognized her quandary. "My difficulty lay in identifying with Black South Africans and trying to help her see the degree of discrimination [only Blacks experienced]. But the student didn't feel comfortable with that response." For the teacher, that was difficult:

> It was difficult to know how to express my feelings in a moral way, in a way that

> did not seem disrespectful and mean and racist. I mean those things are immoral and I mean I took a big risk in responding the way I did . . . that was a kind of moral dilemma, . . . Do we as teachers try to couch our truthful responses, choose to give our kids the truth or do we choose to make it look nice and presentable and okay for them to hear? And to deal with? And I guess I come down on the hard core reality that isn't always nice. And that can have difficult consequences.

Seeing that the dilemma resides in the nature of the knowledge she wants her students to acquire, Brett continues:

> When you deal with controversial material, *that* can polarize people racially and politically and every other way. This kind of situation can be difficult because students, young people, don't necessarily want to admit to the badnesses of life. They don't necessarily want to see the evil, ugliness, especially they don't want to see it if the United States is involved. And . . . if it involves their families and themselves. But I have had to think about that a lot, and try to do some strategizing for this current year.

In her strategizing this teacher reveals how she has had to "look at places to remove myself from the argument at hand, and try to find ways of having the students themselves begin to identify with the ideas, the realities of a Black South African person. My aim is to educate my kids to certain realities."

Recognizing that it is impossible to remain on the fence in discussing South Africa, yet also believing that a good teacher ought to be able to present certain scenarios for students so that they can find ways to say what they think and feel, and to question, Brett acknowledges that she came to a new understanding about her own practice: "I tried to do better this year, with that curriculum, to look for ways that students could get closer to what it is they themselves feel and not reacting to what I felt."

Thus this teacher, reflecting on her practice, indicates the intricate ways her ethical concerns enter her teaching relationships, entangle her in a dilemma, and how she seeks to resolve it—over time. Faced with something she cares about deeply—the plight of Black South Africans and her assessment of the pernicious nature of the White South African view, the teacher judges it wrong to voice that. The very knowledge Brett tries to impart is implicated, then, becoming a source of conflict and ultimately the center of her efforts to change her practice. What is again revealed is the way the individual and the context shape the particular nature of a dilemma.

Another teacher, Ramon Parks, who teaches philosophy in a small suburban high school, spoke similarly about how teaching controversial issues became an ethical dilemma. In his case the dilemma arose because the students *wanted* to know his opinion. For him the question became: "What is the context in which it is appropriate for me to express my opinion on sensitive issues—euthanasia, suicide, abortion—the kinds of things we are talking about?" Parks elaborates his ideas:

> They want to know my opinion and yet there is a danger in my mind of giving it too early because often the dialogue stops then. Now we know THE ANSWER, we can go on. Some kids don't do that, but a lot do. So I try to create an environment all year long whereby they are willing to question your opinions as another opinion, hopefully reasoned, but still an opinion. And then the conflict is reduced.

In the specific dilemma he encountered, Parks found himself considering whether or not to voice his opinion in a class discussion of a case of euthanasia, where a nurse with a terminally ill patient in a moment of crisis lets the patient die without calling for help. For the teacher, "The question is, 'Is the nurse right or wrong to do that?' And I felt if not right, at least I could understand what the nurse was doing, and I thought it was a rational decision for her to take, . . . and I thought that it was morally justifiable. . . . I am sure it is not legally justifiable." In that situation Parks saw that the students were not giving the situation the attention it deserved, nor were they treating it as "an open question." They saw it as a closed question, and so he ponders, "do I give my opinion and force it open, running the risk that twenty-two kids will change their vote because this is what the teacher thinks, which is not what I want?"

Although he wants his students to formulate positions and arguments, Parks admits the difficulty of that goal: "Kids tend to be very poor debaters. Their notion of debating is to say things louder and louder, rather than searching for some evidence . . . I would love to have them develop the whole range of opinions and arguments on their own—be able to expound the whole range before coming down someplace. Kids usually see things right away as either right or wrong, or [look for] instant answers and tend not to go much farther than that."

Embedded in Parks's situation, then, is a new element—the student's own view of the nature of knowledge. Here the teacher takes that into account as he struggles to determine just how he can voice his own views in class discussion, encourage the thinking of his students, and move them to new understandings about the nature of knowledge and how one knows.

In sum, these teachers reveal the ways their ethical values are implicated in their relationships with their students, found in their own approaches to their subject matter, and reflected in their own and their students' stances towards the nature of knowledge. While not all dilemmas teachers report have all of these dimensions, it is this particular set of elements—of self, relationships, craft, one's values and one's stance towards knowledge, that were revealed in this study. Before examining how these dimensions of dilemmas may also be involved in teachers' development, it is useful to look briefly at some related features of the dilemmas teachers reported in the original study, since these provide a context for those under discussion here.[1]

The Dilemmas of Teaching: The Web of Self, Craft, Relationships, Values, and Ways of Knowing

Teacher responses to questions about conflicts they faced in their professional lives revealed that 70 percent characterized their conflict as moral or ethical and a majority connected the dilemma either directly or indirectly to his or her sense of self (Lyons, Cutler, & Miller, 1986). As one woman put it, "Well, you know,

[1] The teacher interview data presented in this article were collected in two waves. In 1985, as part of the "Dilemmas of Teaching Project," 46 teachers (23F; 23M) from secondary and elementary schools in the Northeast were interviewed. In 1987, 20 teachers, including several previously interviewed in 1985, were interviewed as part of a Spencer Fellowship project, "Teaching: The Development of Mind, Craft, Self and Relationships." All names of teachers presented here are fictitious.

morality and everyday actions get pretty tied together when you're teaching. There are very few situations I've run into where there's a clear right way and a wrong way, or the shadings are very simple."

The majority of the dilemmas reported involved students, and surprisingly, only a few involved school administrators. Although Lortie (1975) reports that teacher complaints are predominantly about tasks, time use, or other adults, this research suggests the centrality of the student-teacher relationship. Teaching involves close human interactions. It is not surprising that teachers may experience their relationships to students as raising ethical issues. Piaget (1932/1965) asserts what my own research affirmed—that "Apart from our relations to others there can be no moral necessity" (p. 196). Morality resides in the relationships between people (Lyons, 1982, 1983, 1985, 1990).

This study supports the conclusion, too, that many of the dilemmas of teaching are not solvable and must simply be managed rather than resolved—a finding similar to that of Lampert (1985) and other researchers (Calderhead, 1987; Zeichner, Tabachnick, & Densmore, 1987). Fifty-two percent of the teachers said the dilemma was ongoing, and a majority indicated that their dilemma was likely to recur. The dilemmas, although broad-ranging and diverse, share certain features with teacher vignettes already discussed: these practical conflicts involve the self, usually include the teacher's relationships with students, and are considered ongoing or recurring. They demand deliberation, attention to detail, and new kinds of creative resolutions, ones that attend to all elements and people involved.[2]

What became salient in this analysis, however, were the various ways teachers' ideas about knowledge were part of their practical conflicts—as Caroline Brett, Ramon Parks, and others suggested. Their comments raise the question of interpretation; that is, how to make sense of these issues of knowing. A current and growing body of work exploring people's epistemological perspectives from the individuals' own views provides a useful framework.

[2] In this article I refer to the dilemmas teachers report as "practical," "ethical" conflicts to distinguish them as real-life, specific, and particular kinds of human conflicts—that is, conflicts that have multiple perspectives and contradictions, and that are not easily dichotomized. Although I refer to these dilemmas and conflicts as "moral" or "ethical," I am deliberately avoiding a distinction between moral and non-moral. The moral/non-moral distinction is a heritage of Kantian philosophers, who make a sharp distinction between moral value and other kinds of value. Discussing these issues in light of early Greek dramatists and philosophers, Nussbaum (1986) argues:

> The Greek texts make no such distinction. They begin from the general question: "How should we live?" and consider the claim of all human values to be constituent parts of the good life: they do not assume that there is any one group that has even a *prima facie* claim to be supreme. I believe that their approach is faithful to the way that our intuitive practical reasoning does in fact proceed, and that it recaptures aspects of our practical lives that tend to be obscured in works beginning from that distinction, however understood. (p. 5)

Similarly, I find that the term "practical conflict" better captures the kinds of dilemmas teachers report and the kind of deliberative reasoning they do as they seek to deal with them. These dilemmas cannot easily be dealt with by the choice of one principle over the other, but rather demand new kinds of integrations, where creative resolutions are sought (see Bartlett, 1990; Rorty, 1988). Since situations are unique, created out of the particularity of lives, situations, and circumstances, action to be taken is not a given, determined by the application of a single principle. Rather, action is determined by questioning, searching, and deliberating, and is dealt with by what one student of conflict negotiation called "creative integration" (Follett, 1924). Rules and laws—as Dewey (1932) suggests—are simply one set of useful guidelines.

Teachers' Perspectives on Knowing: A Framework for Interpretation

Many researchers interested in understanding how individuals understand the nature of knowledge and come to construct their own truths are guided by the work of William Perry and his study of college students (1970). During their undergraduate years, college students move, Perry argues, from a dualistic understanding of knowledge as either right or wrong to a position of relativism; that is, an understanding that all knowledge is constructed. In sketching these changes, which he outlines in nine positions, Perry suggests that a capacity for detachment, and an ability to stand back from oneself in objectivity and to assess conflicting authorities and the relativism of one system of thought to another, are necessary to achieve this epistemological revolution (p. 35). But when psychologists Mary Belenky, Blythe Clinchy, Nancy Goldberger, and Jill Tarule (1986) studied women's approaches to knowing—Perry's original work was derived largely from the study of college men—they discovered some differences.

First, although research revealed that women were able to act in detached objectivity, to see and respond to demands of external authorities, it also showed that women were especially concerned with understanding others' opinions, beliefs, and perspectives (Clinchy & Zimmerman, 1975). Essentially, women seemed to step into, not back from, situations, to see and respond to others in their own particular situations and contexts rather than to challenge them. To elaborate and verify these findings, Belenky and her colleagues expanded this research to a sample of one hundred and thirty-five women, including women in city colleges as well as rural mothers coping under difficult, sometimes oppressive situations. This work verified earlier findings (Clinchy & Zimmerman, 1975) of women's approaches to knowing, and elaborated a theory to include five different epistemological perspectives. These categories range from "silence" and "received knowers," places where women deny or have no access to their own voices as they look to others as authorities, through a "subjectivist" belief which affirms their own deeply personal ideas; to a belief in reasoned, "procedural knowing," and, finally, to a conception, similar to Perry's, that all knowledge is contextual and constructed and that women are "constructivists," capable also of making theory.

Belenky and her colleagues found that the metaphor of "voice" captured accurately and most powerfully the way women came to understand themselves as knowers, especially in gaining or finding a voice. They also found links between women's ways of knowing, their ideas about themselves, and questions about value—about what is right and wrong, good and bad. Thus, in connecting these ideas of self, morality, and epistemology, Belenky and her colleagues expanded on what Carol Gilligan (1977, 1982) and my own work (Lyons, 1982, 1983) first suggested: that there are intricate connections between people's ideas of self, their ethical ideas, and their relationships to others.

This work in epistemology also suggests a way to begin to consider how to interpret the experiences of teachers. For example, this new research demonstrates that an individual—that is, a teacher or a student—can hold various stances toward knowledge and authority, truth and ways of knowing. The empirical mapping of these epistemological views is still underway. Belenky and her associates do not define a developmental progression, as Perry does, but their work clearly

suggests changes in epistemological perspective. Further, they describe two different approaches to knowing used by "procedural knowers." One approach is more like traditionally known, objective, rule-seeking ways of evaluating, proving, and disproving truth. They label people using this approach "separate knowers" (similar to Bruner's (1985) "paradigmatic knowers"). A second approach seeks understanding and meaning from the individual's perspective. Belenky and her associates call users of this approach "connected knowers" (similar to Bruner's narrative knowers), people who look for connections between events, considering motives, intentions, and believability (Belenky et al., 1986; Bruner, 1985). While individuals can make use of both approaches or tend towards one over the other, each has its own logic. Thus, this work reminds us of three things: that individuals can hold various epistemological perspectives; that such perspectives may change over time; and, that within a given epistemological perspective, approaches to knowing may vary.

The teachers' views discussed here provide evidence of at least two kinds of views about knowledge: 1) the stance teachers hold towards knowledge in general, and in particular towards their individual subject discipline; and 2) the stance teachers take towards their students as knowers, specifically in the way they believe their students construe knowledge. To elaborate these two views and to consider the question of how an epistemological perspective offers a useful interpretive framework for conceptualizing teacher's work and development, recall the case of Ramon Parks, the philosophy teacher. In talking about his conflict—of not knowing when to interject his own views into student discussion—he articulates a hope he has for his students, revealing his immediate and long-term goals for their development and how these connect with his and his students' ideas about knowing.

Parks wants his students to "develop a whole range of opinions and arguments on their own, either by having different people in the class do it, or individually by kids realizing—that there are a range of responses that might be possible on a given question." To deal with this, and with his realization that kids would rather come down on some quick answer, he takes a "sort of devil's advocate role." And the reason he does this, he says, is " . . . to get them to do what the course, philosophy, is all about, to think, reason, construe arguments . . . Not to change their minds, but to expose them to a methodology."

Parks also reveals how the situation in his class connects to his sense of values and how that in turn connects to a conception of knowing and knowledge:

> I suppose it is a moral issue in a sense that everyone is entitled to their own opinions, but I have never accepted the conclusion that is often drawn from that, that everyone's opinion is equally valid, which kids tend to do. They tend to slip into an easy relativism, "It's just an opinion." Well, some opinions are better than others and I believe that is an important value to me that kids realize that—that there are opinions that ought to be abandoned when persuaded to do so, and one ought to be open to that kind of persuasion.

He ponders a case:

> Kids will say, "Everybody on welfare's lazy" and even when presented with conflicting evidence, that 70 percent of [people on welfare] are children and all that kind of stuff, they maintain their opinion, and say, "Well, I am entitled to my

> opinion." And my point at that point is that—and I guess this is a strong moral issue, I would say "No, you're not, you are no longer entitled to your opinion . . . you can't hold an opinion in the face of contrary evidence." That's wrong and I think that is a moral dilemma.

Examining Parks's views more carefully, it is possible to tease apart several elements related to his conceptions and attitudes towards knowing—for himself and his students. A clear sense of his students' easy and precipitant conclusions suggests that he sees most of his students as dualistic thinkers, with some as multiplistic knowers, who accept all opinions since any opinion is as good as any other (Perry, 1970). He considers his role to be a teacher of procedures of knowing, of "methodology," and to move students to a new view of multiple perspectives of knowledge by having them create competing arguments of their own. But he also believes his responsibility includes teaching about the relativism of all knowledge grounded not in opinion but in different knowledge claims, some having greater validity than others.

In sum, Parks's views emphasize four things: 1) As a knower, he sees knowledge as relative with different groundings for its validity; 2) he views students as knowers who have specific ways of knowing; 3) as a teacher, he makes explicit goals about students' epistemological development; for example, he wants to help his students move from a dualistic, "one-right answer" to a multiplistic understanding; and, 4) as a teacher, he introduces specific procedures for knowing, ones he believes will promote or challenge students' epistemological development, like guiding students towards seeing that some perspectives may be more adequate than others.

Similarly, Caroline Brett's dilemma—whether to allow any opposing argument to that of Black South Africans—embodies implicit stances towards knowledge. But her dilemma reveals something more: her role in the presentation of knowledge is changing. In coming to see that there might be another way that her students could encounter controversial issues, she withdraws from an old stance—"removing myself from the argument at hand"—and works on creating a new one as she struggles to find ways her students can encounter "reality" and still appreciate controversial issues in their own terms. A dilemma "that arises out of what I am teaching in terms of how to deliver it to students" challenges Brett to see the problem as an intricate part of her position towards the knowledge she is teaching and the view of it she will allow discussed in class.

Brett's considerations resemble elements in Parks's thinking, but because her dilemma is leading her to change, she describes these elements as if in flux: 1) As a knower, she has her own perspective on the presentation of knowledge that, in this instance, is at the center of her conflict; 2) she assesses her students' stances towards knowing, but as she tries to respond to them and hold to her own goals in teaching, she changes; 3) as a teacher, she has goals for her students as knowers—that they take into account particular contexts and know the realities even if they are difficult to assimilate; and, 4) as a knower and a teacher, she tries to find new ways to approach knowing and learning, not focusing on the nature of thinking or proofs needed for validity, but rather introducing the logic of contextuality to help herself and her students appreciate growing complexity.

Brett's particular dilemma "of what I am teaching and how I deliver it to students," of how to present knowledge "that would not be so hurtful versus a way that's close to the reality but perhaps could hurt" suggests a particular aspect of knowing. The teacher of a subject discipline is always at pains to determine just how that subject is to be "delivered." While a historian or a mathematician may worry about plying a discipline—of "doing" history or math, constructing new knowledge—the *teacher* of history or math has a different but related task. That task involves both the *presentation* of knowledge—of a subject or content—and a particular *kind* of knowledge construction. In a unique process, the teacher joins the students in encountering a body of data and in interpreting it, a co-joint activity constructing meaning and potentially new knowledge. These tasks involve special challenges that concern how to examine and approach knowledge, a view of one's discipline, an assessment of students, and interactions with students who, in turn, have unique views of knowledge and ways of knowing. Brett came away with a new puzzle in interacting with her questioning students: how to approach a truth she held dear in a way that students could grasp it in their own terms. In this case, the mutual interaction of students and teacher inspired in the teacher a new way of approaching knowing as well as new understandings and new knowledge.

But it seems important to suggest the difficulty of these epistemological achievements for students and teachers. Brett reveals the struggle of the teacher. Another teacher, a math teacher of fifteen years, Margaret Robinson, similarly engaged in the problem of connecting with students and their ways of knowing, illuminates the struggle of the student.

Working in a large urban high school as a special assistant to classroom teachers, Robinson encounters students who have grave difficulties learning math. Her task is to help them. But she sees the problem in a profoundly stark way: "how to help students to risk as learners, to ask questions, simply to raise a hand." Students, she believes, need help simply "knowing what they are knowing."

> I ask them, "Why didn't you ask this in class?" And they talk about the environment of a class, their reluctance. I even make contracts with kids that say, "If you are personally shy, which day of the week will you ask the question?" The kid could be a star, if [only] she'd say in class, "Ah, will you repeat that again, please?"
>
> But to address the fact that there is a fear and risk in learning . . . that risk as the learner, to ask the question, [to] raise the hand, is incredible.

Margaret Robinson tries in her work to reach a long-term objective: "I just want them to work up to their real, true questions." In the meantime, she seeks to help her students simply find a voice, to speak, echoing the struggles revealed by Belenky and her associates (Belenky et al., 1986), who depict the image of silent knowers. Robinson envisions the enormous potential achievement of a student who could at least say, "Ah, will you repeat that again, please?"

Implicitly or explicitly, then, epistemological and ethical dimensions exist in the social and intellectual relationships between teacher and student in everyday interactions. And in these situations, the teacher's self is intricately involved, as the English teacher Chris Smith suggested. Chris Smith's situation—whether he really "did consult the situation" and acknowledge what he knew of his student, his sub-

ject matter, and himself—as well as the experiences of the other teachers presented here, reveal elements of the dynamics of the epistemological interactions at work in teaching. Table 1 summarizes these.

TABLE 1
Elements of the Epistemological Dimensions of Teachers' Work: An Implied Dynamic

1. *Teacher's Stance Towards the Self as Knower*:
—Teacher holds implicit or explicit assumptions about knowledge and about her/his role in knowledge construction;
2. *Teacher's Stance Towards the Student as a Knower and Learner*:
—Teacher assesses student—implicitly or explicitly—as knower;
—Teacher identifies goals for students as knowers; employs specific procedures for knowing in teaching lessons; makes this assessment for the range of students in his or her classes;
—Teacher's assessment of student as knower is likely to include several epistemological perspectives. For example, from one of dualist, multiplist, relativist, and so on, of Perry's (1970) views, or "silence," received knower, subjectivist, proceduralist, or constructivist, of Belenky et al.'s (1986) model of knowers.
3. *Teacher's Stance Towards Knowledge of a Discipline/Subject Matter in the Interactions of Learning*:
—Teacher's view of nature of subject matter knowledge similarly will shape the tasks of learning, interacting with assumptions about students as knowers and influencing a way of collaborating with students in knowledge construction, interpretation, or translation. (This stance may change over time, in part through the interactions of students and teachers.)

Implications: Considering Teacher and Student Change and Development—A Model and Other Suggestions

The experiences of the teachers and students presented here make it possible to begin to sketch in a speculative way elements involved in teachers' professional change and development and several important implications for understanding aspects of students' development as well. Although more work is needed to test and refine these ideas, several concepts, dynamics, and implications may be identified.

The Concept of Nested Knowing

Implied in the interactions between teachers and students described previously is one phenomenon that needs to be examined in its own right; that is, the relationship between a teacher's views of knowing and his or her assessment of students as knowers, on the one hand, and students' own perspectives, on the other. It can be illustrated by the concept of nested epistemologies, or nested knowing, a characterization of the interdependence of students and teachers as knowers in learning. Like a set of dynamic objects that are interacting with one another, although each is distinct in its own right, students and teachers come together in a special relationship in learning, having a clear epistemological basis. While this conceptualization of nested knowing is a tentative one, in need of elaboration and verification, it is useful at this stage to mark an important domain. It holds implications educators need to understand. For example, a student or a teacher could be a dualistic knower, seeking or seeing one right answer; or hold a view of the multiplicity of all knowledge, or of the construction of all knowledge and of the individual

as a constructor of knowledge—all in different configurations, having different outcomes.

In the data presented, for example, it is clear that Ramon Parks acted to respond to his students given his assessment of their actual and developing approaches to knowing; that is, his assessment of their emerging epistemological capacities. Caroline Brett similarly assesses her students, but she reveals something else: how she came herself as a teacher to a new way of knowing through her interactions with her students. Thus, in learning, teachers and students influence and are influenced by each other's ways of knowing: they are nested knowers.

This analysis suggests Vygotsky's conception of the processes of development and of the social nature of learning (Vygotsky, 1978; also Williams, 1989). In Vygotsky's view, development occurs only in and through the social interactions between people—like student and teacher. A special intersubjective learning relationship makes development possible. He posits, too, the idea of two aspects of student development: actual achievements and potential development—what he calls a zone of proximal development; that is, those emerging embryonic capacities of an individual. In the relationship between student and teacher in learning, a teacher needs to make some assessment of both a child's actual and potential capacities. It may be useful to consider a zone of proximal development as an emerging epistemological capacity. Defining and identifying students' different epistemological perspectives is one way to make concrete the idea of a zone of proximal development. Continuing research ought to make it possible to name and identify students' emerging epistemological capacities in a way that is useful to educators.

Similarly, the stance of the teacher toward knowledge and truth may be further examined in light of current feminist discussions about theories of knowledge. While it is not the purpose here to take these up in detail, they offer another interpretive lens for illuminating classroom activities of teachers. Positionality is one such epistemological theory or perspective that bears relation to the teacher's role. In this view, the positional knower conceives of truth as situated and partial. Truth is considered partial in that individual perspectives "that yield and judge truth are necessarily incomplete" (Bartlett, 1990, p. 881). Truth is "situated" because it emerges from particular involvements and relationships. Knowledge arises within social contexts and in multiple forms. Because this is so, the "key to increasing knowledge lies in the effort to extend one's limited perspective" (Bartlett, pp. 881-882). For a teacher like Caroline Brett, knowledge may be said to be positional. It emerges from her perspective and is elaborated through her relationships with her students, who similarly have partial perspectives. Similarly, Ramon Parks worked to expand his students' views. The goal teachers seek in their practice is a widening of their own and their students' perspectives.

This work is important in its theoretical implications, especially as it points to the dynamics at work in considering the interacting epistemologies of students and teachers. It keeps at bay a simplistic rendering or a reductionist categorization of either teachers' or students' epistemological perspectives as a non-linear relationship emerges in the intersubjectivity of teachers and students as knowers and potential constructors of knowledge. Thus, the cases presented here offer glimpses of powerful interacting processes of teacher and student development, ones important to elaborate for theory and practice.

Elements of the Dynamics of a Model of Teacher Change

The interviews provided an opportunity for teachers to describe their own changing understandings of their practice. Several elements seem to interact in the dynamics of teachers' professional development:

- —the teacher's sense of self as a teacher, a practitioner;
- —a shifting conception of one's discipline and craft; that is, the teacher reconsiders a relationship to a discipline, especially how to present or consider a body of knowledge or discipline;
- —a re-alignment of one's relationships with students; that is, not only the teacher's way of interacting with students in learning, but a conception of the student as a knower and learner shifts;
- —the teacher's own conception of knowledge and knowing; and
- —ethical and value concerns: situations of change may be experienced as having ethical dimensions, even though individuals may sometimes be unaware of them (Lyons, in press).

This conception of teacher change—and by implication teacher professional development—thus involves a changing logic, one that touches self, craft, relationships, values, and ways of knowing.

While the cases presented here offer glimpses of the dynamics of teachers' change, they do not precisely explain what precipitates change and exactly how it comes about. That is a needed research agenda. This work offers a set of interconnected ideas that may facilitate and guide such a research task. Teacher change seems to involve a web of values and ideas, ways of knowing and interacting, and being in relationship with other knowers.[3]

Implications

Several implications follow from this research:

1. Teachers' work cannot be conceptualized primarily in terms of subject matter knowledge or defined solely by content and pedagogical knowledge. Although subject matter knowledge in teaching history, English, or any other discipline clearly matters, as does a teacher's repertoire of pedagogical knowledge strategies, teachers' work ought to be seen as comprising several interacting epistemological tasks, coming together in an encounter with knowledge, in particular contexts and with specific students. The teacher's assessment of how to present subject matter is mediated by his or her understanding of students as knowers and is informed by his or her own stance towards a discipline and knowledge as well as consideration of the self as a knower. Research needs to continue to elaborate fully teachers' epistemological perspectives.
2. Teachers explicitly or implicitly, aware or unaware, interpret and assess students as knowers. This assessment enters into their consideration of long-term and day-to-day goals for student learning. Identifying students' different episte-

[3] This outline suggests some long-standing ideas about development. For example, Loevinger (1976) claims that development can only be considered as multi-dimensional. Teachers presented here suggest a similar configuration, one we need to understand more clearly.

mological perspectives may provide one conceptual framework for teachers who want to analyze and name this aspect of students' approaches to learning as well as encourage students' emerging epistemological development.

3. Teachers and students are interdependent as knowers and learners. They have interconnected and interacting epistemological perspectives, what might be called nested epistemologies, each influencing the other in learning. This important interaction needs to be described so that the intersubjectivity of the student-teacher in learning may be outlined in its epistemological dimensions.
4. Teaching as an enterprise is likely to present teachers with practical ethical dilemmas. Given the characteristics of dilemmas identified here, prospective teachers ought to be alerted to these possibilities. Teacher education programs are likely to offer teachers—if anything—insights into the dilemmas of teaching associated with rights and fairness, of school and state regulations, contracts, student responsibilities and so on. Prospective teachers need to be able to consider as well the kinds of conflicts reported here: in teaching subject matter, in their learning relationships with students, and in the pedagogies they seek to explore and the knowledge they present.
5. Conceptualizing a model of teacher change needs to include several interlocking elements: self, craft, relationships, values, and ways of knowing. Epistemological and ethical issues are likely to be embedded in change. This view of teacher change may make it possible to evaluate and assess various efforts aimed at teachers' professional development. For example, short-term workshops and new-wave pedagogies need to be assessed in light of the discussions presented here. Teachers themselves suggest that efforts to change their teaching practices can go on over several years. Professional development for teachers, like all developmental change, seems to be better understood as involving a changing logic, a new way of seeing and being in relationship with learners and learning.
6. Teachers themselves may want to be made aware of their own views about knowing, characterizing them, and exploring how they fit into their goals and teaching strategies and materials. Teachers educated in the work of Perry (1970) and Belenky and her associates (1986), can use the idea of different epistemologies or ways of knowing in their own work. Teaching the ways of knowing ought to be part of teacher education programs.[4]

Research needs to meet the challenge of identifying systematically the epistemological perspectives not just of teachers but of students. My own work (1987) and that of Kitchener and King (King, Kitchener, & Wood, 1985) indicate that there may be as many diverse epistemological perspectives of high school students in a given class as there are learners. But few such systematic studies of high school

[4] I have been teaching the epistemological descriptions of both Perry (1970) and Belenky et al. (1986) to master's level teachers in training, asking them to critique existing curriculum projects and texts to identify the underlying view of the student as a knower with such questions as: Is the student assumed to be a receiver of knowledge, or a knowledge constructor? Similarly, it is possible to ask: What is the view of the teacher as a knower embedded in this lesson, text, or curriculum? Vallance (1985) has made a similar argument, suggesting that a conception of ways of knowing could be used as a perspective on practical curriculum choices, as are other systems of curriculum thought.

students' epistemologies currently exist (Clinchy & Zimmerman, 1975; Maher & Dunn, 1984). Given the discoveries of the work of Belenky and her colleagues (1986), this research with students seems clearly important. Similarly, given Belenky et al.'s discoveries through their focus on the experience of women, it is important to continue to pay attention to issues of gender as the mapping of approaches to knowing continues.

Finally, the outlining of the concept of nested knowing suggests that researchers need a new conception of method. The interactive, intersubjective nature of knowing of students and teachers presented here reveals the importance of finding ways that move beyond traditional psychological emphases and methods that focus on the individual. We need research that works with the interface between individuals, like teachers and students. The student-teacher relationship, long acknowledged as critical to learning, is remarkably absent from systematic research studies. But as Hinde (1979) and Hartup and Rubin (1986) suggest, a needed psychology of the relationships between people is only now in its infancy. One critical task for the emerging science is the development of a methodology adequate to capturing the interactions between people. For the moment, as Hinde argues, it may be necessary to start simply with good descriptions (1979).

Conclusion

In her book *The Fragility of Goodness*, Martha Nussbaum (1986) elaborates a line of thinking about ethical conflict in human experience that highlights how individuals deal with life's contingencies, or what she calls "luck." Examining the works of Plato and Aristotle, and especially the tragedies of several Greek playwrights, including Aeschylus, Sophocles, and Euripides, Nussbaum shows that the idea of the good human life is dependent on things that human beings often do not control—not random, chance happenings, but all the things that are part of a human life that can just happen. Yet in the development of Greek ethical thought, especially through Plato, and later through the Kantian tradition, there emerged the idea that through reason, contingency in practical conflict could be contained. One could, for example, simplify the structure of one's value commitments, refusing to attach oneself to concerns that generated conflicting demands. In her efforts to recover this central dimension of Greek thought about contingency in human affairs, Nussbaum compellingly argues that because many of the valued constituents of a well-lived life are vulnerable to factors outside a person's control, there exists only the fragility of goodness.

These ideas do not play a central role either in current ethical theory or in the psychology of moral development. I suggest that the ethical dimensions of teachers' work presented here describe clearly the centrality of how contingency enters into our moral lives and is part of who we are as human beings and of our daily work. Although their dilemmas reflect social issues of a larger arena—Black South Africa, euthanasia—teachers encounter these in their particularity—with this class, the student who asks that question. And as the teachers like Caroline Brett disclosed, there are conflicting "goods" teachers struggle to enact, determined by who they are, and how this historical moment intersects with their own life histories. What do I see? What do I know? or believe? The complexities of what one

knows requires a less confident and yet more particular wisdom. Nussbaum's work reminds us of the validity and complexity of these views, that moral goodness cannot be separated from the world of practice, and that no one can be secure from the vulnerability of ethical risk (also Arendt, 1968; Freire, 1970).

While more work will elaborate and verify the hypotheses presented here, Nussbaum's image of hovering in thought and imagination around complexities of the particular is a useful one, given the sometimes enigmatic complexities of teachers' lives and experiences. By attending to teachers' narratives, their words and experiences, we find a text that can be articulated but never exhausted, one that will remain there, the final arbiter of the correctness of our vision.

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