# On the Maturing of Legal Writers: Two Models of Growth and Development

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#### I. A SAD STATE OF AFFAIRS

Given the increasing number of writing courses in law schools, we might conclude that college graduates are writing—and perhaps thinking—less well than they once did. Either that, or there is a new concern with raising the general quality of writing in law schools and in the profession. While one might wish that the cause were the latter, a few moments' conversation with law faculty suggests that many think it's also the former—the perception that first year law students seem to be writing less well than they once did and that law schools ought to be doing something about it.

If that's true and not just one more chronic complaint that things are not as good as they once were, it's not clear whom we should blame, much less what we should do. One obvious target is the English professor. When collared in the hall, freshman composition instructors are for most of us a legitimate object of abuse. particularly when we are asking about one of our upper-division students who apparently can't write—at least well enough to suit us. Of course, college English teachers can in turn point down to high school English teachers who failed to teach their students to write before they got to college. Looking in the other direction, those of us in graduate and professional schools complain that the undergraduate faculty are no longer teaching their students how to write, regardless of field. And then along with businesses of all kinds, law firms regularly complain that the law schools aren't teaching their graduates how to write or think critically. We might conclude that the entire educational establishment is failing to teach students how to write or how to think.

In fact, there is more going on here than bad teaching. We should notice first that most of the complaints about writing and thinking come at predictable points in a student's educational life: at points of transition—from high school to college, from the general education of freshman composition to some academic concentration, from college to graduate or professional school, from professional school to a profession. One could respond that life is

1

nothing but transitions, so we have said nothing particularly interesting. In what follows, though, I want to suggest that, in fact, it is no accident that these points of major academic or professional transition are predictably the period when a person's writing and apparent thinking may seem especially bad. I also want to argue that this kind of seeming incompetence is not only predictable, but for many students probably inevitable; indeed, it may be evidence of intellectual growth.

To support those claims, I want first to sketch some recent work in cognitive development, critical thinking, and expert thinking. Then I'll offer an account of development that proposes a more useful and interesting explanation for why we complain so much about bad writing at just the times we do. This may seem like the long way around, but I want to locate this problem of teaching legal writing in the widest possible educational context—the context of the central aim of liberal education: to train all of our students to think well and write well, with law students merely a sub-set of that larger group. Those who are ready to consider these matters from this different point of view may reconsider some of their views about teaching thinking and writing.

#### II. HIGHER ORDER THINKING: TWO MODELS FOR GROWTH

We can approach the matter of critical and analytical thinking and writing from two not mutually exclusive points of view: (1) mature, competent thinking is the natural and, ideally, inevitable goal of human development, as the end of a teleologically guided process of growth, or (2) good thinking is a learned skill, acquired as a result of experience and education. The developmentalists argue that as we grow physically, we also grow cognitively, not steadily in small increments, but through discrete transitions from one identifiable cognitive state to the next, finally to some highest level that cognitive destiny intended. The experientialists, on the other hand, emphasize the development of critical thinking, problem solving, and higher-order thinking skills not as the natural and predictable growth of the human organism, but through learned experience and training, through socialization into a world of expertise in which well-organized knowledge is the base out of which cognitive skills emerge.

I would like to sketch these two positions in some detail, because they imply two metaphors for development, one of which virtually all of us take for granted. In what follows, I want to argue that the other metaphor for development might be more useful as we think about what we are up to in education of any kind.

# A. Cognitive Growth as Destiny

There are many models of cognitive and academic development, but most of them assume that there is a beginning point to growth and a goal to be reached. Not all of them assert by any means that this growth "just happens," but when it doesn't, something has gone wrong in the development of the whole person.

Three Models of Growth: Two of these models have seemed particularly useful to curriculum planners, and a third is relevant to my purposes, because I want to use it later in this essay, modified to suit my purposes. The three models are those of Jean Piaget, William Perry, and Lawrence Kohlberg.

The best known developmentalist was Piaget, a Swiss child psychologist. He argued that just as we develop through distinct stages of physical growth, so do we rise through structurally distinct cognitive levels. The infant grows through the first two stages rather quickly: sensory-motor and pre-operational. The third and fourth stages are rather more drawn out and more complex. Piaget called the third stage concrete-operational; he claimed that it lasted from roughly the age of six or seven to middle adolescence. The fourth and highest stage he called formal-operational (Inhelder and Piaget, 1958).

Quickly (and very crudely) put, the difference between concrete and formal operational thinking turns on the ability to manipulate abstractions derived from concrete experience. Most of Piaget's research involved scientific concepts, but he argued that the general principles held for all kinds of thinking: Can the person juggle multiple hypothetical variables and then combine and recombine them to predict different outcomes? Can the person project probabilities? Can the person reason from the intersection of logical sets and from empty sets?

Though Piaget claimed that this growth from concrete to formal operational thinking predictably occurred during adolescence, some American researchers have claimed that up to 50% of our first-year college students are still rooted in concrete-operational thinking (Kangas and Bradway, 1971). And a study by the American Accounting Association claimed that half of the graduate students studied were still either concrete-operational thinkers or barely in transition (Shute, 1979). If that is the case, then we ought to wonder whether those law school students who seem unable to think critically, imaginatively, flexibly about the law may be at a similarly low stage in their cognitive development. If so, legal education would face a challenge rather different from merely improving its educational practice. It would have to rethink its selection processes.

Two more recent proponents of stage-based, holistic views of development are William Perry and Lawrence Kohlberg. Because their stages of development extend well into adulthood, they have attracted more attention among curriculum planners at the college level.

Perry, a counselor of Harvard undergraduates, proposed a scheme of development that has become particularly attractive to curriculum planners because it directly addresses the development of college students (Perry, 1970). During the several years he devoted to student counselling, he observed that different students would respond differently to the same instructor, one finding him or her open-minded, receptive to discussion and different points of view; the other finding the same instructor undisciplined, ready to put up with the useless opinions of badly informed students rather than dedicated to setting forth "the truth." Perry also noted that students did not adopt these positions randomly, but rather sequentially. If students preferred an instructor who allowed everyone to express an opinion, to discuss rather than to lecture, they seemed not in subsequent years to change their preference and seek the more structured, authoritarian instructor. On the other hand, those students who did prefer the more authoritarian instructor would in later years predictably come to prefer the more open instructor.

From this and other systematic changes he observed in the behavior of Harvard undergraduates, Perry inferred a regular course of development that consisted of four stages: dualist, multiplist, relativist, and committed. Like Piaget's theory, Perry's scheme begins with a cognitive stance entrenched in the concreteness of immediate authority: the dualist wants from the teacher/authority the single, right authoritative answer. Eventually, after realizing that the authorities may really disagree, the student moves through a multiplist period in which she believes that if experts really do disagree, then "all opinions must be equal"; then on to the relativist's realization that while there may be legitimately different points of view, some are better founded than others. Finally, the student accepts that different people can legitimately hold different positions, but that finally one must commit oneself to one of them.

Like Piaget, Perry describes a development that roughly traces a movement from concrete to abstract: Perry's dualist is entrenched in the need for "hard" knowledge, "concrete" [more on

4

such metaphors in a moment] facts. But as that student grows, he or she moves toward the ability to live with multiplicity and ambiguity, to an appreciation of process over fact.

Lawrence Kohlberg was a developmental psychologist interested in the development of moral reasoning. He proposed a system of moral thinking that roughly resembles Piaget's developmental scheme (Kohlberg, 1984). He argues that our moral thinking evolves through three stages, each consisting of two stages (which I will ignore). He calls the lowest and earliest stage preconventional. It is based roughly on a kind of pragmatic eye-foran-eye morality in which one does what is right because of the threat of immediate consequences. Kohlberg would not assert that this first stage is the same as Piaget's concrete-operational thinking, but it does share the authoritative priority of the immediate presence of reward and punishment as the basis for projecting consequences of acts.

Kohlberg calls his second stage the conventional stage of morality. It is roughly that stage of morality whose principles derive from the community of one's peers: first the family, then the community, finally the nation. The moral values are immediately enforced not by reward or punishment, but by a more abstract sense of approval and duty.

The third and highest stage Kohlberg calls post-conventional. At this stage, the person is not directed in his or her behavior by the rules of a community but rather refers to higher principles of behavior transcending all communities, abstract principles of universal moral behavior derived from concrete, social experience. In essence, Kohlberg's scheme describes the growth of a person from moral behavior defined by individuals immediately present, by the larger society that a person eventually joins, and then by the community of human beings who, despite their local differences, share a set of universal moral principles. (I should point out that Kohlberg's system of development has been strongly criticized as oriented toward male values and behavior, that it assumes that the final stage in the development of many men is by nature better than the final stage in the development of many women. (Gilligan, 1982))

I should emphasize here that I am interested only in the broadest outlines of similarity among Piaget, Perry, and Kohlberg. Their schemes are more complex and more finely-grained and elaborated than my account of them. But all three describe a course of development that begins with deference to the authority of concrete experience and evolves toward the ability to derive and ma-

nipulate higher-level abstractions based on lower-level abstractions. What all three of these schemes have in common is the development of a person's increasing ability to free him or herself from the authority of the concrete to a point where that person has inferred higher-order principles. It is the ability to imagine something other than what is, to imagine and then manipulate hypothetical variables, to combine and recombine them, to accept multiple possible answers and the final uncertainty of all answers, valuing the process of inquiry more highly than the outcome of the inquiry. (I understand that one cannot simple-mindedly conflate Piaget, Kohlberg, and Perry into a single scheme. But I am not conflating them. I am abstracting from them what will be relevant to what follows. I also understand that all three appreciate the critical role of experience and socialization in development and that development may be uneven, further ahead in some areas of a person's life, behind in others.)

The Metaphor of the Moving Line on a Graph: Each of the theories I have sketched is susceptible to a tacit metaphor that underlies almost all of our ideas about growth and development as improvement: it is the metaphor of the upward moving line on the graph. This moving line may be a straight diagonal, a smooth curve, or a stairstep. Ordinarily, we do not like to visualize this "growth" line as a staggered series of increasingly higher peaks and less deep valleys. That is, we do not get lighter before we get heavier, shorter before we get taller, less intelligent before we become more intelligent, less competent before we become more competent, less moral before we become more moral, less good at solving problems before we become better.

In the form of a stairstep, it is the model we use to account for the movement of a person who achieves a series of increasingly higher stages, not regularly to be sure, but over time (measured left to right) predictably ("naturally," given normal intelligence and the right environment), moving upward and onward, toward a goal located somewhere in the upper-right quadrant. To be sure, most developmentalists build into their schemes a period when children/students may seem to show some decline in their cognitive skills as a result of conflicts between what they have assimilated and what they are experiencing, but that regression is only a prelude to further growth. Thus, if we lay a solid foundation and then reinforce growth, the students will both maintain what they have learned and steadily build on it toward greater cognitive maturity.

But metaphors influence not only how we talk about such

matters, but how we think about them. We speak of anger, for example, in images of liquids boiling inside sealed containers: "I was so boiling mad that I blew my lid. But after I let off steam, I felt better" (Lakoff, 1986; Johnson, 1987). Had our historical circumstances been different, our culture might have adopted for such emotions the metaphor of the machine: "I was so racing mad that I was already running too high for my specs, so I knew I had to lower my rpms or burn out my bearings. After I cooled the system down, I operated better." Under our presiding metaphorical frame, we often encourage — or at least condone — the expression of anger because we consider its "release" therapeutic. But under another metaphorical system, we might have considered the expression of anger damaging because it could lead to systemic breakdown; I would have exceeded my specs.

The language that I used to describe cognitive growth before was (deliberately) full of that metaphor: "raise the general quality of writing," "upper division student," "point down to high school English teachers," "intellectual growth," "the highest stage," "knowledge is the base from which cognitive skills emerge," "rise through structurally distinct cognitive levels," "rooted in concreteoperational thinking," "low stage of development," "entrenched in concreteness," "highest abstract principles," "higher abstraction . . . based on lower level abstractions," "higher order principles." This language is so easy to fall into and so easy to accept without noticing it that I will boldface it for the next few paragraphs.

The metaphor of development as a line on a graph is an appealing one because it allows us to account for so much of our experience with students: lower level students seem to be locked in concrete thinking: upper level students deal with higher abstractions. It also provides us with a ready rationale for criticizing apparent failure to develop toward higher levels of cognitive skill. If any of our students do not seem to have achieved the level of development we expect at some point in our classes, we can blame the student for not working hard enough to move on. Or we can criticize those undergraduate teachers who should have prepared that student to work at our higher level of performance or at least built a solid base that we could build on. Thus, if we think our first year students can't think and can't write at a level we expect, we can blame high school teachers. If we teach undergraduates who can't construct an argument and write clearly, we can blame teachers of freshman composition. If we teach graduate students who can't construct a coherent argument, we can blame their undergraduate teachers. At whatever level, we can blame

the failure of our students to develop on their lack of motivation or incompetence or on those who did not provide them with the **foundation**, the **bas(e)ics** that they need to perform at our **higher** level of instruction.

It is metaphor that may also encourage us to understand ourselves and our students in ways that affect our perceptions of our responsibilities toward them. When we locate our students on a graph, we can categorize them by giving them the name of the point or the level on the graph defined by the system of measurement-thus our students are "eighth decile IQ," or "concrete-operational," or "dualist," or "conventional." We chart their growth as they rise or progress through subsequent stages, as they "become" those higher stages. When they do not develop, we might wonder what they need to grow-perhaps a richer intellectual environment, more stimulation, etc. But however we might define our responsibility to the student on the graph, we stand in an observer's third dimension, disconnected from the metaphor that represents the student and her progress. We may go back to the classroom and change the environment to encourage growth, but as we think through the problem, our students remain essentially "others." They perform and we measure. The metaphor of the graph does not encourage us to put ourselves into the figure as part of the measurement.

Most crucially for my eventual point here, the metaphor does not encourage us to look upon **regression** as desirable. With Piaget, Perry, and Kohlberg, we may know that **regression** is predictable, but once students have achieved a **higher** level of performance, any **decline** in their level of performance is something that usually dismays us, that indicates their failure, because self-evidently, we have done nothing to cause them to **fall back**.

On the basis of this description, we can easily understand the temptation to place many first-year law students at a level of cognitive development still **embedded** in the **concrete**: They find it difficult to manipulate the abstract legal principles behind individual cases; they have a difficult time freeing themselves from the most visible and concrete signs of legal thinking—the arcane language of the law, when arcane legal language is inappropriate; they have a difficult time freeing themselves from slavishly imitating individual models of analyses, syntheses, briefs, etc. that they happen to read. They neither read nor write flexibly, imaginatively, even competently. In short, someone failed them earlier—high school teachers or college teachers. Or they just don't work hard enough. Or they just can't cut it. Under any circumstances, we often find ourselves having to make up for prior failures.

#### B. Good Thinking as Successful Socialization

There is another way to think about these matters: Good thinking and good writing are not the natural outcome of natural growth but rather a set of skills that can be deliberately taught and deliberately learned in a context that we can describe as a "community of knowledge" or a "community of discourse." Good critical thinking/writing in general or good thinking/writing in a particular field does not simply happen as a result of a person's mind maturing, but is a consequence of experience gathered by working with others more experienced in some particular discourse community. This view of good thinking may seem to be a superficial restatement of a model of cognitive development: we simply substitute training for development, and we come out in the same place. Our students still aren't prepared, and we can blame those who failed them earlier. But in fact, when we look at some recent research done in this area, we come out in a different place with a very different metaphorical model.

Critical Thinking: Skill vs. Knowledge: There are two modes of skilled critical thinking: productive and analytical. We deploy the productive mode when we create sound arguments, formulate a central point of our argument, and then find good reasons to support it; when we construct a logical argument that avoids the fallacies of the standard rhetoric text books: post hoc ergo propter hoc, overgeneralization, undistributed middles, etc. We deploy analytical critical skills when we recognize the fallacies in someone else's argument (or in our own after we have created it), when we recognize the central point of someone else's argument and what is and is not relevant to it, when we recognize unstated assumptions, when we recognize and thereby are not seduced by its fallacies. (A good recent example of a textbook on the topic is Kelley, 1988.)

In particular, the skilled critical thinker is not constrained or dominated by the concrete presence of the object of attention. By virtue of having seen a good many arguments, good and bad, the skilled critical thinker can see what is absent in a bad argument: sufficient evidence, a clear point, consistent logic. The skilled critical thinker can identify the assumptions that are not manifested in but are tacitly behind the text. The skilled critical thinker is no longer persuaded by singular anecdotes, individual cases, etc., but rather evaluates the evidence in the argument on the basis of evidence available but lacking, evidence that the critical analyst knows exists and that might counter an argument. The skilled critical thinker does not defer to the concrete authority of the text, but rather because he has seen so many good arguments, he can imagine an alternative, one that would be more convincing. For the skilled critical thinker, what is absent is at least as important as what is present. Thus, the unskilled critical thinker is like the concrete-operational thinker, the dualist, the pre-conventional moral reasoner: all are cognitively limited to the authority of the concrete. Indeed, a term that should complement "critical thinking" is the term "critical imagination": the ability to recognize what is lacking and to imagine a text/argument/case with it.

How does one become a good critical thinker (or imaginer)? Certainly, one has to learn universal "rules" of thinking: what counts as good statistical reasoning, as a valid deduction from valid premises, as using evidence correctly. But while all this is necessary, learning good critical thinking as a generic skill is made difficult by two problems: (1) what counts as the rules of good thinking differs from field to field, and (2) what different fields count as good evidence also differs from field to field. Every teacher of legal writing has had to teach new habits of thinking to counter the habits of everyday thinking that students bring with them from their undergraduate training in literature, philosophy, history, chemistry, sociology, etc. What counts as good thinking in a literary analysis of Iago's criminal behavior in *Othello* would not count as good thinking in the analysis of alleged criminal behavior in a court room, and vice versa.

More than that, understanding what counts as "good evidence" depends not only on thinking about evidence in different ways in different communities, but on knowing how different communities of decision makers—judges and literary critics—have dealt with evidence of different kinds in different contexts at different times. Whether any evidence is "good" in any field depends not on evidence as such, but on evidence in the context of knowledge that the community believes should be imparted through experience. Being a good critical thinker depends on knowing a lot about what one is thinking about.

If we emphasize specific knowledge as a prerequisite to good critical thinking, we may seem to contradict a principle that we have been pushing about concreteness and abstraction. In fact, it supports it, because by knowledge, we do not mean a mound of separate bits of information, but a structured array of knowledge consisting of higher and lower levels of generality—indeed, abstract knowledge derived from concrete knowledge. This conclusion is supported by the research of those who have tried to measure whether courses in generic critical thinking do any good. Although some researchers have claimed to find that such courses do teach students how to think better after they leave the course and although others are optimistic that ways can eventually be found (McMillan, 1987; Perkins, 1989), it is, I think, fair to say that the overwhelming number of researchers have failed to find any strong effect. In short, it is not at all obvious that critical thinking can be learned as a generic skill. Rather, it must be taught in a particular field, embedded in a particular community of knowledge. (And some research into expert and novice thinking suggests that even when it is learned in one field, it does not easily transfer to another (Glaser, 1984)).

Expert vs. Novice Thinking: While research into critical thinking tends to focus on generic problems of argumentation and analysis, research into expert problem solving has focused on the ways that experts reason differently from the ways that novices reason. The research is conducted by asking experts and novices to talk aloud as they think through a problem and solve it. Researchers then study the protocols that the subjects produce for clues to how those subjects thought through the problem (Newell & Simon, 1972; Simon & Simon, 1979).

The single common finding in the research has been that as novices start to formulate a solution to a problem, they tend to seize on the components of the problem statement that are most concrete, most visible. When the novice in physics is given a problem that has a straight-forward, right-or-wrong solution (these are called in the literature "well-formed problems") and the problem statement contains, say, the picture of a spring, then the novice assumes the problem is a "spring-type" problem. On the other hand, because the expert has seen and solved countless problems of this kind and others, he is able to transcend the concrete representation of the problem and categorize it at a more general level. At that point, the expert knows which algorithms to plug in to find the solution (Chi, Feltovitch & Glaser, 1981; Larkin et al, 1980).

Other researchers have explored what are known as "illformed problems," problems for which there is no algorithmic solution, problems that have no easy and obviously correct and incorrect solutions. This research into ill-formed problems is more interesting than that into well-formed problems, because ill-formed problems are the sort that the world of the law wrestles with every day, the kind of problem that has no obvious right and wrong answer, the kind of problem that in fact is ill-defined as to its very nature, much less its solution (Voss, Greene, Post, and Penner, 1983; Voss and Post, 1988).

And the same findings result: In one study, when experts in Soviet affairs were given the problem "How would you improve agricultural output in the Soviet Union?" they ignored the concrete representation of the problem and redefined it, decomposed it into subordinate problems related to the larger problem. They did not base their solution on the concrete representation of the problem as given. When along with the problem they were given a specific list of concrete items to consider in their answer, they did not take that list as defining the problem space, but instead reformulated the problem according to their own understanding of it, frequently ignoring the list altogether.

Furthermore, when they began to solve the problem, they rephrased it into a problem of a more abstract character: the problem of Soviet agriculture is one of capital investment, history, ideology, etc. And then when these experts constructed their arguments, they created chains of related arguments that subordinated some problems to more general problems. In short, the expert thinkers were not tied to the concrete representation of the problem; they spent a substantial amount of time redefining it, making it more abstract.

The novices, on the other hand, took the problem as it came. They spent relatively little time decomposing the problem into a set of problems. And when they were asked to consider a series of specific factors in solving the problem, they predictably addressed each of the factors in turn, each thereby organizing his answer around the most concrete elements of the problem statement. Further, unlike the experts, the novices attacked the solution at a relatively concrete level: the way to improve agricultural output is more fertilizer, more tractors, more roads, etc. And finally, the novices did not construct chains of arguments that subordinated some reasons to others. In short, like the dualist, like the concrete-operational thinker, like the pre-conventional moral reasoner, like the unskilled critical thinker, and in particular unlike the expert thinker, the novices seemed locked in the grip of the concrete.

And here is perhaps the most important finding of all: The research elicited protocols from experts in Soviet affairs and from novice students taking their first course in Soviet affairs. But two other groups were also studied: advanced students in Soviet affairs—subjects who had considerable knowledge about the Soviet Union but little expertise; and faculty in a chemistry department—subjects who had little knowledge of Soviet agricultural affairs, but who were highly expert in their own different field. The researchers included this last group, because they wanted to determine (1) whether those who had developed highly expert skills of thinking in a field distant from Soviet affairs would provide any signs, any evidence that they could transfer skills they had acquired in their own community to a different one and (2) whether, when they formulated and solved a problem that might be locally strange to them, they would nevertheless give signs of behavior that appears to be generic to experts when they are thinking about a problem locally familiar to them.

The outcome is important for our purposes: the experts in chemistry behaved more like the novice students than like the experts in Soviet affairs. In short, when experts in one field were confronted with a problem remote from their own community, they seemed not to deploy whatever skills of analysis that we might think were generic to all experts. Expertise seems not to travel well (a conclusion that further supports those who have questioned the value of generic courses in critical thinking) (Glaser, 1984).

# C. Expertise and the Community of Experts

Before we move on to the specific consequences of this way of thinking for education in general and legal education in particular, we must emphasize this: Expertise does not exist in a vacuum; it is a social construct. The concept of expertise cannot exist independently of a community of knowledge. The knowledge about which one is considered by others to be expert is developed, defined, evaluated, maintained, and transmitted by those in the community who are qualified to make judgments about what counts as expertise. If that is so, then we acquire expertise not in a vacuum, but as novices who must be socialized into a community of knowledge, into a community of discourse by those who constitute the community. The process of becoming an expert is at least as much a social process as an exercise of individual effort and intellect. Put this way, expert thinking is successful socialization.

And at this point, perhaps, we can see the wider relationships among the schemes of development, the skills of critical thinking, and the skills of expert thinking: they all emphasize the movement from the concrete to the abstract, from visible presence of a singular instance to the more general and abstract category, from concrete singularity to abstract multiplicity. But they have something else in common: Earlier we described the research that argued for distinct phases of cognitive change as seeming to characterize a person's whole intellectual character. But we did not point out then that in recent years, other developmental psychologists have argued that differences in performance on which Piaget based his claims about concrete and formal operational thinking seem to depend strongly on the way the problem is posed to a child, particularly on the experience that the child has had with the content of the problem and on the context in which the problem is set. In some cases, young children who theoretically should not have been able to think in formal-operational terms displayed characteristics of that kind of reasoning when the problem they were reasoning about was matched to their knowledge.

In this regard, it should also be noted further that Perry was working with students just entering particular fields of study. The dualists were also novices. The most casual inspection of our own experience underlines the fact that whenever any of us enters a new field, our first move is to seek out the authority in the field, to defer to received opinion. (We ordinarily do not repeat the multiplist position of assuming that all opinions are equal, because it takes only once or twice to realize that it is intellectually foolish to argue that all the so-called experts in a field are equally unauthoritative.) In other words, the more schematically-minded curricular planners who want to take developmentalists at face value may be mis-identifying a learned set of skills and the acquisition of a body of knowledge as generic development. What they call generic higher-order thinking may simply be the product of accumulated generic expertise in life.

D. On the Matter of Seeming Incompetent: A Predictable Phenomenon

There is one more issue that we might view differently if we think about growth not as a line moving onward and upward, but as socialization into a community of knowledge and discourse about it. It is the issue we opened with: why do so many writers at points of transition seem to write so badly?

Whenever we face the task of joining a new community, we have to manage a number of demanding tasks. We have to acquire a new body of knowledge, including both the current state of knowledge and the history of how that knowledge came about; we have to master new ways of thinking that may conflict with ways of thinking to which we have already habituated ourselves and which work just fine in some other community. We also have to find the voice of the community, and since the voice of a fully-socialized member is defined at least as much by what is not said as by what is said, by absence as much as by presence, capturing that voice is a difficult matter. And, of course, all of this is compounded by the anxiety, insecurity, strangeness, etc. that accompanies all ventures into new social space.

It is no surprise that as novices struggle to acquire new skills, many-perhaps most, to some degree-temporarily lose skills they seem to have once mastered. One of the most common problems in freshman writing courses is that after winter vacation, students return to their second semester seeming to have forgotten everything they learned in the first. Teachers offer a plausible explanation: "They forgot what they learned." In fact, there is an explanation more interesting. Typically, freshman composition courses are organized around "narration and description" in the first semester, "explanation and argumentation" in the second. To write competent narratives and descriptions, a first year student need only map his or her discourse directly onto the remembered (or fabricated) story, the object to be described-not a simple task, to be sure, but a kind of discourse that requires a writer to manipulate words referring to once concrete events, referents perhaps still visible to the mind's eve.

When we ask a student to write explanations and arguments, however, the student is dealing with more abstract matters: evidence, data, logical sequence. The student has no pre-defined form—story—in which to cast the discourse. Given these new cognitive demands, it is predictable that in many cases, skills of grammar and sentence structure that were seemingly mastered earlier will seem to deteriorate. The cognitive burden is too great for many students to maintain once-mastered skills at earlier levels. There is evidence from a variety of fields on the degradation of once mastered skills under the pressures of cognitive overload, and the evidence for the degradation of writing performance has been often demonstrated: among very young children (Jacobs, n.d.); among high schools students (Hake and Williams, 1985); among college freshmen (Nielson, 1979); among medical students (Jacobs, 1982).

If this evidence is credible, then we need not necessarily be dismayed when many of our students seem not to be able to function at a level we might hope. If our students are entering a new community of discourse under trying circumstances, we ought not be surprised at a brief period of seeming incompetence. They may in fact be incompetent. But that is something we cannot determine simply by looking at the surface of their performance.

A somewhat revised version of Kohlberg's model of moral thinking would reflect this pattern of socialization: Read "pre-conventional" as pre-socialized, "conventional" as socialized, and "post-conventional" as post-socialized (a matter we will address at the end), and we offer a different—though still geographical—account for the stages of community membership: not lower left to upper right, but outside to inside to beyond. Graphically, it is the difference between the two figures on p. 17.

This is not to deny that some students in fact have been badly educated before they come knocking at the door to our community. Nor do I claim that in some important sense (more of this later) many students are in fact intellectually unable to handle a demanding education. In the worst cases, students who are attempting to join a new intellectual community are both intellectually incapable and badly educated. What I will argue in what follows, however, is that if we entertain the metaphor of successful entry into a community of discourse as another point of view, we will not offer generic incompetence or inadequate preparation as the inevitable default explanation for apparent incompetence.

# III. Some Implications of the Community of Discourse Metaphor

If we understand the development of "higher order thinking" not just as a matter of cognitive growth but as socialization into a community of discourse, then we must change substantially how we view the process of education in general, and the teaching of writing in particular. First, the model would have to include those of us who constitute the community, its already socialized members. We would have to measure our students' failure and success not in terms of whether they move onward-and-upward, but whether we successfully bring our students into our community. We have to know and we have to show concretely—not explain in general— how we want them to behave so that they will behave like us.

Nothing identifies an outsider more quickly than the way a person talks. The problem is that it is not just what a socialized person says and how she says it that so identifies her, but what she does not say, because what a person does not say is what the community takes for granted—the common knowledge of the community. No one doing English literary history has to say that Shakespeare was a prominent Elizabethan playwright. Were this piece directed to readers in cognitive psychology, it would have been wholly inappropriate for me to have written earlier,





Other researchers have explored what are known as "illformed problems," problems for which there is no algorithmic solution, problems that have no easy and obviously correct and incorrect solutions.

Everyone in the cognitive sciences knows what an ill-formed problem is; I would have seemed amateurish to have defined it. Thus, membership in a community of discourse is defined at least partly by the absence of discourse, by silence.

Now imagine the writer who is novice to the community of the law: Assuming that what I have described above might plausibly predict that writer's history, how would we expect that writer to write?

- a. First, we would expect the writer to display what we have called concrete behavior. When we pose a problem in any detail, the writer will not redefine, rephrase, restructure the problem statement or its form. The writer will instead seize on those features of the problem that seem most concrete and will incorporate them into the solution.
- b. The writer will write what we will take to be self-evident banalities, things that need not be said in the community.
- c. We can expect that, because the novice will be trying to manage several cognitive demands simultaneously, the quality of his writing may seem less than entirely competent. Specifically, it will seem to be "bad" in two ways: (1) it will tend toward concreteness as a kind of default behavior, and (2) it will tend toward episodes of incoherence.
- d. Related to (c), the writer will seem not to be able to use the language of the law itself with any dexterity, will seize on the most prominent, i.e., concretely present features of the "dialect" of the law and probably exaggerate those features.

Not all writers will display all these characteristics. Indeed, some will display none of them. But enough of them do to dismay those of us who expect that mature college graduates ought to do better. I would like to examine each feature in a bit more detail.

A. Concreteness

In seminars I have given for new teachers of legal writing at the University of Chicago School of Law, I have tried to prepare them for how many of their students are likely to respond to the mataring

first few assignments (usually closed and open memoranda). To a new teacher of legal writing, the most dismaying characteristic of papers is that "they are all summary and no analysis." (In fact, no complaint is more common than that in all classes in all fields.) Given what we now know about the way novices behave, it is also the most predictable.

My explanation goes like this: I first lay out everything I have discussed thus far. Then I ask what are the most concrete features of the problem that they have given their students. There is first the language of the assignment. They can expect to see that language perhaps repeated word for word in the first paragraph of their papers. If the problem is simply stated, the novice does little to call attention to his novice behavior if he weaves it into the first paragraph. It is when the instructor gives a list of questions, problems, issues, points for the student to "think about" that the concreteness of the problem statement becomes a problem for the novice, because many novices will predictably go through each of those points, in turn, in the memorandum. (Recall how the novices responded in Voss et. al., 1983.)

A more significant kind of concreteness is the text of the decision they use in their memoranda. Once past a restatement of the problem in the introduction, many new law students will march through the text at their side, summarizing each paragraph in turn until they reach the end. And again, the reason for this kind of concrete behavior is predictable: these students do not yet control the knowledge expressed in those decisions; it is for most of them a kind of knowledge wholly alien to their experience. If they have no prior knowledge into which they can integrate this new knowledge, they cannot retain it easily. And so they translate the knowledge in the texts they are reading into their own language, thereby gaining over it some measure of cognitive control.

There is a theory of learning that we might call the "velcro theory of knowledge." The more old knowledge we have about a subject, the more new knowledge we can retain about it: (1) because we integrate new knowledge with old knowledge, and (2) because if we are rich in knowledge about a subject, we probably have organized that knowledge in a way that allows us to incorporate new knowledge into it quickly and efficiently (Glaser, 1985). But if we are novices, if we do not yet have that rich and wellstructured base of knowledge, we are more likely to feel that we have to instantiate and rehearse that knowledge on a page before we can get it under control in our minds. (And even if we are knowledgeable in a field, we often find it easier to get new knowledge under control by writing it out; most of us, however, know better than to use that summary in our final draft.)

Having no richly organized knowledge about matters of court decisions, new law students will find it difficult to get control over the content and implications of any specific decision. Their predictable reaction is to write out in summary form what is in the decision: it is a way of getting that knowledge under control. But once the writers have filled up a few pages with that summary, it may seem to them that they have completed the assignment. The better student will have mastered the content of the decision—one way or another—before doing the last draft of the memorandum. And it will show in the kind of text that student produces: it will not be a running summary of the text of the decision, but rather a memo that uses that decision in the analysis of a problem.

Thus, one common feature of bad first-year legal writing is predictable: a text that seems to be all summary and no analysis. It is the default move of many novice writers when they attempt to solve a strange problem: seize on its concrete features—in this case the text—and map it directly into the answer. We should be surprised and pleased when any of our students do otherwise.

And finally, this kind of writing strategy frequently leads to a paper that we might characterize as "Point-last," a paper in which in the last paragraph the writer finally discovers, formulates, states the claim that would count as an answer to the question proposed. This sort of organization reflects another kind of concreteness: the sequence of the paper reflects the actual events of the night before—start out at 10 PM with an opening paragraph that includes most of the language of the problem statement; from 11 PM to 4 AM, read, study, and then summarize the decision; at 4 AM, finish the summary and find a conclusion that reflects the thinking that should have been reflected at at the beginning of the paper. The organization of the memo is that of an intellectual autobiography, reflecting the writer's narrative sequence of thought and discovery.

# B. Self-evident Banality

The typical novice does not know what to take for granted, what to remain silent about, because she has not been specifically instructed in that matter, an impossible task under any circumstances, and because she has not yet read enough legal texts to establish a body of knowledge that would allow her to recognize what is absent in the texts that she is reading.

Here, for example, is the first paragraph from the first paper

written by someone who was no novice to writing but who was a novice to the community he was joining. He was a first-year law student at a very selective school of law, a student who had the June before graduated very nearly at the top (that metaphor again) of his class from a prestigious college and who in that community had been perceived as a competent writer (I know because I looked up his record):

It is my opinion that the ruling of the lower court concerning the case of *Haslem v. Lockwood* should be upheld, thereby denying the appeal of the plaintiff. The main point supporting my point of view on this case concerns the tenet of our court system which holds that in order to win his case, the plaintiff must prove that he was somehow wronged by the defendant. The burden of proof rests on the plaintiff. He must show enough evidence to convince the court that he is in the right.

To his first-year legal writing instructor, this paragraph was a tissue of self-evident banality, all redundant, all "filler." Obviously if the original ruling is upheld, the appeal is denied; obviously the plaintiff can win his case only if he can prove he was wronged by the defendant; obviously the burden of proof rests with the plaintiff; obviously the plaintiff has to provide the court with evidence. But at this point in his academic career, the writer had not yet so thoroughly assimilated that knowledge that he could unselfconsciously resist stating it.

Two common features of bad thinking are summary and selfevident banality. It is easy to charge with generic incompetence those who do not know the difference between what is important and what is not, who do not seem to know the difference between summary and analysis. Indeed, they may in fact be generically incompetent. But they may also be novices behaving in ways that novices predictably behave.

#### C. Less than Competent Performance

I have occasionally discussed these matters at seminars on teaching legal writing. At the end of one, a woman volunteered that I had recounted her academic history. She said she had earned a Ph.D. in anthropology, published several books and articles, and been judged a good writer. But, she said, she became bored with anthropology and went to law school, where during the first few months she thought she might be developing a degenerative brain disorder: She could no longer write clear, concise English prose. She was in fact experiencing a breakdown like that experienced by many students taking an introductory course in a complex field—a period of cognitive overload, a condition that predictably degrades our powers of written expression.

Here is a passage from the first paper written by a first-year law student who as an undergraduate had been evaluated as a superior writer (again, I know because I checked):

The final step in Lord Morris's preparation to introduce the precedents is his consideration of the idea of conviction despite the presence of duress and then immediate pardon for that crime as an unnecessary step which is in fact injurious for it creates the stigma of the criminal on a potentially blameless (or at least not criminal) individual.

At first blush, this seems to be merely a tangle of inarticulate syntax. But in fact it means something intelligible:

Before Lord Morris introduces his precedents, he considers a final issue: If the court convicts a defendant who acted under duress and then immediately pardons that defendant, the court may have taken an unnecessary step, a step that may even injure the defendant, if it stigmatizes him as criminal when he may be blameless.

This writer had to juggle several related actions, few of which he entirely understood, much less how they were related. When he tried to express these ideas, he dumped onto the page all the concepts that seemed relevant, expressing them in abstractions loosely tied together with all-purpose prepositions. His prose degenerated under the pressure of cognitive overload.

D. Infelicitous Use of Professional Language

Now here is a great irony: As this student struggled with his ideas, his prose predictably degenerated. But he was probably also trying to imitate the voice in most of what he had been reading for the first time. And what he was reading typically suffers from the same clotted abstraction:

Because the individualized assessment of the appropriateness of the death penalty is a moral inquiry into the culpability of the defendant, and not an emotional response to the mitigating evidence, I agree with the Court that an instruction informing the jury that they "must not be swayed by mere sentiment, conjecture, sympathy, passion, prejudice, public opinion or public feeling" does not by itself violate the Eighth and Fourteenth Amendments to the United States Constitution.

Sandra Day O'Connor, concurring, California v. Albert Greenwood Brown, Jr., No. 85-1563.)

This means,

When the jury assesses whether a death penalty is appropriate, it must not respond to mitigating evidence emotionally; rather, it must inquire into the defendant's moral culpability. I therefore agree with the majority: When a court informs a jury that it "must not be swayed by mere sentiment, conjecture, sympathy, passion, prejudice, public opinion or public feeling," the court has not violated the defendant's rights under the Eighth and Fourteenth Amendments.

As a novice in a field reads its socialized prose, he will predictably try to imitate those features of style that seem most prominently to bespeak membership, professional authority, expertise. And in legal prose, along with the terms of art, no feature of style is more typical than clumps of Latinate abstractions derived from verbs (they are called "nominalizations," one of my terms of art):

individualized assessment of the appropriateness of the death penalty . . . a moral inquiry into the culpability of the defendant.

The irony is that if a writer new to a field does not entirely control her ideas, her own prose will often slip into a confused style characterized by those same clumps of abstraction (Williams, 1988):

consideration of the idea of conviction despite the presence of duress and then immediate pardon.

What we should find astonishing is not that so many novice writers write badly, but that any of them writes well.

IV. A REFORMULATION OF THINKING AND WRITING

As I said earlier, I would like to reformulate the matter of cognitive development and more particularly the acquisition of skilled problem-solving/critical-thinking abilities as a pattern of socialization along the lines proposed by Lawrence Kohlberg for moral reasoning. Instead of pre-conventional, conventional, and post-conventional, I propose reformulating those stages as pre-socialized, socialized, and post-socialized. (I do not assert that these stages have the discrete structural properties that Piaget or Kohlberg attributed to their developmental descriptions.) In what follows, I will extend the description to include the practicing lawyer, presocialized, socialized, and post-socialized.

# A. The Pre-Socialized Writer

The typical pre-socialized writer/thinker who behaves in ways that suggest generic incompetence has all the characteristics of Piaget's concrete-operational thinker, Perry's dualist, Kohlberg's pre-conventional moralist, and the generically ineffective critical thinker/problem solver. First, he or she is not yet aware of the tacit conventions of a community's discourse. It is the equivalent of a freshman who writes in a research paper, "I began my research by going to the library." In law school, it is the inappropriateness of referring to the court as "you" in one's first brief. In a law firm, it is the inappropriateness of "I looked everywhere in West Law and Lexis, but I couldn't find any cases to use," rather than "There appears to be a a lack of case law on this matter."

A pre-socialized trait more difficult to overcome is the excessive deference to the authority of the concrete. In both law school and law firms, it manifests itself in all the ways that we described earlier. In the early memos of the new lawyer, it often manifests itself as the tracking of the concrete language of the law into the concrete language of the memo or brief, an inability or unwillingness to paraphrase the literal words from a law or a decision because, as one new lawyer put it, "the law is the law, and you can't paraphrase the language of the law." In another form, it is the research memo that the writer maps onto his or her history of researching the problem, the memo whose narrative structure is drawn from the literal story of the research, rather than from the structure of the problem and its solution, a structure that should model the abstract issues of the law pertinent to the concrete problem at hand. This "tyranny of the concrete" combines with a tyranny of someone else's authority when the inexperienced lawyer takes the structure of a reply brief point by point directly from the structure of the brief replied to, instead of restructuring the argument to fit his or her own theory of the case.

More interestingly, it also manifests itself in the general quality of writing. As a novice, the student can "see" only that which is manifestly present in the discourse of the law. The most concretely manifest features of legal writing are, first, the terms of art and the archaic usages and, second, the often excessively complex style. It is another version of being locked into the concrete. New law student typically overindulge in the "heretofore," "aforementioned," "witnesseth" kind of jargon.

In a law firm, this combination of confusion and degradation of skill is most easily identified in the inability of new associates to dictate their memos, letters, and briefs. Experienced lawyers who are skilled in dictation control the content of their field, the tacit conventions that make them sound like a lawyer, and the tacit conventions of structure that allow them to decompose a discourse into manageable series of sub-problems while maintaining a sense of the overall structure and end-goals. The problem is not that dictating qua dictating is a learned skill (though it partly is). For the experienced lawyer, the content and structure of the discourse being dictated is not strange, the content not confusing, the conventions at least tacitly understood. Once those matters are relatively automatized, the experienced lawyer can direct all of her attention to the problem before her and the language she will use to solve it.

B. The Socialized Writer

Once socialized, the law student or new lawyer exhibits a kind of behavior Kohlberg attributes to the conventional moral thinker. He or she behaves in accord with the values of the immediate social universe. Indeed, the major problem of the thoroughly socialized writer is that the tacit assumptions that were entirely covert and strange are now part of the unstated cognitive universe, so much so that the outsider, the non-lawyer, may find the discourse of the socialized writer opaque. The writer takes too much for granted, fails to anticipate what the non-lawyer audience does not know. And so the ordinary citizen finds legal prose opaque, aloof, complex. Since every reader of this journal would find a legal example less than compelling on this matter, let me offer a pair of passages from a different field. These two passages have the same information, but in one, the information can be inferred by a socialized member of the community; in the other the information is explicitly stated for those who are not. Which one is which is no mystery.

An appreciation of the effects of calcium blockers can best be attained by an understanding of the activation of muscle groups. The proteins actin, myosin, tropomyosin, and troponin make up the sarcomere, the fundamental unit of muscle contraction. The thick filament is composed of myosin, which is an ATPase or energy producing protein. Actin, tropomyosin, and troponin make up the thin filament. There is a close association between the regulatory proteins, tropomyosin and troponin, and the contractile protein, actin, in the thin filament. The interaction of actin and myosin is controlled by tropomyosin. Troponin I, which participates in the interaction between actin and myosin; troponin T, which binds troponin to tropomyosin; and troponin C, which binds calcium constitute three peptide chains of troponin. An excess of  $10^7$  for the myoplasmic concentration of C<sup>++</sup> leads to its binding to troponin C. The inhibitory forces of tropomyosin are removed, and the complex interaction of actin and myosin is manifested as contraction.

When our muscles contract, they depend on calcium. Once we understand what calcium does, we can understand how muscles are affected by drugs called calcium blockers.

The fundamental unit of muscle contraction is the sarcomere. The sarcomere has two filaments, one thin and one thick. These filaments are composed of proteins that either cause contraction or prevent contraction. Two of these proteins cause a muscle to contract. One protein is in the thin filament, the protein actin. The other protein is in the thick filament, the protein myosin, an energy producing or ATPase protein. When actin in the thin filament interacts with myosin in the thick filament, they cause a muscle to contract.

The thin filament also contains proteins that inhibit contraction. They are the proteins troponin and tropomyosin. Troponin has three peptide chains: Troponin I, Troponin T, and Troponin C.

- a. Troponin I participates in the interaction between actin and myosin;
- b. Troponin T binds troponin to tropomyosin;
- c. Troponin C binds calcium.

When a muscle is relaxed, tropomyosin in the thin filament inhibits actin, also in the thin filament, from interacting with the myosin in the thick filament. But when the concentration of  $C^{++}$  in the myoplasm in the sarcomere exceeds  $10^{-7}$ , the calcium binds to troponin C. The tropomyosin then no longer inhibits actin and myosin from interacting. When actin and myosin interact, the muscle contracts.

The second is easier to read not because it consists of short sentences or even because it has information the first one does not . . . the sarcomere, the fundamental unit of muscle contraction. The thick filament is composed . . .

. . . the sarcomere. The sarcomere has two filaments, one thin . . . .

When a lawyer takes for granted the knowledge of his audience and simultaneously suffers from syntactic breakdown, the outsider audience will find his discourse unreadable because it will be both badly written and directed entirely toward other socialized readers, excluding those who do not share the universe of legal learning. And so we find sentences of this next kind, entirely grammatical, but so dense with syntactic presuppositions that, except for someone entirely familiar with the content, they are almost opaque (not a concocted example):

The Internal Revenue Service in Private Letter Ruling 81-9041, in the course of a ruling which concluded that a sale of mortgages between members of an affiliated group filing a consolidated return, followed by a pledge of the mortgages to secure mortgage-backed bonds, was a deferred intercompany transaction and not a disposition of the mortgages which triggered the recognition of installment gain, also applied and relied upon Revenue Ruling 76-269 to hold that the use of a wholly-owned subsidiary of the builder-parent to originate the mortgages in the manner contemplated under the proposed arrangements would not cause the builder to be considered to have received purchase price from the purchasers.

This writer was so thoroughly socialized into his world that he was wholly unaware of the effect of his language on his reader. There is a bit of pre-socialized writing here, as well: the writer was staying very close to the concrete regulatory language he found in his authoritative texts.

#### C. The Post-Socialized Writer

The next stage in the development of the thoroughly socialized writer is in some ways no less traumatic or risk-laden than the transition from presocialized to socialized. The risk is best captured by one young and very new lawyer in a prestigious East Coast law firm. At the end of a training program, he said to me, quite seriously and resentfully, "We've just spent three years learning to sound like lawyers, and now you want us to sound like ordinary people." And he was right. We were being unreasonable. These young lawyers had struggled successfully to join a social and intellectual community in law school that required them to master a form of discourse that was strange and threatening, and to outsiders still is. It was now familiar and supportive. Or at least so it seemed. And here we wanted them to give it up at the very moment that they had entered yet another new world, the world of their law firm.

In fact, the senior partners had become convinced that their junior associates did not write well, did not communicate with clients clearly and easily. In short, these senior partners wanted their juniors to become post-socialized, or rather socialized again into a new and wider universe, to go beyond—outside—the social/professional community of the law and write in ways that would communicate with ordinarily intelligent clients. Had the writer of the advice letter quoted from above been able to go beyond his community, give up the mystery of the language, rely on his own ability to explain the matter in a way that did not compromise his own position but did communicate with the reader, he might have written something closer to this:

In Private Letter Ruling 81-9041, the Internal Revenue Service ruled on members of an affiliated group that sought to file a consolidated return. The Service held that if you sell mortgages to one another and then pledge the mortgages to secure the bonds that you back by those mortgages, you would not have engaged in a transaction between companies. Therefore, you would not have to recognize any installment gain. In this ruling, the Service also relied on Revenue Ruling 76-269. In that ruling, it held that if you are the parent of a builder and you use a wholly-owned subsidiary to originate mortgages, you would not be held to have received the purchase price from the purchasers.

But the risk in writing like this is manifest. First, the writer must be confident that he understands the law well enough to give up its concreteness. Indeed, he must be ready to give up the mystery of the law, in general. But give up the mystery of the discourse, and one risks losing the authority of one who understands the mystery of the profession. I proofread this manuscript while returning from a conference with a committee of senior lawyers in a very large West Coast corporation, where one of them said that their non-lawyer clients within the corporation explicitly insisted on opaque legalese under the belief that it would protect them against litigation. It is the risk that every writer/communicator takes when he or she gives up the jargon, the freedom to take for granted what the "in-group" shares, the seeming authority of professional language.

And it is here that the model proposed by Lawrence Kohlberg is illuminating. You will recall that the third stage of Kohlberg's scheme of moral development was a kind of reasoning he called post-conventional, the kind of reasoning of a person who understands that moral behavior is not directed by rules, but rather guided by principles. In our matter, let me simply state, naively of course, that the transcendent value of a wholly decent community must be that of guileless communication, communication whose intent is to express as clearly as possible what it is the writer wants the reader to feel, understand, believe, do. (I appreciate how utopian this claim must seem.) Such an objective may require discourse of great complexity; its vocabulary, its style may place great demands on the reader. Indeed, only a few readers may have the prior knowledge necessary to understand it. Nevertheless, within the system of communication available to the writer, the writer will make open communication her primary value. This objective carries with it great risks, because it requires the writer to find the right compromise among the demands for language that is clear, language that is persuasive, and language that signals authority without depending for its power on mere verbal opacity; i.e., the writer must keep tacit some shared knowledge if the writer is to be recognized as a member of the discourse community, but that tacit knowledge cannot remain tacit when one audience of a multiple audience requires it. Imagine yourself as the writer of the passages about calcium blockers. Which would have been appropriate for an audience of medical peers? One immediately says the first, but the second is clearer, more readable for any audience.

Given this system of values, the legal writer in particular is put at risk, because what he says may be sayable in deceptively simple language. And those who want the authoritative answer may find its simplicity insufficiently authoritative. Nevertheless, we ought not encourage in our audience whatever dualist impulses are latent in their attitudes.

Now, what I have attempted to lay out here is by no means the invariable development of every writer. Some students never tumble to the conventions of a particular discourse, never learn how to sound like a native. Some, once socialized, never give up their jargon and opacity. And some are able to maintain a high quality of discourse under the most trying circumstances. They enter college writing well and never stop. What special skill do they have? They must have the ability to control the fundamentals of writing so well that those skills are virtually automatized under all circumstances; they must have the agility of mind to gain quick control over a new body of complex knowledge; they must have the insight to infer from reading the tacit conventions of a new universe of discourse and the confidence to express themselves clearly enough not only to communicate their good ideas, but to risk revealing their bad ones as well. Indeed, a research project of very considerable interest would be the contrastive history of those who never learn to write well, the history of those who learn to write well, and the history of those who seem always to have written well.

Lacking that history, however, we are left to our intuitions about the development of competent professionals. But it should be an informed intuition, especially for those who are responsible for teaching others. Uninformed, we are left with folklore, the same kind of folklore that made some believe that the foundations of a logical mind lay in Latin, or geometry, or traditional grammar, or philosophy. The folklore about the first-year students in schools of law is that they write badly because they were badly educated. The reality is often otherwise.

# V. RECONCILING METAPHORS OF DEVELOPMENT AND SOCIALIZATION.

I have laid out two apparently conflicting metaphors: the metaphor of the graph and the metaphor of the community. In fact, I do not believe that they must conflict. If we believe that at some level of our multiple selves there is an enduring, developing, growing central self (a good many do not so believe), and if we know that we are behaving like novices—or dualists, or concrete-operational thinkers, or pre-conventional moral reasoners—then we are not those categories, but only behaving like the behavior predicated of those categories. It is when we behave in those ways and we are not conscious of so doing that we "become" a dualist or a concrete-operational thinker.

This is a matter called "meta-cognition"—being aware of the act of thinking, monitoring our behavior, understanding it as we behave it. Once we understand that we are likely to behave in certain ways in certain contexts under certain conditions, then the fact that we may experience episodes of seeming regression, bad thinking—concrete thinking, ought not dismay us as inexplicable.

We may find them frustrating, exasperating, even humiliating, but if we are comfortable with the idea that those episodes do not betoken some kind of permanent incompetence, we can live through them. Now translate that into teacher-talk. "If you understand that you are likely to behave in certain ways . . . ."

In fact, we should add to the idea of cognitive growth the capacity to engage in exactly this kind of meta-cognition, the ability to monitor thoughts and behavior, and not to take our apparent failures as characterizing **who** we are, but rather only **what we are doing**. The word "novice," after all, is simply a term that defines a relationship to a particular context. It is not like the terms "dualist" or "concrete-operational thinker" or "post-conventional moral thinker," terms that define a condition of being.

True, a novice lacks certain characteristics and competencies: the novice does not **yet** have the knowledge of an expert in a community or **yet** have the habits of thinking or the tone of voice. But that is a lack only in relation to the community at the moment the novice is in that relation. We are all novices in some communities and experts in others. What we define as novice behavior is only that: local behavior. That behavior is the behavior of every person who stands outside a community of knowledge wanting to come in. It is behavior as predictable as feeling sad or confused or angry. It is not a condition of being, so long as we are aware that we are behaving in that way.

My intention here has been to suggest that we ought not judge writing or the progress of our students by a metric of development that we can simply map onto some age or grade level, any more than we can map it onto weight or height. Indeed, we may measure the progress of some of our students as much by the degradation of a skill as by its improvement. The degree to which we can escape—or help our students escape—being pigeon-holed depends on how self-aware of their own behavior we can help them become. Once they are aware that they are behaving in wholly predictable ways, they free themselves from "being" the name of that way.

But before they can do that, we have to do it for them.

#### Bibliography

- Bryant, Peter. "Piaget's Struggle and the Struggle about Piaget." In Jean Piaget: An Interdisciplinary Critique. Ed. Sohan Modgil, Celia Modgil, and Geoffrey Brown. London: Routledge and Kegan Paul, 1983.
- Chi, M., P. Feltovitch, and R. Glaser. "Categorization and Representation of Physics Problems by Experts and Novices." Cognitive Science (1981) 5: 121-52.
- Colomb, Gregory G. and Joseph M. Williams. "Perceiving Structure in Professional Prose." In Writing in Nonacademic Settings. Ed. Lee Odell and Dixie Goswami. New York, NY: The Guilford Press, 1986.
- Gilligan, Carol. In a Different Voice: Psychological Theory and Women's Development. Cambridge, Mass.: Harvard University Press, 1982.
- Glaser, Robert. "Education and Thinking: The Role of Knowledge." American Psychologist (1984) 39: 93-104.
- Hake, Rosemary and Joseph M. Williams. "Some Cognitive Issues in Sentence Combining: On the Theory That Smaller Is Better. In Sentence Combining : A Rhetorical Perspective. Ed. D. Daiker, A. Kerek, M. Morenberg. Carbondale, Ill.: University of Southern Illinois Press, 1985.
- Inhelder, B. and Jean Piaget. The Growth of Logical Thinking from Childhood to Adolescence. New York: Basic Books, 1958.
- Jacobs, S. Composing and Coherence: The Writing of Eleven Premedical Students. Washington, DC: Center for Applied Linguistics, 1982.
- Jacobs, S. "The Development of Discourse Structure in Young Children." Honolulu, n.d.
- Johnson, Mark. The Body in the Mind: The Bodily Basis of Meaning, Reasoning, and Imagination. Chicago: University of Chicago Press, 1987.
- Kelley, David. The Art of Reasoning. New York: Norton, 1988.
- Kohlberg, Lawrence. The Psychology of Moral Development. Vol 2. New York: Harper and Row, 1984.
- Lakoff, George. Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. Chicago: University of Chicago Press, 1986.
- Larkin, J., J. McDermott, D. Simon, and H. Simon. "Expert and Novice Performance in Solving Physics Problems." Science (1980) 208: 1335 -1342.
- McMillan, James H. "Enhancing College Students' Critical Think-

ing: A Review of Studies." Research in Higher Education (1987) 26.1: 2-29.

- Newell, A. and H. Simon. Human Problem Solving. Englewood Cliffs, N.J.: Prentice Hall, 1972.
- Nielson, B. Writing as a Second Language: Psycholinguistic Processes in Composing. Unpublished Dissertation. San Diego: University of California at San Diego, 1979.
- Perkins, D.N. "Are Cognitive Skills Context Bound?" Educational Researcher (1989) 18.1: 16-25.
- Perry, William G., Jr. Forms of Intellectual and Ethical Development in the College Years. New York: Holt, Rinehart and Winston, 1970.
- Shute, George E. Accounting Students and Abstract Reasoning: An Exploratory Study. Sarasota, FL: American Accounting Association, 1979.
- Simon, D. and H. Simon. "A Tale of Two Protocols." In Cognitive Process Instruction. Ed. J. Lochhead and J. Clements. Philadelphia: Franklin Institute, 1979.
- Tomlinson-Keasey, C. "Formal Operations in Females Aged 11 to 54 Years of Age." Developmental Psychologist (1972) 6: 364.
- Voss, J. and T. Post. "On the Solving of Ill-structured Problems. In *The Nature of Expertise*. Ed. M. T. Chi, R. Glaser, and M. Farr. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1988.
- Voss, J., T. Greene, T. Post, and B. Penner. "Problem-Solving Skill in the Social Sciences. In *The Psychology of Learning and Motivation: Advances in Research Theory*. Vol. 17. Ed. G.H. Bower. New York: Academic Press, 1983.
- Williams, Joseph M. Style: Ten Lessons in Clarity and Grace. Third ed. Glenview, Ill.: Scott Foresman, 1988.