Part II. Reading, Learning, Teaching

Though this structure of PROBLEMS and their articulation in introductions is no more complex than the structure of a sentence, it is still complex enough to make us wonder whether teaching it is worth the difficulty. Does a good introduction make a difference large enough to justify the time it takes for students to understand its structure? Can they in fact understand and use that structure? If not, we waste our time and that of our students teaching it. But some good evidence suggests that the answer to both questions is yes, and that students agree. First, I will offer some evidence that when PROBLEMS are well-articulated, it makes a difference in how we evaluate student writing and that students respond positively to studying these matters. But there are two obstacles to their success: first, many of our students seem to be unaware that they should think in terms of finding PROBLEMS at all, and second, they have a particularly difficult time dealing with the kind of PROBLEM that we ask them to address most often in academic settings. I will deal first with our responses to their problems, then to their responses, then with the problems that make dealing with all this so vexing.

1. Reading and Responding to Introductions

It is beyond debate that the opening "frame" of understanding through which we engage a text profoundly influences how we respond to the rest of it. Reading is a goal-driven activity that we organize around a preliminary sense of the *telos* of a text, a *telos* that organizes, filters, and shapes our reading experience (Kieras, Spiro, Meyer). But the research on this matter has not focused on how introductions to longer, naturally occurring texts influence not just how well we selectively remember what we read, but how we judge texts and their authors. And as a consequence, we cannot confidently project what we learn from a laboratory finding to the classroom. I offer three kinds of evidence suggesting that different kinds of

introductions described here encourage us to respond differentially to texts as a whole and to authors in particular: a reported observational study of one writer (Berkenkotter et al), an analysis of 42 introductions to Senior Papers in English and History at the University of Chicago, and the results of a study that asked faculty to read and evaluate papers identical in all regards except for their different introductions.

Introductions as Evidence of Socialization

In a study examining how one graduate student ("Nate") became socialized into his field, Berkenkotter et al examined the style, structure, and content of three of his introductions. The character of his first one encouraged them to judge Nate as "imitative," as an "isolated newcomer," his rhetorical strategies as "ineffective." His entire introduction:

How and Why Voice is Taught: A Pilot Survey Problem

Problem

The English profession does not agree on what a "writer's voice" means or how the concept should be used to teach writing, equating it to personal style, literary persona, authority, orality, or even grammar.[1] When teachers, writers, and researchers comment on the phenomenon of voice, they usually stay on a metaphorical level.[2] Voice is "juice" or "cadence."[3] The concept appears to be too illusive and too closely tied to personal rhetorical philosophy, disallowing a generally accepted definition for common usage.[4] A novice writing teacher, then, might say "You don't know what it is. I don't understand it. How or why should I teach it?"[5]

It should be taught.[6] Most experienced teachers and accomplished writers recognize that in spite of the wide range of definitions the concept of voice is somehow central to the composing process.[7] Some believe that without voice, true writing is impossible.[8] Until the profession understands the phenomenon or in some way addresses what these experts are saying, a paradox exists, and the novice writing teacher confronts a mixed message.[9] Voice should not remain just another eccentricity in an already idiosyncratic profession.[10]

Background

Who are these "accomplished" teachers, writers and thinkers who uniquely honor a writer's voice?[11] Aristotle, Coleridge and Moffett have acknowledged the impact of the "self" on an audience.[12] Donald Murray and other contemporary rhetoricians state without reserve that this self, the writer's voice, is "at the heart of the act of writing."[13] From my

experience writing and teaching writing I know that a writer's voice can spirit a composition and, if the voice is misplaced or confused, can drive a teacher or writer batty.14 If I say to my class "No, No the voice is all wrong here," or "Yes, I can hear you now," I might induce the kind of authority I seek, but I am probably sending one of those strange undecipherable teacher-messages that students rightfully ignore or misinterpret.15 I am liable to get talk-writing or emotions unbound.16 Like the accomplished experts and theorists, I tacitly know that voice is important, but I am not necessarily equipped to translate this importance for my students.17

Are there other teachers who face or at least perceive the same dilemma?18 I sense that there are, but a hunch is not good enough.19 Since I have invested time and energy searching the question of voice, I worry that my observations and suspicions are egocentric.20 Before I tire myself and my colleagues with a series of inquiries and experiments, I must decide if a problem actually exists.21 Therefore I composed a pilot survey to tell me if I should continue my study of voice and in what direction.22 The survey, a questionnaire, was aimed at other writing teachers in the Pittsburgh area.23 By asking if, how, and why voice is taught I hoped to understand the boundaries of my questions and my universe.24

As signs of Nate's pre-socialized state, the authors point to his lack of citations, to diction like "batty" (14) and "hunch" (17), to self-referential language like "the boundaries of my question and my universe" (22) (though such self-referential language appears in a very substantial portion of academic writing). They observe that "we cannot expect him to exhibit a command of the conventions that Swales or Dudley-Evans describe," that his writing "does not create a 'research space'." They are right: Nate does not exhibit a command of the conventions, does not create the kind of research space that Swales describes, and thus earns their assessment of him as unsocialized.

But in fact, Nate did create a research space that included *all* the elements of a PROBLEM specified not only by Swales' and Dudley-Evans, but by the fuller model I have described here. Nate's problem is not that he failed to articulate the elements of a research space, because in fact he did articulate every one of them. His problem was that he did not know how to use those elements to shape that space, because he did not know the grammar of introductions. In a revision below, I have deleted metadiscourse and deadwood and changed some diction. But most importantly, I have re-arranged the order of his sentences and grouped them into the coherent

units of Stasis, Disruption, and Response. (Numbers refer to the sentences in the original.)

> [Critics from Aristotle to Coleridge have emphasized the impact of "self" on an audience.12 According to contemporary rhetoricians like Donald Murray this self is the writer's voice and is "at the heart of the act of writing."13 Most teachers also recognize that voice is central to composing7; that it can spirit a composition; that when it is misplaced or confused, it confuses readers.14 Lacking voice, true writing is impossible,8 so we should teach it.6] **CONTEXT/Stasis**

> [But the profession disagrees not just on how to teach it but even what "voice" means.1 When some teachers, writers, and researchers discuss voice, they stay on a metaphorical level:2 voice is "juice" or "cadence."3, or tie the concept to a rhetorical philosophy that equates it with personal style, literary persona, authority, orality, or even grammar.1
>
> **CONDITION/Disruption**

> [*So what*?] As a consequence, the novice writing teacher may think voice is important, but because the concept has no generally accepted definition, she may not be able to make that concept important to her students.17 When she says to a class "No, No, the voice is all wrong here," or "Yes, I can hear you now," she might induce a kind of authority but may send a message that students misinterpret.15 Or she might finally say "I don't know what voice is. I don't understand it. How or why should I teach it?"5 **COST/Disruption**] **PROBLEM**

> [To address these questions,22 I conducted a pilot survey of writing teachers in the Pittsburgh area to determine how and why voice is taught.23 **PROMISE/Resolution**

I do not argue that this revision is in all ways superior to the original. Indeed, one of my colleagues thought the original charming, my revision so repellent that it could have been "written by a robot." But he also said that he would not be surprised to read it in "certain grindy journals" (I did not ask him which ones he had in mind). I am interested only in his last observation, because I think that it indicates in his judgment, the revision is close to a prototype (too close for his tastes).

My point: Berkenkotter and others are right about Nate: His diction, his excessive metadiscourse and personal narrative demonstrate that he was indeed not yet socialized into the professional discourse of his field. But it is crucial to recognize that in his introduction, he *explicitly* formulated all the crucial components not only of Swales' "research space," but of the elements of CONTEXT, PROBLEM (including CONDITION and COST), and

PROMISE-OF-SOLUTION that could have inhabited a Stasis - Disruption - Resolution structure. He simply did not know how to articulate them in a way that reflected the "grammar" underlying the rhetoric of PROBLEM-posing. I have refereed manuscripts whose authors formulated their objectives in terms so much more primitive that their opening paragraphs said little more than "Here's something that I know and desperately hope that you don't but might like to." To the degree that Nate intuitively understood the rhetorical *elements* of a PROBLEM, he was more socialized than many new PhD's. It would be interesting to know how much the ill-formed introduction of this paper influenced the evaluation of its holistic quality, because introductions appear to make a difference.

Correlations between Introductions and Judgments of Holistic Quality

To determine whether the perceived quality of introductions does correlate with perceived quality of whole, I analyzed 42 Senior Papers from English and History at the University of Chicago. Twenty papers received Honors (9 in history, 11 in English); 22 a grade of B- or lower (12 in history 10 in English). Here are two representative introductions (in the interests of space, I condense the O'Connor example and drop citations; the original was twice as long):

1. Hemingway's *A Farewell to Arms* blends the themes of love and war, based on this grand scale of love and death. The themes of love and war and the bliss and tragedy originate, develop, and intermix, often coexisting in certain sections of the novel, depicting life as it is. The result of this intermixing is a fusion of the idyllic or comic and the tragic or disturbing, which is affected by the impending doom of the war. *A Farewell to Arms* is about a love affected by the events that happen during a war. It is a narrative which follows the development of the psychological characteristics of two lovers in tragic and idyllic settings, developing their relationship amidst the unstable surroundings of a country at war. Hemingway writes of two lovers as they represent average human beings in their emotions, thoughts, and actions in a natural and neutral world of love and war. He describes the lovers as they stand on unstable ground during this period, comforted by the neutral territory they find amidst the instability of their surroundings.

2. In 1959 Flannery O'Connor was invited to meet James Baldwin but declined, saying that his visit "would cause the greatest trouble, disturbance and disunion". Reading this, we could conclude that

O'Connor was racist. But in a 1964 letter, she hinted at a real reason, one not obviously racist:

> About Negroes, the kind I don't like is the philosophizing prophesying pontificating kind, the James Baldwin kind. Very ignorant but never silent. Baldwin can tell us what it feels like to be a Negro in Harlem but he tries to tell us everything else too.

But the ambiguous treatment of race throughout her work remains a difficult subject. In *The Habit of Being*, Sally Fitzgerald describes O'Connor's puzzling presentation of race as the product of "an imperfectly developed sensibility" and that "large social issues as such were never the subject of her writing." Fitzgerald's analysis, however, is only half true. Large social issues were not the subject of her writing, but her attitudes concerning race were far from the product of an imperfectly developed sensibility. They were well-developed and firmly based intellectually in her religious beliefs. To O'Connor, to treat racism as a social problem is to misunderstand it. Analysis of "The Artificial Nigger" and "Everything That Rises Must Converge" shows that her treatment of racism as a spiritual crisis was more sympathetic to racial equality than is apparent and, far from indicating that racism was an aberration in her life, it suggests that her understanding of racism set her apart from other liberals of her time.

Which received Honors is obvious. They represent these general differences:

Honors (20) B-/lower (22)

Length

1. Introductions at least 1/10 length of paper: 70% (14) 32% (7)

Rhetorical Complexity of PROBLEM/SOLUTION

2. DENIAL (*but, however,* etc.):   65% (13)
    31% (7)

3. Other semantic signal of Condition   80% (17)
    43% (10)

(*puzzle, unclear, discrepancy*, etc.)

4. Cost stated   60% (12)
    18% (4)

5. Gist of SOLUTION at end of introduction: 50% (10)
    28% (6)

Summary

Number with all five positive elements present:	25% (5)	5% (1)
Number lacking all five:		20% (4)
41% (9)		

These correlations are far from perfect: Some Honors papers had one-paragraph introductions, no Disruption (apparent to me), no gist of a SOLUTION. But only four of them lacked all the positive characteristics. Among the B- and lower papers, some had introductions as long as the longest of the Honors papers; most had at least one of the elements of a prototypical PROBLEM statement. But only one paper had all of them; all positive characteristics were missing in 9 of 22. The overall pattern was clear to me: In general, Honors papers had rhetorically more complex introductions; B- and lower papers, less complex.

I do not assert that the Honors papers were highly evaluated *because* of their complex introductions, the others less well *because* of their more primitive ones. I point only to a general correlation. It is now worth considering, however, whether in fact the rhetorical complexity of introductions does influence how we evaluate what follows. The next study tested the assumption that, in fact, good introductions influence holistic judgments.

Controlled Observations

Because the data reported above are retrospective and uncontrolled, I created a series of three papers alleged to have been written by a first year student in the fifth week of the first quarter of a Humanities course. These papers differed *only* in their introductions. I modified two of the introductions you have already seen so that they would be identical in all respects except those at question here. Here are the opening three sentences that were common to all three introductions:

> In 433, Corcyra and Corinth became involved in a dispute over which of them should control the city of Epidamnus. Because they could not settle the dispute between themselves, they sent representatives to Athens to appeal for its help against the other. After hearing the speeches and debating among themselves, the Athenians finally decided to support Corcyra.

They differed only in what follows:

1. The two speeches differ in many ways, but the most important difference is in the reasons that each side gives to support its appeal

for help from the Athenians. It is important to understand the appeals that Athens accepted and rejected before the war because those appeals can tell us something about Athenian values. In order to show what these values are, I will first discuss the Corcyrean speech and then the Corinthian speech.

2. Corcyra emphasized how they could help Athens in the coming war while the Corinthians appealed to history and justice. Since Athens was the birthplace of Socrates and Aristotle, it would be easy to think they would side with justice, but the Athenians supported Corcyra. It's important to understand the values that Athens rejected before the war, because we could be misled when they try to explain some of their cruel actions during the war on the basis of justice. The speeches describe the values of justice, honor, and tradition, which they claim to hold but in this case reject, and the values of pragmatism and self-interest, which they probably really believed in

3. The appeals differ in that the Corinthians appealed to Athens' sense of justice, while the Corcyreans appealed to their self-interest. After some debate, the Athenians finally sided with Corcyra, because at this time the Athenians knew that war was coming and that they might need Corcyra's naval power. We can best understand Athens' real values and motives if we look carefully at the specific appeals the Corcyreans and Corinthians made and that the Athenians accepted and rejected.

The first announces only a topic; the second articulates a full PROBLEM-SOLUTION rhetorical structure; the third articulates no PROBLEM, but ends with what could be the gist of a SOLUTION to a PROBLEM not yet articulated.

Each of these three introductions was then joined to five identical following paragraphs to create three essays that differ only in their introductions (see Appendix 1). The three "essays" so constituted have been read and evaluated by several groups of faculty. In uncontrolled settings, groups have consistently evaluated the essay introduced by introduction #1 the lowest, by #2 in the middle, and by #3 the highest. In controlled readings involving 55 instructors from colleges and universities in the Midwest, readers were asked to give a numerical grade ranging from 1 to 10 to the version they read, to evaluate on the same scale the apparent "critical thinking" ability of the putative student-authors, and to write a one-

sentence comment that summed up their response and the reason for it. (Individuals readers, of course, read and evaluated only one version.) The quantitative results:

	Holistic Score	Critical Thinking
Version #1:	4.8	4.1
Version #2:	5.8	5.9
Version #3:	6.5	6.3

The discursive comments reflect these numbers. In short, when an essay opens with the PROBLEM, it appears to elicit perceptions of higher quality not only of the essay, but of the mind attributed to the putative author. What is seen as "just summary" in one context is seen as "some evidence offered" in another. A writer judged to be "not perceptive" on the basis of one introduction is judged "thoughtful" on the basis of another.

I do not want to exaggerate the influence of a well-formulated introduction. But on the basis of these three sets of data, introductions appear to constitute an element of discourse that plays a perceptible role in our understanding of texts and should play a role in our students' rhetorical education. The next question is whether students can recognize the power of that role.

2. Student Judgments about the Importance of PROBLEMS

The University of Chicago offers an elective course officially called "Advanced Academic and Professional Writing," a.k.a., The Little Red Schoolhouse. It now annually enrolls 400+ students, undergraduate, graduate, professional, and post-doctoral. The course consists of several lectures on matters of sentence style, discourse style, and so on, all based on the principle of bi-level structuring of discourse outlined in Colomb and Williams (1990) and described here. At the beginning of each quarter, students fill out a questionnaire asking about self-perceived problems with their writing, and then at the end evaluate how well they believe they have mastered various elements of style and structure and rate the perceived usefulness of each principle that they have learned. Since substantial writing is required in almost all College and University courses, most students have

an opportunity to evaluate the Schoolhouse as they are learn and use what it offers them.

Table 1 represents four of 10 kinds of difficulties that students were asked about before and after the course. (These are responses for 1991-94, based on 476 of 820 students enrolled.) At the beginning of the course, students reported they felt more inadequate formulating a PROBLEM and writing an introduction than being clear and organized. And it was in those two areas that they reported the greatest relative progress. Apparently, the value of these structures is not only in their being a rhetorical plan for writing introductions but as a heuristic for formulating PROBLEMS.

Table 1. Relative Progress

	Pre-LRS	Post-LRS	Change
Clarity of Sentences	3.3	5.1	+1.8
Organization	3.2	4.6	+1.4
Formulation of problem	2.8	4.8	+2.0
Writing Introductions	2.2	4.6	+2.4

(Scale: 1 - have had great difficulty ; 6 - have had no difficulty)

Table 2 illustrates reported comparable values for just three of the ten units of the course: style, the placement of points (roughly equivalent to major claims), and problem-formulation. In the first ten years of the course, the sessions on style and the placement of points were regularly ranked highest. In the first year that PROBLEM formulation was presented, it was rated highest, by both graduate and undergraduate students:

Table 2. Relative Value of Units of Instruction

	Undergraduates	Grad & Prof. Students
Problem formulation	5.7	5.2
Point placement	5.4	4.6
Style - 1 (nominalizations)	5.2	4.8

(Scale: 1 - no value; 6 - extremely valuable)

Without pre- and post-testing, these data are self-serving of course, but they do not mean nothing. We assume that advanced students (some post-doctoral fellows) are able to evaluate accurately their own educational experience. They apparently value more highly than progress in clarity and organization their enhanced ability to articulate a PROBLEM in the

introductions to their papers. Based on these self-reports, in this case, direct instruction seems to work (contra Krashen, Freedman, Cooper; for a more extended discussion of this issue, see Williams and Colomb, 1993).

3. Two Obstacles to Teaching and Learning PROBLEMS

It seems reasonable to suspect that a well-articulated PROBLEM is relevant to the perceived holistic quality of the text it introduces, and that students feel (or at least report) that their enhanced ability to articulate PROBLEMS and write complex introductions is a useful achievement. On the basis of those two claims, it would be easy to assert that we can raise the rhetorical competence of our students simply by teaching them how to think about problems, PROBLEMS, and their articulation in introductions. But there are two obstacles: First, a substantial number of our students seem not to understand in the first place that finding and articulating PROBLEMS is at least as important as solving them, and second, the kind of PROBLEMS that we most often ask our students to address is extraordinarily difficult for most of them to grasp. Until we face up to those two difficulties, theoretical understanding won't make any difference in their ability to find and pose problems, never mind solve them.

Why Our Students Think They Write

We read for many reasons – diversion, improvement, interest, social contact, etc. But in our professional lives, we read for only a few. We read to stay current. We also read to acquire specific knowledge and ideas so that we can pose and solve a specific PROBLEM of our own making. And we read to find the solution to a specific problem, the answer to a specific question, but not in the service of our writing about it. These motives are by no means mutually exclusive. As we read for one reason, we are alert to the other two.

Motives for writing match these for reading in the same overlapping way, but ordinarily, we write to an audience we hope is reading mainly for the third purpose: to find the SOLUTION to our/their PROBLEM. While some of us write to review articles or to share new knowledge with those who might be interested, most of us write to pose and solve a PROBLEM. When we do (and we are thoughtful), we anticipate readers who are reading

only to keep up or only to acquire information. But if you, *you*, are my ideal reader, you are reading because you share my specific interest in solving the specific problem of PROBLEMS and introductions, either because you have always had that interest or because I have persuaded you to share it. In fact, I can name several whom I would consider ideal readers: Ackerman, Berkenkotter, Bazerman, Hashimoto, Huckin, MacDonald, Swales, among others.

To practicing writers, these motives should be self-evident, but to our students, perhaps not. In a study that asked first year students at the University of Pittsburgh and Robert Morris College (among other things) what motivated them to write, Palmquist and Young found that the overwhelming majority (72.4%) wrote either to "discover" ideas (10.5%) or to "express" them (61.9%). Only 27.5% said they wrote to "inform" readers (18.6%) or to "persuade" them of a claim (8.9%) (these numbers may be an artifact of a composition program that emphasizes writing to discover).

No one would argue that writing to discover or to express are trivial motives, but we might be struck by the small number of students whose motives implied readers, until we recall that their motives match their competence and that few of us who assign writing tasks to first year students expect them to discover and communicate information that is genuinely new and useful, much less to discover, pose, and solve a PROBLEM that we think is "interesting." Nevertheless, most of us believe that eventually our students should learn to anticipate mature motives for reading, that they must eventually learn to pose and solve PROBLEMS. To determine whether and when that happens, we put some of the same questions to more advanced students in the Schoolhouse:

> "When you write an essay or term paper, what reasons motivate you? Ignore in-class essay tests or take-home examinations. Before you answer any of the questions, read the whole list."

Discovery

1. To better understand something I have read.

2. To help me discover something new or to clarify my own ideas or feelings.

Demonstration

3. To demonstrate that I know and understand ideas and information that I have read about or that I have heard lectures and discussions about.

4. To demonstrate that I can exercise some skill or method of analysis.

Expression

5. To express my thoughts and opinions about some subject.

6. To make an important claim about a topic and to give good reasons for it.

Communication

7. To communicate to a reader who might find use for it information that I have gathered and/or my views, thoughts, opinions about it.

8. To persuade a reader to accept my ideas.

9. To find, pose, and solve a problem that a reader should think is important enough to need a solution.

To hide our logic, we presented these questions in random order. And instead of asking for simple yes or no responses, we asked them to respond from "not important," to "somewhat," "very," and "most." The averages of 114 responses:

	Discover		**Demonstrate**		**Express**		**Communicate**		
Questions [1	2]	[3	4]	[5	6]	[7	8	9]	
3rd year 2.6		2.8		2.6			2.5		
2.7	2.5	**2.8**	**2.8**	**2.8**	2.4	2.5	2.6	2.4	
4th year 2.55		2.9		2.7			2.43		
2.6	2.5	**2.8**	**3.0**	2.5	**2.9**	2.4	2.3	2.6	
Grad 2.25		2.65		3.3			3.1		
Students 2.3	2.2	2.7	2.6	2.9	**3.7**	2.9	**3.2**	**3.2**	
Grad 2.25		2.75		3.1			2.87		
Business 2.1	2.4	2.7	2.8	**3.1**	**3.1**	2.9	2.9	2.8	

To be sure, few of us know why we do what we do; questions like these are likely to elicit answers that students think are appropriate rather than true. But while these data are not as sharply distinguishing as those of Palmquist and Young, they are indicative. Among upper-level undergraduates, their most important motives are either demonstration or expression. Their least important motives include helping readers who want information or solutions. Among graduate and business students, the

relationship is reversed. Their most important motives imply readers; their least important discovery.

Our problem is to encourage a development toward PROBLEMS by introducing that concept into the conversation of the classroom. We might be struck by the fact that so few responding to this questionnaire cited the posing and solving of problems as their most important motivation for writing. Of the 114, only 18 picked problem posing and solving as their most important motive. The concept of problem does not seem to occupy a naturally prominent place in their vocabulary of motivation, which suggests that what actually motivates them to write may be obscured by the vocabulary of the choices, that perhaps they all think they are posing and solving problems, though unable to say so.

The Contrasting Phenomenology of Costs and Conditions

As difficult as it might be for students to understand that at some point in their professional lives their motives for writing must include posing and solving PROBLEMS, there is perhaps a yet more telling reason why it is so difficult for them to engage with what I have defined as an "interesting" PROBLEM. It is that one kind of problem in particular – the kind that we in fact pose most often in academic settings – raises difficulties not just in its articulation, but in its very conception. Indeed, this distinction among kinds of problems and PROBLEMS may even distinguish kinds of students.

The ordinary language definition of "problem" reflects the notion of a real Cost entailed by a real flat tire: something really troublesome and unpleasant, a concrete Cost that we try to avoid or overcome. This kind of tangible problem might occasion a conceptual problem that defines a research problem aimed at solving the tangible problem:

Tangible problem: I have a flat tire.CONDITION

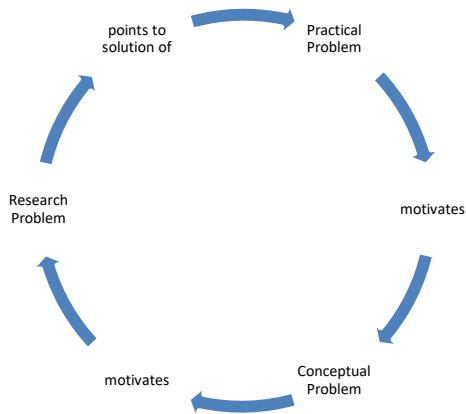If I do not fix it, I will miss an appointment.COST

Conceptual problem: I do not know where the jack is.CONDITION

If I do not find it, I will not know how to change the tire.COST

Research problem: I do not know where the driver's manual is.CONDITION

If I cannot find it, I cannot know how to find the jack.COST

Graphically, it looks like this:

Most of our students understand this relationship: People are dying of aids, but we cannot solve that practical problem because we have a conceptual problem: we do not know exactly how the HIV virus works. That conceptual problem motivates a research problem that we hope will point to the solution of the practical problem. And so students understand that a research problem is motivated by a conceptual problem which is motivated by a tangible, practical problem.

But there is another, different kind of problem-cum-PROBLEM with a different kind of motivation. It is the kind of problem that those of us in academic communities call a "pure" scholarly or research problem: We do not know how much matter there is in the universe, how Shakespeare could have known so much, how language evolved, the origins of melody among Polynesians. These are not problems motivated by any tangible or pragmatic problem, the kind of problems that we call "troublesome" that so afflict us that we flee them. These are "conceptual" problems, intellectual problems, theoretical problems, problems that arise simply from the workings of a curious, inquiring mind, problems that so fascinate us that we cannot resist pursuing them and then articulating our answers in print, even though their solutions will impinge on the practical, pragmatic, tangible problems of "the world" not one whit. (I will henceforth omit the scare quotes around pure; I mean by pure only a PROBLEM whose Conditions and Costs are not motivated by any Cost exacted by a tangible problem of the world. I imply no relative value between pure research PROBLEMS and research PROBLEMS motivated by external tangible problems of the world.)

Now, of course, we must conceptualize all problems that we eventually articulate as PROBLEMS, whether they are motivated by tangible and

concrete conditions like homelessness or by pure theoretical and scholarly topics like Shakespeare's imagery, must, of course. And the hardest pragmatic problems of the world usually can be solved only by first posing a difficult conceptual PROBLEM whose solution requires the posing and solving of a difficult research problem. But to our students, there is less felt difference between a PROBLEM that articulates gun control as a *pragmatic* PROBLEM and a PROBLEM that articulates gun control as a conceptual *research* PROBLEM, than there is between a conceptual research PROBLEM driven by a tangible problem like gun control and a conceptual research PROBLEM driven by a pure scholarly problem like the origin of the chorus in Greek drama. In the first, the tangible problem of gun control drives the research problem about gun control, but in the second, no tangible problem drives a problem about the origin of the Greek chorus. This difference is a compound of four qualities that make it difficult for our students to share our enthusiasm for the Greek chorus kind of PROBLEM:

1. We locate conceptual and tangible problems in different places in our experience.

2. We become aware of them in paradoxically different ways.

3. We find it extraordinarily difficult to articulate in a PROBLEM the Costs of a "pure" conceptual research PROBLEM, relatively easy to articulate the Costs in a tangible research PROBLEM.

4. We can solve tangible problems in two ways, but conceptual problems usually in only one.

It is these difficulties that at least partly lead to the lower case rhetorical problems about which we have an increasingly rich literature.

i. Locating the PROBLEM: We locate the tangible problems that might motivate research PROBLEMS and the "pure" conceptual problems that might motivate research in different experiences. The Condition to a tangible problem is usually constituted by a tangible experience such as a flat tire, no place for poor people to live, too easy access to handguns, a non-functioning immune system, Conditions that seem to exist "out there," in the tangible world (including our physical bodies) and that actually or potentially injure us, or at least exact some Cost of diminished happiness. And the experience associated with the Costs of tangible problems seem to be exacted from "out there," as well, Costs that tangibly affect my body, now or potentially, or the bodies or feelings of others: We miss an appointment, sleep in a cold doorway, lie wounded in the street or sick in a

hospital bed. If the problem is "ours," then we physically, tangibly feel that problem by feeling or imagining its *Costs* that seem to hit us unbidden.

But in the academic world, particularly in the liberal arts, the problems that we and our students typically address and articulate as PROBLEMS are not *necessarily* stimulated by the perceptible costs of a tangible problem that causes people distress. In the academic world, we more typically ask our students to address "pure" problems whose Conditions and Costs are not "out there," but essentially "in here," in our mental worlds: how could Shakespeare have known so much? what was Native American social structure like 1000 years ago? how much matter is there in the universe? To be sure, many conceptual research PROBLEMS that we enthusiastically grapple with are stimulated by tangible problems in the world that, were those problems ours, would terrify us. It is no comment on the character of those doing research on AIDS to say that while they may be dedicated to solving the tangible problems of people with AIDS, they are also fascinated by the HIV virus and its effect on our systems as a pure *research* PROBLEM, as a PROBLEM of pure understanding. But most such problems that we might eventually articulate as PROBLEMS do not come looking for us from "out there." If pure conceptual problems are going to be posed as PROBLEMS, those problems have to be found "in here" and articulated "out there."[19]

Most of our students would rather think and write about PROBLEMS stimulated by tangible problems than about PROBLEMS based on pure conceptual destabilization, because the CONDITIONS, COSTS, and SOLUTIONS to tangible problems are prototypically "out there," visible and concrete, and so seem more conceptually available. Moreover, our students usually write not to develop the solution to a *conceptual* PROBLEM motivated by what is "out there," but to recommend a specific solution to what is out there, articulated in a SOLUTION that describes not a conceptual conclusion but direct action (I understand that some would deny the difference). Furthermore, tangible problems afflict us all, educated and uneducated, learned and unlearned, literate and illiterate alike. It takes no special training or education to recognize tangible problems.

Conceptually pure research problems, on the other hand, are, candidly, an elitist indulgence. They are enjoyed largely by those few of us whom society has exempted from having any immediate and continuing need to solve 9 - 5 problems from out there; we are able to spend our time concerned with PROBLEMS in here, in our heads, with their COSTS, CONDITIONS, and the benefits of SOLUTIONS invisible and abstract to

anyone not part of our community. Such PROBLEMS are the property of – or must be made the property of – a community of academic interest.

ii. Becoming Aware of the Problem: We usually become aware of conceptual PROBLEMS driven by tangible problems from "out there" and research PROBLEMS driven by conceptual PROBLEMS purely from "in here" in opposite ways. We usually become aware of the existence of or potential for a PROBLEM based on a tangible CONDITION of a tangible problem when we see, hear, taste, smell, or feel its cost, or we fear that we will. We need not experience the condition to realize we have a problem, much less a PROBLEM, but we do feel or imagine feeling the costs of that condition. We may not feel the *condition* of having the AIDS virus, but we feel or fear feeling the *cost* of having it.

On the other hand, almost invariably, we become aware of the potential for a pure conceptual problem *in exactly the opposite way*. When we are on the outskirts of such a PROBLEM, we experience not what we might articulate as its COST first, but only signs of what might eventually be articulated as its CONDITION. We recognize most clearly the sign of a possible CONDITION to a pure conceptual research PROBLEM when we are dead-certain that what is widely believed about some issue is in error, especially when that error is in print. I am dead certain that what has been written about introductions is, if not dead wrong, at least not vividly enough right. When I first felt that, I was not concerned with the tangible problem of teaching students how to write better introductions. I was just vexed by what seemed to me to be conceptually not quite right in what I had read about rhetorical problem posing and solving, so I bet a substantial amount of my time that I was feeling the signs of at least one potential component of an "interesting" problem that might become an interesting PROBLEM – a CONDITION consisting of not just of my mistaken, incomplete, misleading thinking, but the thinking of others who did not know they were completely or partly wrong, particularly among those who were writing for a community of readers that included me. What I did not understand at that point was the COST of that CONDITION, COSTS that I would fully understand only *after* I had articulated the SOLUTION to a PROBLEM motivated by a problem, neither of which at that point, paradoxically, yet existed.

What I mean by this paradox is that until we *solve* the PROBLEM, we aren't clear what either the problem or the PROBLEM is. So what if people don't understand the underlying structure of PROBLEM-posing introductions? I would not know the answer to that question until I found a

SOLUTION that would allow me to recognize COSTS that perhaps none of us knew we were paying. But until I did that, I did not fully understand my PROBLEM; which is to say, my SOLUTION created my PROBLEM. And once I understood the PROBLEM, I was able to see the problem behind it more clearly. It is the paradox Socrates posed in the Meno. Our students find this kind of thinking bizarre. But it's what we do – a kind of Zen locksmithing: we have made a key that fits a lock before we have made the lock that fits the key.

We feel a more subtle sign of a Condition to a potential conceptual problem that might become a PROBLEM when after accumulating and thinking about a body of knowledge on a topic that interests us, we experience a kind of low-grade but tantalizing buzz of cognitive dissonance: a fluttering sense of possibility; the sense of an important unasked question; the feeling that behind a set of disparate data and facts is a general principle, connections that we sense but can't quite see; what John Dewey described as the first sign of a problem, a "state of doubt, hesitation, perplexity, mental difficulty" (12). In fact, Dewey accurately caught the affective quality of this not entirely unpleasant Condition of confusion:

> The world 'problem' often seems too elaborate and dignified to denote what happens in minor cases of [becoming aware of a problem]. But in every case where reflective activity ensues, there is the process of *intellectualizing* what at first is merely an *emotional* quality of the whole situation. (109)

Students prefer to think and write about conceptual PROBLEMS driven by tangible problems rather than by conceptual PROBLEMS driven by a pure intellectual activity, because the emotional quality of the costs associated with a tangible problem are infinitely more compelling and immediate (and easy to handle) than the emotional quality of a condition associated with a conceptual problem. Most tangible problems come looking for us (though the best problem-finders see them coming). But unless we are working in a field where there are acknowledged problems lined up waiting to be solved (as in some branches of mathematics, physics, medical biology, etc.), we usually have to go looking for sources that will elicit in us the signs of a conceptual problem, and we must be exquisitely alert for them, because most conceptual problems do not exist until we invent them (Bazerman and MacDonald are quite good on this point).

But while our students often do recognize states of doubt and perplexity, they too often interpret that uncertainty not as the sign of a potentially interesting conceptual problem for research, but of a dismaying

failure of their understanding. When we mature writers experience perplexity about the work of our community, we are confident enough to attribute it not to our incompetence but to something wrong in someone else's argument and exposition – my feeling that in so much published work about rhetorical problem solving something was missing, that it all missed a central point. That failure of understanding was not my problem – it was theirs, though I would make it part of my PROBLEM in due course. This ability to sense and trust our own uncertainty is an acquired cast of mind, a product of training, practice, and confidence, a mental habit shaped by our community of interest. Few of our students present themselves to us fully sensitive to those kinds of *grounded* doubts, hesitations, and perplexities, and fewer yet are able to articulate them well. And so they find our conceptual problems not just baffling; they do not even experience their existence, because when we resonate to the "emotional quality of the whole situation," we experience it as the tantalizing possibility of a problem and its eventual representation as a PROBLEM, but our students too often experience that emotional quality of puzzlement as just more evidence of their intellectual incompetence.

   iii. Articulating the Costs and Conditions of the PROBLEM: Because of these differences between the epistemological/phenomenological nature of tangible and conceptual problems, our students (and we ourselves) feel it to be much more difficult to articulate the Costs and Conditions of conceptual PROBLEMS than of tangible PROBLEMS.

   It is not difficult to articulate the most obvious COSTS associated with the tangible problem of AIDS because we can usually *feel* them, or at least imagine feeling them; they are evident and palpable, COSTS for which we have a rich vocabulary based on fundamental human motives: pain, loneliness, fear, loss of respect, etc; the hope for money, power, prestige. To be sure, these tangible problems have causal CONDITIONS that are often difficult to articulate, because they are usually more complex than we want them to be. In the former Yugoslavia, how do we define the causal CONDITIONS whose COSTS are so tangible: Are the CONDITIONS that exact the COSTS of so much suffering tribal mentality? cultural history? lack of UN action? evil? all of the above? But as difficult as it may be to understand which CONDITIONS cause what COSTS, we are rarely at a loss to offer some explanation, right or wrong.

   On the other hand, though we can articulate the CONDITIONS to a conceptual problem more easily than its COST, they are still hard to pin down, because the strongest sign of a possible CONDITION is that sense of

cognitive disequilibrium that Dewey described, and out of that alone we begin constructing the CONDITION to a PROBLEM. Our seemingly impossible rhetorical task is to persuade our readers to feel exactly the same way.

How we do that is fraught with methodological difficulty. Once we feel that sense of unease, we metaphorize it into something that we project onto the body of knowledge about X by instantiating that into an impersonal "gap in knowledge about X" – hence my opening metaphor about problems as opposed to PROBLEMS: "This gap in our understanding exacts a price on our teaching." In fact, we have a rich vocabulary that encourages us to displace our sense of cognitive dissonance onto the understanding of our community. When we try to understand some issue and don't quite, *we* may have feelings of uncertainty, perplexity, confusion, ambiguity. But if we believe that *we* feel uncertain not because *we* are incompetent or uninformedly ignorant but for some good grounded reason having to do with *their* failure, then we point to *our community's* understanding of the issue as "having" a discrepancy, inconsistency, contradiction, incongruity, incoherence, disagreement, incompleteness, ambiguity, unclarity, anomaly, paradox, conflict. Although the language we use to describe the CONDITION to a conceptual PROBLEM is conventional and limited, it is always displaced and usually metaphorical, making it difficult to articulate the CONDITION to a conceptual PROBLEM exactly.

And it gets even more complicated and, unfortunately, more significant: At this point, we might be able to articulate a dissonant CONDITION, but we are probably still unable to articulate what COSTS – if any – might be associated with this gap in our knowledge, this discrepancy or inconsistency. Suppose we don't fill in a gap of knowledge, correct a discrepancy, or correct an error? So what if I remain ignorant about the number of trees on the island of Zanzibar, the source of Shakespeare's classical learning, the reasons why Anasazi Native Americans suddenly disappeared from their cliff dwellings in the Southwest? The trouble with an inchoate conceptual PROBLEM is that often we cannot even guess at its COSTS until we solve it: What COSTS does the community pay if it, unknowingly, remains oblivious to the new knowledge, the better understanding, the new connections that I provide? What COSTS will my community stop paying that it didn't know it was paying, or what as yet unknown BENEFITS will it gain? So what if they don't learn about Welsh grammars? realize that the Athenians were self-interested? know about a new kind of Roman amphora with its original contents? To explain the COSTS

of any of the CONDITIONS implied by these questions, we have to understand not just what locally puzzles us and how much better we would feel if we were not puzzled, but how any new understanding might change some other part of the network of received knowledge, understanding, opinions, values, ideas, etc. that constitutes our community of knowledge.

Which creates the paradox: If COSTS are necessary for there to *be* a problem or a PROBLEM, how can we discover COSTS only *after* we've solved what does not yet formally exist? How can we recognize anything as a problem or a PROBLEM until we have found its SOLUTION? It is the paradox that Charles Darwin must have had in mind when he observed that, "Looking back, I think it was more difficult to see what the problems were than to solve them." But how can that be? If we have a solution, we no longer have a problem. Dewey again captures the paradoxical phenomenology of problem/PROBLEM posing and solving:

> In fact, we know what the problem *exactly* is simultaneously with finding a way out and getting it resolved. Problem and solution stand out *completely* at the same time. Up to that point our grasp of the problem has been more or less vague and tentative. (108).

To see this process through to its conclusion requires patience, confidence, tenacity, and a tolerance not just for delayed gratification, but for the delayed existence of even the *possibility* of gratification. Our emotional horizons are long; those of our students are short.

iv. Solving the PROBLEM: We can solve tangible problems in either of two ways, but conceptual problems usually in only one, rarely in the other. When we solve tangible problems, we can remove the Condition that exacts the Cost or we can ameliorate the Cost. I can solve the problem we holistically call "excessive litigation clogging the courts" by eliminating the Condition: make it more difficult for people to bring suit for no good reason or disbar greedy lawyers, or by ameliorating the Cost of the Condition: build more courthouses and hire more judges. But we typically solve a conceptual problem only by changing its Condition, only by filling the gap in knowledge, resolving the discrepancy, clarifying the ambiguity, correcting the error. We do not know how Shakespeare could have known so much. Some think that, as a consequence, we cannot know who Shakespeare really was. We can solve the problem of

> [[we do not know how Shakespeare could have known so much_{CONDITION} ➡ [we do not know who he really was]_{COST}]_{PROBLEM}

only by discovering how he could have known so much. We could try to "solve" this PROBLEM by arguing that there is none, that we should not care who Shakespeare really was because there is no COST in not knowing – i.e., remove the COST by persuading our audience that it does not really exist. But that does not solve the PROBLEM. It uncreates it.

But that is exactly what paradigm shifts in a field do: they uncreate problems by replacing them with new ones. For example, in the late '50's, linguists faced an extraordinarily intractable problem in how to move from phonological analysis to grammatical analysis and from grammatical analysis to semantic analysis. They had this problem because they were committed to a "bottom-up" explanation of language: first do phonology, then and only then move on to grammar. The problem was to get from pure sound to syntactic structures. Until that Condition of procedural ignorance was solved, linguists felt, they would pay the Costs of not having a phonologically grounded grammar. Noam Chomsky "solved" the PROBLEM by arguing that the supposed Cost was no Cost at all: "Forget about trying to create procedures by which one moved from phonology to syntax. That's the wrong direction: get the syntactic component of a language device straight, and an account of the phonology becomes possible." That is a conceptual move generally beyond the abilities of our students.

Finally, we should point out again that different fields encourage different ways of finding problems. In the natural sciences, it is not quite the case that problems line up to be solved, but the community has a good understanding of what problems are outstanding and which might be turned into "interesting" PROBLEMS. The most interesting PROBLEMS, of course, are those not yet discovered and articulated. In other fields like the humanities and some of the social sciences, the situation is different. In those fields, problems and PROBLEMS more often have to be discovered, or more typically, invented. Good PROBLEMS about early 19th c. novels do not line up in the hall hoping to be tapped on the shoulder by anxious PhD students. (Again, see Bazerman and MacDonald on this matter.)

For all these reasons, less advanced students usually prefer to articulate and write about PROBLEMS that address or are motivated by tangible problems. After all, they have been articulating PROBLEMS about tangible problems all their lives, in a language common to us all – "Dad, I need the car. If I don't get it, the guys will . . . ." But most of our first year students have no experience finding, posing, and solving pure conceptual problems or PROBLEMS; nor do they all have a taste for them; nor do they have much experience recognizing that promising feeling of informed ignorance or

confusion that motivates them; nor when they feel it, do they trust it, attributing it to their incompetence rather than to anything potentially interesting to their community of readers; nor do most of them see any obvious payoff in posing and solving a pure conceptual PROBLEM because they have no community to reward them for doing so. But however difficult it may be for us to make these distinctions, we eventually must if we are to help our students to understand what it means to pose and solve an "interesting" PROBLEM in an academic setting. Either that or encourage them to pursue only tangible problems. But that has its costs, as well.[20]

The trick, of course, is to figure out a way to teach them how to think about problems and PROBLEMS in a productive way at all. That's the problem of Part III.