

Aporia: Webs, Passages, Getting Lost, and Learning to Go On

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After several unsuccessful attempts to weld my results together into...a whole, I realized that I should never succeed...My thoughts were soon crippled if I tried to force them on in any single direction against their natural inclination. — And this was, of course, connected with the very nature of the investigation. For this compels us to travel over a wide field of thought criss-cross in every direction.¹

I would like to begin this essay with the experience of getting lost on the World Wide Web. The basic hypertextual design of the Web allows for different textual materials, including multimedia materials, to be linked together in an enormous network of criss-cross references.² Designers of specific Web pages include links that lead a user beyond the confines of their material, into other pages, which in turn are linked to other pages. Following these associations with a “click” on each link, one can quickly travel far from one’s starting point — and despite improved navigational devices that provide a record of where one has traveled, allow one to “bookmark” specific locations for a later return, and so forth, all travelers on the Web have experienced the disorientation of finding themselves in a strange location, between the familiar and the unknown, and wondering “Where am I?” “Why am I here?” “What does this mean?” The key element underlying this constellation of choices is the *link*. A link represents a decision by the designer to associate textual points A and B. Movement along this path represents a decision by the user to leave the known content of the page on the screen to an unknown page whose content may edify, surprise, or confuse. A link can be viewed, on one level, as a simple transition, a bridge, a means of connection; but on a deeper level it represents a way of associating elements that inevitably affects how we understand them. It is a method of semiological transformation; the elements are not only joined, but changed in the process.³ Any two things can be linked, including a raven and a writing desk; but *what the link means* can be a deep puzzle — a puzzle not only of conceptual ambiguity but also of confused location, since with the passage comes not only an associative puzzle but also movement within the labyrinth of the Web.⁴ A great many assumptions are incorporated into each link, and these assumptions are almost entirely implicit — all the user knows is that the designer wanted to make a connection; but why it was made, or what sense the user is to make of the connection, is up to the user to figure out. The sense of being “lost,” then, is both a problem of having arrived in an unfamiliar location, and an *aporia* of unknown signification.

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The concept of *aporia* is most familiar from Plato’s dialogue, the *Meno*.⁵ In that dialogue, Socrates undertakes to teach a young boy a lesson in geometry, which involves figuring out the area of a square. As an essential part of that proof, Socrates draws out from the lad an initial guess as to the area, and then proceeds to lead him, through a step-by-step line of argument (*elenchus*), to the realization that his guess must be incorrect. The boy is flustered, confused, perhaps a bit embarrassed (“It’s

no use, Socrates. I just don't know"⁶). This, says Socrates, is the moment of aporia: the moment where a misconception has been exposed, stripped away, and where a clean terrain now exists for the reconstruction of true knowledge. Socrates goes on to lead the boy, step-by-step, through an alternative proof of the area of the square, until he arrives at the correct answer. I want to focus on this transitional stage of aporia, as Plato describes it. Several metaphors are provided, in this dialogue and others, of what aporia is like: it is like feeling "paralyzed," "stung by a stingray," or "numb." Now, why should a state of conceptual puzzlement be described by such corporeal analogues? Plato does not explain this. What does it assume about learning to say that a learner must be exposed, stripped of misconceptions, before true learning can occur? Are there other ways to think about aporia — what Jacques Derrida calls this "old, worn-out Greek term...this tired word of philosophy and of logic"⁷ — in ways that might carry us through new paths of thinking about learning and understanding? Let's begin with the etymology: *a-poros* means lacking a *poros*: a path, a passage, a way.⁸

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When I have lost my way, I have two problems: one is not knowing how I got here; the other is not knowing where to go next. Perhaps I keep returning to the same point again and again. Conceptually, I lack both the step-by-step algorithm that led me here, and an overall map that provides a relative sense of my location within a network of possibilities. This is a lack of both knowledge and understanding. But my confusion is not only cognitive. Aporia is an *experience* that affects us on many levels at once: we feel discomfort, we doubt ourselves. We may ask "What do I do?" "What do I say?" "Who am I?" "What is my relation to others?" An aporia is a crisis of choice, of action and identity, and not only of belief. When I have too many choices, or no choices, I don't have a choice; I'm stuck. *I don't know how to go on.*

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Ludwig Wittgenstein's discussion of rules, like his discussion of language games, covers a variety of different, but related cases.⁹ Indeed, there can be as many types of rules as there are types of games, and vice versa. Some rules, like the arithmetic algorithm he sometimes uses as an example ("add 2": 2-4-6-8...) are strict and explicit; at the opposite extreme are rules that we "make up as we go along." But all rules, he says, have some properties in common. A rule is like a sign-post; it indicates a direction, a way, a path, which must be *followed*. Wittgenstein says some puzzling things here. On the one hand, he says that there is never only one way to follow a rule, and that rules do not contain within them explicit directions on how they are to be interpreted. A sign-post is both clear and yet ambiguous — pointing always requires us to make a guess: Precisely what is being pointed at? On the other hand, insofar as we follow a rule, he says, we follow it "blindly." I take this to mean that once we have formed an interpretation of a rule (or even after we have made one up), we must follow it *as a rule* as a matter of course; otherwise it is not a rule (the same is true of being led somewhere by clicking on a web-link, following a map, or tracing a line). Hence the idea of following a rule entails both an element of obligatoriness and an element of judgment and choice: a person cannot be said to have learned a rule, or to be following it, without both. How does one know that

another person (a student, say) has understood a rule, since how it is being interpreted is both an idiosyncratic and an inaccessible mental state? Because, Wittgenstein says, the person says “*now I know how to go on,*” he can do something in accordance with the rule, he can do it the right way (which means the socially approved way, within some context, language game, or form of life). In order to do something in the “right” way, certain alternative ways of doing it must be “ruled out.” In this sense, then, following a rule is like tracing a pattern; it must be followed more or less exactly, once one can see the line to be traced. Indeed, “rule” sometimes means “*line*.”

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In the book, *On the Line*, Gilles Deleuze and Felix Guattari describe two methods of organizing information, which they liken to two types of root system: a centrally organized, hierarchical system of organization, like a root system with a central tap root and structures of diminishing significance branching off from that; and a system that is *rhizomatic*, spreading in all directions, with no center and no given hierarchy of importance.¹⁰ The World Wide Web is a rhizomatic system: it grows in all directions, allows passage along many alternate routes, with no governing set of rules for deciding which of many branching options to choose or how to organize the results one finds there. But this model of a rhizomatic “web” is of much greater importance than simply in reference to the World Wide Web: It is, more generally, a way of thinking, a way of writing, that contains multiple lines of association; that is organized not only linearly, but laterally; that follows, not a single hierarchical outline, but a labyrinth of continually returning, criss-crossing pathways.¹¹ Each particular step or link within a rhizomatic whole can be conceived as a line between two points, but the *overall* pattern is not linear, because there is no beginning and end, no center and periphery, to be traced. If a link is a line, it is both a line that we follow and a line that draws us in, like a fish: the Web or Net is a set of paths that we explore, but also a web or net that catches us up. We may wish for a map of this labyrinth, but this does make things any easier, since the only map is a replica of the web or maze, which will be as puzzling as the original. A map, to be useful, to help us learn how to go on, must always simplify, exclude elements. But a labyrinth cannot have a map that is not a labyrinth itself. Someone could draw a line to show us how to get out of the maze, but this does not teach us how to cope with mazes. To learn that, we need to learn how to find our way within a labyrinth by creating a map, ourselves, as we go. The picture of rhizomes, webs, and nets *begins* with the significance of the line, the link, as an object of study itself, not merely as a connection between two points. In this inversion, we do not start with the points, and then connect them; we start by thinking about *ways of connecting*, and regard points as the nodes of intersection where lines or links come together.¹² We make choices, but they are choices that are made from links and pathways that we do not choose. Similarly, we may repeat lines from a play, or lines from a poem; we recite them, as givens, but we can also interpret them, add something to the passages that make them our own. The lines that we follow or trace both facilitate and limit: a line in this sense is not only a connection, but also a divider, a border; just as a path facilitates going from one point to another, but also implicitly prevents or discourages a different *passage*.

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A *passage* can be many things. It can be a path or a tunnel, connecting two knowns. A connecting path or hall is often said to “communicate” between two rooms.¹³ It can be a journey, a real trip or a metaphorical one. A passage can be a transition, an experience of change or growth; one can undergo an arduous rite of passage. We also talk about change in terms of the passage of time. A passage can be a quotation, from a scripture or a musical score; yet even when a quotation is verbatim, it is interpreted or modified within the changed context, it is never exactly the same. The use of prepositions here is significant: A passage *to* is different from a passage *through*, which is different from a passage *from*. Sometimes a passage connects knowns; sometimes it leads from a known to an unknown. One can differentiate here the pattern of a constellation, which connects known elements, or givens, from the pattern of a labyrinth, which leads away from the known toward the unknown: in the latter case, *we choose a path, not a destination*. The example of teaching that Socrates uses in the *Meno*, of moving step-by-step through the logic of a geometric proof, fits the particular model of dialectic that Plato wants to endorse: The link of known steps by which the boy is led to a conclusion is linear, foredestined. It is a constellation, not a labyrinth. This is a model of teaching that does not promote exploration or inquiry; it minimizes uncertainty. Sarah Kofman distinguishes the Greek words *odos* (a path or road connecting knowns) and *poros* (a passage across a chaotic expanse, a sea-route, for example, or blazing a trail where no trail yet exists).¹⁴ Lacking an *odos* is not the same as lacking a *poros*. These two kinds of path or passage are important because they imply two kinds of transition out of doubt: one by progress toward a fixed answer, one by *movement* toward an unknown destination.

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Like a passage, a *movement* can also be a musical sequence; it can be a dance; a motion, a relocation. A movement can also be a political phenomenon, pursuing a prospective, but unknown future; often such political movements rely upon repeated slogans or quotations from a leader or martyr. Movement as relocation is a good way to get from point A to point B. Movement as dance is not about getting from point A to point B. The first traces a line; the second defines a gestural space. Wittgenstein says that his investigation seeks “new movements in thinking,”¹⁵ but movement concerns the body as well. When we are paralyzed we cannot move; when we are numb or dizzy we cannot tell if or where we have moved. The progression of musical notes on a page is something we can read and analyze, seeing patterns and the relations within their movements up and down the scale; but hearing the music, or dancing to it, *we feel* their movement, their rhythms and relations, in a fundamentally different way. Their repetitions and variations are echoed in our motions, our bodies; we are never entirely passive listeners. We recognize something of ourselves in them, and this *recognition* is both a discovery and a creation.

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Recognition is also a different way of thinking about the *Meno*. In that dialogue, Plato says that we come to knowledge through *anamnesis*, which is usually translated as “recollection,” a remembering of truths revealed to us in a previous life,

before our birth. He says that in teaching he is not giving the boy the answer, but drawing forth what is latently within him. This is his attempt to answer “Meno’s paradox.”¹⁶ Socrates’ version of the paradox emphasizes that we cannot look for something if we do not know what it is; in his account we either must know something perfectly and completely or we cannot know it at all (hence he must posit an unconscious level of knowledge that is brought forth through the dialectic — another metaphor he uses for this bringing forth is midwifery). However, Meno’s original question emphasizes something else: How do we *recognize* that something is true? What needs to be explained is that “ah-ha,” that *feeling* of rightness that we experience when we see a connection that strikes us as right. Something “clicks,” we say. We recognize it the way that we might suddenly recognize someone we have met before. It is this *feeling* of recognition that needs explaining, not the *fact* of truth. We could, of course, have this experience of recognition, or rightness, with something that is not in fact true, or that might not be susceptible to determinations of “truth” either way (our reaction to a painting, or a piece of music, or a movement in a dance, may *feel* right in the same way that a proof strikes us as correct). “Recognition” is a much more interesting philosophical question than “recollection,” for it does not depend on all-or-nothing determinations of truth, but on the more varied process of seeing one thing in terms of another. We recognize something *as* something; we recognize the unfamiliar so that it becomes familiar. We recognize, we think again, we think in a different way; and we pass toward insight and understanding. There is, as Hans-Georg Gadamer reminds us, a “joy of recognition,”¹⁷ a feeling of satisfaction in making a meaningful association (even when the particular subject of the association may be unpleasant). The answer to Meno’s paradox is not to posit a mythical prior life; but to explore what it means to think in a different way. The main burden of misconceptions is not in having false beliefs that can be refuted and replaced with true ones; it is in thinking about a problem in the wrong way, and so not knowing how to go on. One cannot suddenly abandon one way of thinking and adopt a wholly new one — this movement requires bridges, links, which help the learner to assimilate a different vocabulary and set of assumptions. The task of the teacher is not in stripping away falsehood to clear the ground for truth, but in helping someone who is lost to find *their* way, to make a passage, or *translation*, between what is foreign or puzzling and what is familiar.

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A *translation* is a deeply complex endeavor, much more so than our ordinary ways of thinking of it. Usually we describe translation in one of two ways: as finding a series of one-to-one equivalencies between two discourses, or of passing meaning through the mediation of some third language, or metalanguage, which is part of neither of the two particular discourses. Both pictures are misleading. Even leaving aside questions of diverse syntax and sentence construction, simply at the level of individual words no equivalency across discourses is possible. The polysemic associations of denotation and connotation that each word has within the web of its own discourse simply cannot all have equivalents within the other. A link of similarity or contiguity can be established between them, but this only invites a comparison, a transfer, to see one as the other, as in a metaphor or simile. It is only

in the practice of use that one can discover if such a comparison is adequate to our purposes. We translate in order to communicate; hence the success of a translation depends on the success of communication — a contextual, contingent assessment. Moreover, a translation is a kind of relation in which the elements it comprises are transformed. And a step beyond this is where translation is not possible, where there is a surplus of meaning that *cannot* be adequately communicated in another discourse. This confronts us with the limits of translation. Here it is more than a matter of moving from the familiar to the foreign, but of moving beyond the foreign to the *strange*. We run up against the limits of discourse itself; what Wittgenstein says cannot be said, but only shown,¹⁸ or what Lyotard calls the *differend*: “the unstable state and instant of language wherein something which must be able to be put into phrases cannot yet be.”¹⁹ With the strange, difference is so profound that even analogies of similarity or equivalence are not possible; at such moments, we must move from the idea of a translation to the idea of an aporetic encounter — finding our way through a labyrinth with no clear lines to follow. Uncertainty, difficulty, and discomfort in such an encounter are intrinsic. And because the failure of translation in practical contexts of communication is related to the inability to act or coordinate action, such difficulties are *moral* difficulties as well. The challenge of moral responsiveness in the face of radical difference is as much a part of the feeling of aporia as are epistemic or linguistic limits. Here even the possibility of communication, let alone translation, is put at risk. We are caught in a *circle*.

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A *circle* or loop can be a kind of aporia; a path that returns back upon itself. But there are different forms of this circle. One is a “vicious” circle, a circle of simple repetition and reiteration, in which the same recycles repeatedly. But another kind of circle (call it “hermeneutic”) is one in which each return brings a reconsideration of the familiar from the vantage point of the novel — until the familiar becomes novel and the novel familiar, when the relations switch back again, and then again. Here the loop is a passage that represents change and growth. And I would like to suggest one other sort of circle; the circle that cycles us around within a closed system of possibilities and which, by doing so, makes us aware of the boundaries of that system. The system’s closedness is revealed by the frequent return to the same (perhaps in either of the first two senses): but here the discovery is not primarily one concerning the associations among the elements along which one has traveled, but one that recognizes the very closedness of these possibilities, sees the boundaries of the system from the inside (one cannot be outside it). Not all fly-bottles have a *way out*.

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How do we see the limits of what we cannot see beyond, where there is no *way out*? We can travel almost infinitely within any complex network but we cannot travel beyond it; every link carries us to another link but, as with space itself, the web loops back into itself. It has limits, but no edges. There are only variations upon variations; we can experience novelty, creativity, even critique within these terms — which are real, not illusory — but all paths intersect, ultimately. There is no path outside. This, too, is an *a-poros*. At this moment, we recognize that every link that

draws one association excludes others; that every path is a passage away from some possibilities as it is toward others; that a *poros* is always both a way *and* a barrier, an opening and a closure. Hence, there are different kinds of aporia. The aporia of the *Meno* is an epistemic emptiness; at that moment, one knows nothing, and does not know what to think or say or do next — hence, paralysis, numbness. There is no path in sight. But a different kind of aporia is to have lost one's way, to be confused; there are *too many* paths from which to choose. Different still is an aporia in which one cannot recognize a path that is already there. And yet again is an aporia in which the path is apparent, but one cannot or will not follow it (perhaps because the destination is unknown, perhaps because it is known and upsetting). In all of these cases, one does not know how to go on, but for very different reasons. Each would require a different sort of response by a sensitive teacher. There is no "method" here. A dialectic of reasoned argument or proof has the capacity to alleviate only some of these kinds of aporia; for others, it could make matters worse. And for some states of aporia, alleviating them in the sense of making them disappear is not the way to go at all. Perhaps the state of aporia is one to which we need to be returned; not by having a question answered but by seeing the contrast between the different versions of our understanding before and after — to recognize, rethink, our own understandings from the far end of a path we have traveled, and from which we return. With this we recognize that the most important distinction among aporias is between those of which we are aware, and those not — because every choice, every understanding, every movement within a *web* is the surpassing of some limits and, simultaneously, the confirmation of others.²⁰

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I would like to return to the experience of getting lost on the World Wide *Web*. From what standpoint is this a problem? When can getting lost be seen instead as a journey of serendipity? Every navigator, every explorer, has had the experience of looking for one thing but finding something else instead; sometimes this new thing is even more useful, more interesting, more enjoyable, more important, than the thing we were looking for. There is no way to remain open to the possibility of happening upon these if we are not prepared to accept getting lost. The experience of being lost itself teaches us something: that the associations we encounter within a web do not always make sense, are not natural or inevitable, do not explain themselves. We are "lost" only relative to one purpose or need; sometimes being lost is an occasion for rethinking how "necessary" this imagined purpose or need actually is. We need to be reminded of this from time to time. Sometimes we learn by being returned to the same point again and again, with each return, each repetition, comes a new recognition, a changing understanding. We also need to have occasions to reflect on why webs are designed the way that they are, and how they might be designed differently; this both problematizes the apparent naturalness, the transparency of given associations, and begins to make explicit the processes of design so that learners can create new links, drawing lines themselves. We also need to become familiar with complexity, and complexity's sibling, uncertainty. Curiosity and interest, which are essential to learning, *grow out of and depend upon* feelings of doubt and puzzlement; they do not threaten interest, but can enhance it. Something

that does not puzzle us isn't interesting. What Kofman calls the passage across a chaotic sea is an arduous *poros*; but some destinations can only be reached this way, and some lessons can only be learned by persisting in such a journey. At the margins of order and sensibility, we see "the possibility of impossibility"²¹ — we are estranged from the familiar, confronted with differences that we cannot recognize; we need to create our own links as we attempt to pass through. The experience of aporia reminds us of limits: our limits, the limits of our understanding, the limits of our language. We see these limits not as explicit barriers that block all movement, but as paths that lead us in some directions, while also sometimes preventing us from getting to where we are trying to go. They help us to get this far, but they prevent us from getting any further. At this extremity, we encounter a deeper kind of aporia: a *doubt* that never goes entirely away.²²

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The *doubt* of Plato's *Meno* is a transitional phase, positioned between two kinds of certainty: the certainty of strongly held misconceptions and the certainty of true knowledge. This first sense of doubt is not in itself an educational movement: it is merely the empty pause, the frozen, paralyzed instant, between two kinds of complacency. It is a moment of futility and embarrassment. It does not lead to anywhere else. Meno's original aporia, the question about recognition, is lost in Plato's search for criteria of epistemic certainty; but Meno's question introduces a different, more puzzling, more educationally interesting, problem: How does someone recognize an answer to a question? What satisfies them, makes them feel less lost? This way of putting the problem does not focus on criteria of truth, but on one's search, one's purposes, one's movement — where it begins and where it stops. This way is more clearly a question about what one should *do*, and not only what one should *think*. This second sense of doubt is to be stymied, to be delayed, to be stuck; it is a cessation of movement, but not in the sense of paralysis, or no choices, no way out — here there are *too many* choices, and one does not know how to recognize the path or paths that will help them to pass through. From a teaching standpoint, this implies that the condition of doubt itself contains educational potential: that it includes questions, includes an awareness of at least some alternative ways of proceeding, includes a mixture of constructive and inhibitive ideas.²³ These constitute potential points that can be linked to something new; they are not less-than-perfectly-true beliefs that must be simply swept away to clear the way for a recollection of the perfectly-true. Teachers need to appreciate this difference. The goal is not to eliminate aporia, or to regard it as simply a loss, an absence; but to see within doubt the *questions* that make a new understanding possible.

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Teaching that begins with *questions* is both a moral and a pedagogical choice. A teacher teaches with questions because she or he believes that it is a better way to teach, and a better way to *be* a teacher. Yet to succeed at this, the questions must be real questions: questions that puzzle, confuse, *and* interest. Socrates' questions, in the *Meno* and throughout the Platonic dialogues, are rarely authentic questions, felt questions by Socrates; they always indicate a purpose, usually the development of a line of *elenchus*, and Socrates' professions of ignorance usually appear to the

reader as quite disingenuous. This authoritarian and rather manipulative style of teaching, as illustrated in the *Meno* and elsewhere, can be called the “conversion” model: inducing the learner to abandon a corrupt set of beliefs, to experience the crisis of aporia, and then, with the force of revelatory discovery, to be moved into the light of truth. Socrates’ dialectic leads the learner into a state of aporia and undertakes to lead the learner out again. (One could even make associations here with being stripped naked and then being baptized.) This narrow view of teaching provides only the thinnest understanding of where questions come from, of the kinds of confusion students typically feel, and of the nature of aporia itself. Some general things can be said about questions:

There are questions one knows how to answer.

There are questions one does not know how to answer.

There are questions one does not know how to ask.

There are questions that cannot be answered.

Different kinds of questions imply different kinds of aporias. A question is the mediator between what we know and what we do not know; we need to know enough to know how to ask a question, but not know enough that the answer is interesting and important to us. But how does one teach in the realm where questions do not have correct answers, where difficulty is intrinsic, where the learner is, in the deeper sense of the word, *lost*? Leading learners does not help them learn how to go on: it may solve the immediate problem of moving them through passages to a particular outcome, but does not by itself provide them with the ability, or the confidence, to find their way on their own. Teachers need to help learners not by giving them maps, but by helping them to learn how to create maps, to draw lines and make connections themselves.²⁴ Teaching in this latter sense is not a process of conversion, but of translation: of making sufficient associations between the familiar and the foreign to allow the learner to make further associations, to find other paths, and eventually to become a translator, a path-maker, on their own. Learning how to ask a good question is in one sense *the* central educational task, yet one that is almost never taught explicitly, and rarely taught at all. The typical sorts of questions teachers ask are questions to which the teacher already knows the answer. Learning how to ask questions is a skill of both learning and of teaching; hence this approach involves the teacher joining the learner in a process of exploration, one in which the teacher’s own questions, own doubts, will be exposed also. Furthermore, in order to help someone get out of an aporia, a teacher must understand how they got into it; this will require, in part, the teacher taking on the learner’s questions, the learner’s aporia, as their own. In this context, the roles of teacher and learner blur: aporia becomes a potentially shared state — “What question do I ask?” is an aporia of learning *and* teaching. Such an approach involves enduring the state of aporia, not as a brief transitional moment, but as an ongoing condition that generates the questions and problems that move us to seek new understandings, and that shape the particular kinds of understandings that each learner creates.²⁵ This is not to minimize the frustration and discouragement that such experiences of aporia entail. They are not simply psychological states, but bodily experiences as well; which is why we use words like discomfort and disorientation to describe them. They involve a moral as

well as an epistemic element; they involve difficult choices about what to *do* and not only what to *think* — of where to move, and how to go on. But this approach to teaching also allows learners to feel the full joy of recognition, the satisfaction of knowing how to go on without being led — and I do not see any way to experience the latter joy and satisfaction without having experienced the former frustration and discouragement. We need a more courageous, risky approach to teaching — a way of teaching and not a method — one that respects the educational importance of both doubt and confidence, both strangeness and familiarity, both being lost and finding a way. The teaching dialectic here is not a process of argument leading to higher and higher truths, but an ongoing *engagement with difficulty* — and, in this, to embark on a journey with an unknown, unknowable destination.

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1. Ludwig Wittgenstein, *Philosophical Investigations*, 3d ed., trans. G.E.M. Anscombe (New York: Macmillan, 1958), ix.
2. Nicholas C. Burbules and Thomas A. Callister, Jr., "Knowledge at the Crossroads: Alternative Futures of Hypertext Environments for Learning," *Educational Theory* 46, no. 1 (1996): 23-50; Robert A. Jones and Rand Spiro, "Contextualization, Cognitive Flexibility, and Hypertext: The Convergence of Interpretive Theory, Cognitive Psychology, and Advanced Information Technologies," in *The Cultures of Computing*, ed. Susan Leigh Star (Cambridge: Blackwell, 1995), 146-57.
3. Nicholas C. Burbules, "Rhetorics of the Web: Hyperreading and critical Literacy," in *Taking Literacy Into the Electronic Age*, ed. Ilana Snyder (New South Wales: Allen and Unwin, 1997), 102-22.
4. Ilana Snyder, *Hypertext: The Electronic Labyrinth* (Victoria: Melbourne University Press, 1996).
5. Plato, *Meno*, in *The Collected Dialogues of Plato*, ed. Edith Hamilton and Huntington Cairns, (Princeton: Princeton University Press, 1961), 353-84.
6. Plato, *Meno*, 368.
7. Jacques Derrida, *Aporias* (Stanford: Stanford University Press, 1993), 12.
8. For a brilliant discussion of this etymology, see Sarah Kofman, "Beyond Aporia?" in *Post-Structuralist Classics*, ed. Andrew Benjamin, (New York: Routledge, 1988), 7-44.
9. Ludwig Wittgenstein, *Philosophical Investigations*, 3d ed., trans. G.E.M. Anscombe (New York: Macmillan, 1958).
10. Gilles Deleuze and Felix Guatarri, *On the Line*, trans. John Johnston (New York: Semiotexte, 1983). See also Gilles Deleuze and Claire Parnet, *Dialogues*, trans. by Hugh Tomlinson and Barbara Habberjam (New York: Columbia University Press, 1987).
11. See Jorge Luis Borges, *Labyrinths: Selected Stories and Other Writings* (New York: New Directions, 1962), esp. "The Library of Babel," 51-58.
12. See Burbules, "Rhetorics of the Web."
13. Jacques Derrida, "Signature Event Context," in *Margins* (Chicago: University of Chicago Press, 1982), 309.
14. Kofman, "Beyond Aporia?" 10.
15. Wittgenstein, *Culture and Value*, ed. G.H. von Wright, trans. Peter Winch (Oxford: Basil Blackwell, 1980), 20.
16. Plato, *Meno*, 363.

17. Hans-Georg Gadamer, *Truth and Method* (New York: Seabury Press, 1975) 102.
18. Ludwig Wittgenstein, *Tractatus Logico-philosophicus* (New York: Routledge and Kegan Paul, 1922).
19. Jean-François Lyotard, *The Differend* (Minneapolis: University of Minnesota Press, 1988), 13.
20. On this sense of "aporia," see Derrida, *Aporias*, 23, 32-33, and 72.
21. *Ibid.*, 72.
22. Nicholas C. Burbules, "Teaching and the Tragic Sense of Education," in *Teaching and Its Predicaments*, ed. Nicholas C. Burbules and David Hansen (Westview Press, 1997), 65-77.
23. There is an affiliation here, I think, with Vygotsky's "zone of proximal development."
24. For more on maps, see Michel De Certeau, *The Practice of Everyday Life*, trans. Steven F. Rendell (Berkeley: University of California Press, 1984), 116-30.
25. On teaching and aporia, see also Bill Readings, "From Emancipation to Obligation: Sketch for a Heteronomous Politics of Education," in *Education and the Postmodern Condition*, ed. Michael Peters (Westport, Conn.: Bergin and Garvey, 1995) 193-205.