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A Portable Ecology: Supporting New Media Writing and Laptop-Ready Pedagogy

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"ABOUT THOSE LOOPS" TRANSCRIPT

This short presentation, called "About Those Loops," is designed to further explain a metaphor that we developed as we wrote to help ourselves imagine the complex relationships at work at any institutional change process. We suggest in our metaphor that change happens in a series of transacting, overlapping loops within loops.

In the beginning, there were no loops in our thinking. Instead, we assumed that as one pursues change in an institutional setting, there is a linear chain of command or series of events to follow, and that if we simply followed that chain, link, link, link, we would achieve our goals. So, for example, the writing program administrator, in consultation with the department, develops a plan for classroom change. That plan is sent along to the dean or to whatever person or office can approve changes. And if the plan is approved, work is done. Work orders go in, whatever that means, and just like that—A, B, C, D—transformed classrooms appear.

What we learned is that this is a little like thinking that somewhere along the way a miracle occurs, because a lot of complicated things happen between the dean's approval and the transformation of the classroom. Our paradigm didn't offer us adequate ways to think about the complexity of the process.

Gregory Bateson's (1972/1987, 1979, 1991) model of evolutionary change is a more appropriate way to think about institutional change. Bateson's argument, in short, is that the linear model of evolutionary change—where an organism continually evolves into more and more perfect forms—is wrong. Instead, Batson explained evolution as a complex process involving an entire ecosystem of independent actors.

Bateson illustrated this point by talking about the complex origins of the modern horse. The horse that it exists as it does has evolved into the form best suited to thrive on the grassy plains where it lives. But we could also say that the plain exists as it does because, over time, the plain has responded to horses living on it. Certain plants have thrived; others have not. The soil has been beaten down and fertilized in different ways by evolving horses. Some predators have been attracted, others have been fended off, and so on. This means not only that evolution is a process of mutual change and accommodation, but also that evolution is not necessarily progress toward better forms, just emergence into different forms. As we write in "A Portable Ecology," what appears to be an improvement in one place in the system may lead to complications in other places. Some agent in the system evolves into a form in which it can better defend itself or better meet its needs. But the rest of the ecosystem is not stable; other agents are also changing, maybe in response to independent factors, maybe in response to that first agents' new situation. And so the form that served an evolving species well at one time, or the form that served an evolving technology well at one time, may, as the rest of the ecosystem changes, become untenable, or even disastrous. Think of the T-Rex here, or, in terms of technology, think of the 8-track tape.

As rhetoricians, this is a pretty natural way for us to think, comparable in a lot of ways to the good old feedback loop. Here you see my standard classroom slide illustrating the parts of the

feedback loop, and it's easy to imagine the WPA sending a message to the dean, the dean prompting the WPA to clarify the message, and, eventually, the achievement of clearer communication, and so on. But a single feedback loop with only two agents in it hardly represents the complexity of institutional communication. When Bateson talked about the horse and the grassy plain, he suggested not that the horse is in a system with the single entity called "grassy plain," but that the horse is in a complex ecosystem full of all of the many organisms in, under, and around the plain.

Our university ecosystem was similarly complex. The problem was not just to clarify communication with the dean. The more we learned, the more people and units we saw were important to the renovation process. There was the Facilities, Planning, and Management office, and, under that umbrella, there were the folks overseeing architecture, interior design, carpentry, wiring, and so on. There were the technology people managing both classrooms and university-wide computing, and they were constantly balancing projects and requests all over campus. Just within the department, there were different faculty groups with different priorities and needs, and at the university level, there were overarching administrative goals and priorities that could affect not only if our projects were approved, but also when and how they were completed.

And so, we began trying to understand the loops within loops situation. We were thinking in terms of dyads (e.g., the WPA and the dean). But, of course, the dean's decisions are being affected by any number of other agents he interacts with at the university. Just for instance, the dean is interacting with the university president, whose opinions will affect his actions, and moving out to the next set of loops, the president is interacting with the board of trustees, who are affecting her outlook. But that's still too linear; the dean isn't interacting only with the president. There is also his relationship to the instructional technology folks, to the various units, to the other deans on campus. And all those people have independent relationships, too—loops within loops.

We can also think about all of the complex relationships affecting just the formation of writing program goals. We've already been talking about the relationship to the dean, which is often mediated by the relationship to the department chair. Beyond the dean, there is university administration. But this is just one direction we can look. There is also a relationship to the instructional technology people, concerned with questions about whether our goals fit with their goals for the whole university and questions about whether our plans make sense to them in general. There's a relationship to facilities. Do they see our building in need of renovation? Is there time, money, and reason to make our project a priority?

We have to keep students in mind—what they expect and what they bring. In our case, the fact that students and their parents had begun to see laptops as a must-have for school was central to our laptop classroom scheme. Teachers, too, obviously, have to be considered. Are we making their jobs easier? Will they accept or even like the changes we're proposing? And the office staff can be affected. What new things will they need to do to help us get laptops to teachers and manage teaching assignments in these new spaces.

Finally, there's our relationship to the existing spaces. What are the rules for changing them? Can they be made to work as we want them to work. Between all these concerns, there are other relationships, other links, so that at every level, in every direction, we encounter the same kind of complexity that we already saw in the dean relationship. Loops within loops, relationships within relationships, all affecting the formation and then execution of writing program plans.

So what we finally learned is that we were not dealing with just a dyad or with a linear chain of command, but, instead, with a set of relationships, and then with a set of relationships beyond them, branching out in every direction with increasing and sometimes bewildering complexity.

We started with the notion that getting things done on campus was an A, B, C, D procedure—a command-and-achieve model where change results from a predictable linear process. We soon learned that the process had to be recursive somehow, involving planning, and then re-planning based on feedback. But since every stop on that A, B, C, D journey involves its own loop, a simple feedback model only begins to demonstrate the complex ecology of communication and action of which we were part.

It's not just about us and the things happening in our little feedback loop. We finally learned that each office we interacted with should be seen as already a part of its own complex web, full of its own stakeholders, its own interactions and communications, and its own twisty pathways to change. Every loop has its own loops, has its own loops, has its own loops. Complexity exists at every stage. There's both the complex horse and the complex grassy plain, and you have to think in terms of the whole ecosystem.

We, of course, have some big ideas about how to manage all that complexity and all those loops. We write at length about those ideas in "A Portable Ecology: Supporting New Media Writing and Laptop-Ready Pedagogy."