

## Chapter 35

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# Coordination

As one individual acts or proposes action with another, her action alters opportunities for controlling perceptions—both the other's and her own. Further, that act alters the possibilities for still others to make use of these two individuals. The result is that the readiness of every one of the interacting individuals to make use of others will adjust and shift. A sort of continuous hunting or *tracking* process goes on as every individual assesses the changing opportunities for controlling perceptions, takes actions to control them, and in doing so further alters the distribution of opportunities for herself and everyone else. The availability of the human resources in a group and the actual use of them are dynamic, in constant flux, protean.

Many others have seen this unceasing mutation. Arrow, McGrath, and Berdahl (2000, pp. 56–57) say this:

Local group process creates, activates, replicates, and adjusts dynamic links in a coordination network. . . . From local action, global-level patterns emerge—behavioral and cognitive patterns such as group norms, cohesion, division of labor, a role system and influence structure, and temporal patterns such as cycles of conflict and consensus, regularities in changing group performance, and the ebb and flow of communication. . . .

This is not the kind of relationship traditionally modeled by independent and dependent variables. Rather, we are talking about contextual factors that constrain the operation of local-level rules without determining the outcome. The whole pattern of global dynamics that emerges from this local action may shift when a contextual parameter shifts to a different value. Or it may remain unchanged. . . .

Complex systems whose behavior depends largely on interactions among local elements—the weather, for example—are predictable only in the short run, and these predictions are for global variables . . . , not local variables. . . . Patterns of key global variables, however, do show substantial regularities over time.

The vocabulary of those authors differs a good deal from mine. Where I would speak of a demand or proposal an individual makes to others, they speak of local dynamics. Where I would speak of environmental opportunities, they speak of contextual factors. Nevertheless, it is easy to see in those passages a picture of patterns arising from the actions of individuals, patterns that change their actors or their shapes or both as the social opportunities change. It is easy to see, too, that the authors do not aspire to predict particular acts when they write of environmental conditions that “constrain . . . without determining the outcome.” They see the regularities of outcome not in individual acts, but in the statistical outcomes (“global variables”) constrained by a preponderance of similar individual goals and by the use of opportunities from a common environment.

### ORGANIZING OURSELVES

Maybe you remember how it was when you were a child and you walked onto a playground in a neighborhood new to you. Or you can think of how it is when you go to a party where there is no one you know. Or think of the first hour of the first day on a new job. You don't know whether to bet that someone will have an eye out for newcomers and will come over to greet you or whether everyone will ignore you until you say something. You don't know whether

people will expect you to state your credentials or to say something nice about the weather. You feel many uncertainties, but you don't expect utter chaos.

You expect to find, before long, some patterns of action. If someone comes forward to greet you, you do not take that as a random action. Rather, you think, "People in this group expect to make at least a little effort to be welcoming. They probably won't ignore me if I invite a little attention to myself." Imagine how uncertain and disconcerting social life would be if we did not find some repeated patterns pretty quickly. Imagine how much time would be wasted, without quickly discernible patterns, customs, or routines, in dealing with other people—in getting work done, playing a game, making a purchase, carrying on a courtship.

To reduce the evils of strife and reap the benefits of cooperative work, we must replace what would otherwise be wild uncertainty with some degree of reliable expectation about the actions of other people—and about our own actions, too. That, at least, is what we all seem to believe. We all act on the social environment to restrict and order perceptions of the possible actions of ourselves and others. We tell children to stay in their seats until the bell rings. We tell employees to show up at nine o'clock in the morning. We tell the customers to stand in line at that window. We tell the subjects of a king to kneel in his presence, and similarly the members of the flock of the Pope. When the judge walks into the courtroom, the bailiff shouts, "All rise!"

Thus arises culture: customs, rituals of membership and passage, laws, agreements, rules, norms, traffic signs, administrative manuals, and instructions for opening a box of breakfast cereal. Thus arise groupings of families into clans and communities in which customs and rules can be well enough understood by all individuals and to which work groups can bring the benefits of cooperation.

If we see a cluster of men walking down the center of the street, all dressed pretty much alike, all wearing ten-gallon hats, with two or three at the front carrying banners, and all keeping close together as they walk—at least until they go out of sight around a corner—it is easy to perceive a repeatable, recognizable, namable pattern there and think of that pattern moving down the street as a "thing"—maybe a "bunch," maybe a "parade"—just as we can think of the little pattern we perceive moving along behind the men as a "dog." Then it is easy to look for the properties or charac-

teristics of that "thing" or "group." And it is easy to ask how individuals *affect* a group—that is, how this *thing* (an individual) affects that *thing* (a group).

We remain, however, individual entities. If we perceive the clustering as an activity of individuals, we are more likely to ask how this pattern of groupiness can come about—what are the capabilities of humans that can enable them to march in a cluster down a street, wearing ten-gallon hats on their heads? How are they helped and hindered when they control their perceptions by using ten-gallon hats, other marchers, and other features of their environments?

It is true that human individuals acting as groups can do things they cannot do as separate individuals—carry a large canoe to the water or build a skyscraper, for example—thereby expanding their powers. But those cooperative patterns of action do not make a group into a system or organism or entity that is somehow a "thing" bigger than the individual. Behavioral functions connect individuals in the uncertain and shifting manner shown in Figure 28–5. We can be mistaken when we see people behaving as if they were all physically connected in thinking that something more is going on other than individual control of perception. You saw that misapprehension illustrated in Chapter 9 under "The Crowd."

Groups cannot have perceptions separate from those of their individual members, and they do not have reference signals (internal standards) separate from those of their individual members, and therefore they cannot maintain purposes separate from those of their individual members. In a group, when individual purposes come into conflict, individuals can leave the group to pursue their separate purposes. In an individual, when pursuits of purposes come into conflict, no purpose can leave the individual and go off by itself.

The idea of living entities of larger and larger scope is an old idea. (See under "Reification" in Chapter 5 and "Group Mind" in Chapter 8.) I am reminded of a story by Arthur Conan Doyle (1859–1930) about a scientist (whom he named Professor Challenger) who drilled a deep hole through the earth's crust and dropped an immense steel spike into it—and the earth screamed. A book is currently in print called *Gaia*; it conceives the whole earth with all its inhabitants as a unitary living organism. Maybe before long someone will write a book explaining how the galaxy or the universe is a living creature.