Some notions of strategic planning are naive because they do not take into consideration the elements of chance that are inevitable in systematic, concerted efforts to plan and direct change. Whether the effort be military (the original use of the term “strategy”), corporate, or institutional, the elements of chance are numerous because they can be natural and human. They can also be systemic and/or the result of interactions among two or more natural, human, and institutional variables.

It would be helpful if we could exclude natural variables altogether in dealing with social and cultural institutions such as colleges and universities. Concepts of natural law do not easily apply to institutions that have been governed, directed, or administered by several generations of human beings. It is difficult to see what might be natural about the survival or effectiveness of educational institutions, and it would make better sense to look to the “normal sciences” of psychology, economics, sociology, political science, and anthropology for assistance in interpreting the reputations, roles, or missions of colleges and universities. As occasional critics have noted, there is something distinctly unnatural about societal and cultural institutions, and efforts to deal with institutions of higher education within a naturalistic framework may not be the most productive means of inquiry and analysis.

Chance, however, is both natural and human. And thus, chance becomes the missing variable in much that we take pride in, or lament. In retrospect it is often difficult to decide whether the successes and failures of colleges are due to natural causes or human reasons. Such ambiguity no doubt gives institutional leaders the option to claim credit for institutional successes and to attribute institutional failures to unavoidable causes.

In a remarkable book entitled, The Laws of the Game, Manfred Eigen and Ruthild Winkler (1981) write that events in our natural world resemble a vast game in which nothing is determined in advance but the rules. Only the
rules of the game are amenable to objective understanding, and the game itself should not be confused with either its rules or the sequence of chance occurrences that determine the course of play. Yet the game is a natural phenomenon that underlies our innumerable observations and inferences concerning chance and necessity. Chance is not the random or capricious event that disrupts the uniformities and regularities we infer from observation and experiment but a basic element of the game that is governed by natural principles or laws.

Eigen and Winkler find evidence of natural laws (and their interaction with chance) in the game that matter plays in time and space; the origin of the genetic code; the development of languages, information, and knowledge; and aesthetic appreciation. They thus see a unity of nature in natural principles that govern the similarities among structures in our natural world. Chance and rules are the underlying components of games and the natural phenomenon of play itself. As a natural phenomenon, play began with elementary particles, atoms, and molecules—and continues in the complex networks of the human brain.

To illustrate the interplay of chance and rules, Eigen and Winkler use bead games to simulate basic statistical processes. By introducing variations in the rules and conditions of various games, they demonstrate the resulting differences in patterns of outcomes and the distributions of effects. From the products of chance and the indeterminacy of simple events come forms and patterns that are highly structured and relatively permanent.

GAMES OF STRATEGY

In a delightful introduction to game theory, J. D. Williams (1954) of the RAND Corporation defined strategy as "a plan so complete that it cannot be upset by enemy action or Nature (p. 16)." He was, of course, writing about games in which there are opposing interests between or among the players. Since coalitions are possible in the competitive games that fascinate human beings, Williams wrote about sets of opposing interests instead of individual players in a game. Most of the games he discusses are zero-sum games in which the winnings of one set of opponents are the losings of the other set of opponents.

It is now well known that in two-person, zero-sum games the choice of a strategy is dependent upon the assumptions the players make about each other, the information they have, and their respective objectives or expected values. In games of high stakes where losses are more devastating than winnings are gratifying, John von Neumann's minimax strategy has particular appeal and opponents may be happy to escape losses that they cannot afford. There are even situations in which opposing players are pleased to