

CHAPTER 9

THE EFFICIENCY OF THE DESIGN PROCESS

1. Decisions that Precede the Design Process

In Chapter 4 and elsewhere in the preceding analysis, the issue of the consistency between the components of the vector that describes an organization structure and the substructures are discussed at some length. The issue of how to make the designed structure become a real one is to be discussed soon. What we discuss now is the important issue of designing structures that are to make the decisions that will solve a specific set of problems which some group wants solved. The very purpose of the design is to create a structure that performs in a manner that produces an outcome which the designer wants for himself, or for whatever group is involved. The structure is the mechanism for giving values to decision variables which describe a performance that produces an outcome desired by the group. The connection between the performance and the outcome is a set of transformations. If the structure is to perform in a manner that produces the real required outcomes, then the transformations which the designer uses to identify the decision variables and the parameter variables that make up the second and third components of the vector he is creating must also be real. Whether or not the designer gets the real outcome he wants, depends on whether or not he knows the real transformations and uses them when he makes design decisions that specify the fourth, fifth, etc., components of the vector that describes the structure. If the sets of decision variables and parameter variables are not derived from the real transformations that are relevant to the people for whom the organization structure is to be designed, then the efforts of the designer are meaningless. His design is worthless. You cannot design a good structure if you don't understand the nature of the business.

Any process of designing organization structures must start with a given set of decision variables and a given set of parameters. The designed structure is that which gives the former their values, given the values of the latter, and does so for some group of people X with

desired outcome Y. If the design is to be useful, then both of these sets must be those which are in the real transformations which the group identifies as describing the real world manner in which they may get their required outcomes. The most basic of all strategy decisions are the choices of the outcomes and the set of connections between what is done and what results. The identification and choice of the real transformations is no easy matter. It involves the understanding of the real world causal relations and the choice of combinations of subsets of these for the organization to operate. This knowledge is the result of the analysis of the nature of the world and of the connections between its components and the determination of which components have values that can be set, which have values that can only be read, and those that have values than can be neither set nor read. All this is useful to anyone if he has some preferences on the values for some of the components of the world. The designer of the organization structure does not necessarily have to do all the derivations of the connections. It would be better if the designer did the derivation himself, so that he may be sure that components two and three of the design vector contain the variables from the real transformations that would produce the world desired. If he derives the transformation himself, then he may be better able to choose from them the sets of decision variables and parameter variables which he is to use. This decision may allow the simplification of the design by excluding some variables which are judged to be of small consequence in their effects on outcomes. The designer may judge both the relevance of a variable and the effects of its exclusion on the design problem, or he may work closely with a transformation expert who does the former while the designer does the latter. If one is to be an expert designer, one who can create designs for different transformations, outcomes, etc., then it is likely that one will not have the time to master both subjects, and working with an expert in each case is probably best. Whatever the connection of the designer to the people who want a structure, the designer must have at hand knowledge of the transformations which the structure will be operating. The detail which the designer can obtain for his design is limited by the detail in which the transformations he knows are given.

If components two and three of the vector which describes the structure must be realistic for the design to be relevant and useful in the specifics circumstances for which it is created, so must be the first component, the set of people. There are a number of considerations