THE MODEL
UNDERLYING SIMSOC

WILLIAM A. GAMSON
RUSSELL J. STAMBAUGH
University of Michigan

We number ourselves among those game designers who advocate having an explicit model in mind in developing a game. If applied to SIMSOC, such advocacy must be seen as an example of “Do as I say, not as I do.” In fact, SIMSOC in various versions has been around since 1964, and a new edition was published in 1978. This paper represents the first attempt to explicate fully the underlying model.

Why so belated? For better or worse, the development of SIMSOC has followed a largely inductive process. That it contains an implicit model has been obvious, and parts of that model have been suggested both in the Coordinator’s Manual which accompanies the game and in a separate article by one of us (Gamson, 1971). There are substantial advantages to be gained by making this implicit model fully explicit, and we will attempt to demonstrate them in this paper. In it, we assume familiarity with the second edition, published in 1972.
Making the model explicit enabled us to identify certain design problems with the 1972 version of the game and to suggest rule modifications that more fully realized the demands of the model. Here, we criticize the 1972 version, discuss the changes that are introduced in the 1978 edition, and attempt to draw from these changes some generalizations about the design principles involved.

THE MODEL

AT THE START

At the beginning of SIMSOC, one could hardly say that a society exists. In fact, the participants face the task of establishing a social order under a very difficult and trying set of conditions. Let us examine these unpromising conditions in some detail.

1. *Extreme inequality by individuals and regions.* A handful of people control the major resources in the society, including the means of subsistence, communication, and production. They not only possess present resources, but they have continuing control of future resources if they are able to maintain their positions. Others not only lack resources but are in a state of dependence for mere survival. From the very beginning of the society, there are clearly visible haves and have-nots.

   The privileged members of society are distributed by region such that there is one region with some abundance, some more or less self-sufficient regions, and one with nothing. The problem of extreme inequality of power and wealth is not merely a matter of individual differences but is overlaid with geography. There are have and have-not regions as well as individuals.

2. *Subsistence scarcity.* There is an imminent societal crisis brewing around the lack of sufficient subsistence for the present population. The problem is not merely one of distribution of subsistence, because there simply is not enough to go around
without “importing” additional subsistence from the coordinator. Participants are unaware of this imminent crisis, but it looms on the horizon, and they will soon be forced to deal with it in some way.

3. Communication barriers. There are powerful communication barriers between regions with free communication within regions. While some individuals possess the means for overcoming some of these barriers, these means are themselves subject to the unequal distribution described above. It is particularly difficult for the deprived region to communicate with other members of the society, since initial communication must come through outside initiative. Thus, the deprived region is isolated as well as deprived, and communication among other regions is difficult.

4. Nonlegitimacy of privilege. Participants all know that the wealthy and powerful hold their position on arbitrary grounds. There is no justifying ideology to defend this privilege, no sense in which anyone could regard the privileged as more deserving than the unprivileged. While it would be too strong to call the privilege “illegitimate,” it is clearly nonlegitimate. The privileged hold their position because they are luckier, not more virtuous or deserving in some way.

5. Poverty of culture. There is a general lack of shared experience and expectations. Members of the society have no shared history in the society nor clear expectations about what to expect. They bring shared culture and language with them, but its applicability to the current situation is unclear. Normative expectations are ambiguous or nonexistent and, at best, very fluid and changing.

6. Lack of government. There is no organized capacity for making collective decisions or dealing with problems in a collective way. No individual or group exercises any legitimate
authority over anyone. No mechanisms exist for making collective decisions or dealing with crises that might arise.

7. Lack of infrastructure. There is no organization below the level of the total society. The basic groups do not exist in anything more than name. They consist only of specific individuals who control resources, and are not functioning groups. No loyalties or support structures for these groups exist. In short, there is not yet any structure to support the functions which the groups have been assigned by the rules.

8. Diversity of personal goals and lack of clarity on how to achieve them. Individuals are pursuing a range of different personal goals, some of which conflict with each other or conflict with societal and group goals. The goals they are pursuing are independent of any means provided by the society. Thus, there is no integration of personal goals and social position, but rather a general state of uncertainty resulting from the lack of culture and social organization. Most people do not have any very clear idea of how to go about trying to fulfill their personal goals.

By any reckoning, this is a formidable set of problems and constraints. The challenge of dealing with them provides the dynamic by which the game runs.

NATURE OF THE MODEL

The model will describe the central processes in SIMSOC as involving three phases. Each phase presents the members of the society with a characteristic set of issues or dilemmas. The participants can deal with these dilemmas in a number of different ways, but it is possible to classify these ways more abstractly into a very small number. The model suggests why some of these ways are more likely to occur than others. The way problems are handled in the first phase affects the precise form in which the issues of the next phase are presented to participants. Conse-
quently, the model is rather complicated, for we must describe the possible outcomes of each phase and follow their path into subsequent phases.

THE FIRST PHASE

The first phase is characterized by a number of processes which occur simultaneously and are resolved in a limited number of ways. The most central process is one of mobilization around the problem of the provisions of subsistence to the participants—that is, overcoming the problem of scarcity. How this general problem gets resolved depends on the handling of the following more specific problems.

1. *Organization of the basic groups.* The easiest and most common path is for basic groups to organize on a regional basis. Because one is in direct, face-to-face communication with one's fellow region members and must travel to communicate with others, it is most convenient to build an organization around this nucleus. This means that political parties initially will take on a regional character, as will industries and other groups.

   This process is one in which individual positions of privilege become located institutionally in a home region. Regional organization and organization of the groups are virtually synonymous in this phase. The infrastructure that develops, being regionally based, increases the distrust between the privileged from different regions. If some of the privileged are also minority group members, this mitigates further against the development of a cohesive elite. The privileged are unlikely to develop a general "ruling class" consciousness or to coordinate the pursuit of their interests in this phase.

2. *Organization of the nondeprived regions.* As indicated above, we expect nongroup heads in a region to become employees and, in some cases, to take over the leadership of basic groups operating in their region. Because of heavy interlocks
between group memberships within a region, each region will become a complex of the basic groups within it. For example, an industry and a political party may come to act as a single unit in many situations.

There may be external power struggles between the head of a group and employees, or between group heads in the same region. Some group heads may sponsor a collective leadership while others may maintain various marks of privilege and power that differentiate them from the other members of their region. In general, given the precarious nature of life in SIMSOC during this phase, we expect privileged individuals to attempt to maintain their positions of privilege and to share it only reluctantly. Close alliances with one or two trusted lieutenants seem more likely than regionwide decision-making and control of basic groups. The abundant region (Green) is particularly likely to encounter problems of internal cohesiveness, as most members are wealthy enough to be relatively autonomous. Interdependencies among members will not be too apparent at this stage.

3. Organization of the deprived region. While the problem facing the better-off regions is that of the institutionalization of privilege, the deprived region (Red) faces the problem of survival. Its members face it under extremely difficult circumstances. They not only lack subsistence, but they are isolated by the absence of any means of travel. They have no way of initiating communication with other members of the society and little or no internal differentiation among themselves.

Under the circumstances, their organization is likely to focus on issues of getting jobs and subsistence for members. During this phase, issues of control over resources are not yet central, although they may be raised.

4. Regional integration. At a collective level, the participants are dealing with the problem of regional integration. In a typically nonplanned way, they will establish some pattern of communication (or noncommunication) with the deprived region and will develop some form of relationship (or lack of relation-
ship). The manner in which the basic groups and regions become established and interact will determine the outcomes of Phase One.

**Outcomes of Phase One**

We will describe the outcomes of Phase One in terms of a number of ideal-typical patterns and will attempt to state the conditions which give rise to one or another. In any actual SIMSOC, one is likely to find elements of more than one of these archetypes which we distinguish here analytically.

1. *Organized challenge to privilege.* There are various reasons why we expect this to be the most likely response to the problems of Phase One, with the challenge spearheaded by members of the deprived region. Members of the deprived region are typically left alone with ample time to become aware of their common plight. Their peril and concern for survival in the absence of internal differences (except for individual goals) is conducive to solidarity and a sense of common fate. Their high ratio of in-group interaction combined with little or no communication with outsiders reinforces this. Given the lack of infrastructure and government in the better-off regions, it is extremely difficult for members of these regions to organize a rapid response to the problems of the Red region even with the best of good will. While members of the other regions are still struggling with the tasks of building an infrastructure, the impatience of the Red region for some societal response grows rapidly.

Since the privileged hold their position through no special merit, members of the Red region are likely to develop a hostile attitude toward the privileged rather quickly. If discussions of the plight of the deprived region are taking place, this is typically invisible to the members of the Red region and takes place without their participation. Thus, they tend to be presented with “solutions” to “their problem” as a fait accompli. Far from sparking gratitude on the part of the Red region, such efforts frequently increase their resentment and anger. Thus, the very
efforts of other societal members to deal with the problem of scarcity are likely to stimulate the confrontation.

The political organization of the deprived region is facilitated by the lack of competing tasks in this region. No one has any basic group business to attend to or any other kind of competition for their attention and energy. In contrast, the members of other regions have individual tasks of various sorts—the disposition of travel and subsistence tickets and the organization of the basic groups—that divert their attention from working on the problem of scarcity. Thus, the problem receives secondary priority in the rest of the society during a period in which it is the sole preoccupation of the deprived region.

In sum, the organization of a challenge to privilege by the deprived region rests on the convergence of two sets of factors: those that make it difficult for the other members to respond rapidly and effectively to the problems of scarcity (communication barriers, poverty of culture, lack of government, and lack of infrastructure), and those that make it likely that members of the Red region will develop strong distrust toward members of other regions (vulnerability and insecurity from lack of resources, isolation, and nonlegitimacy of privilege).

There are also factors working against this dominant outcome. Within the deprived region, there are problems arising from the poverty of culture and diversity of personal goals that may handicap organization for collective action. Outside of the Red region, there are resources holders who have the wherewithal to make a variety of rapid individual responses to the scarcity problem. These efforts may avert a challenge to privilege. We will briefly examine some of these alternative outcomes.

2. **Collapse of the Red region.** In this solution, members of the Red region die or make individual arrangements with power holders in other regions, and move into the region of their sponsor. The region disappears and survivors are integrated. We would expect this to happen under the following relatively unusual conditions: (a) members of the deprived region are suffi-
ciently different in their goals and common understandings that they are unable to reach any kind of agreement on any collective way of dealing with their common plight, and (b) resource holders in other regions move rapidly to coopt emergent leadership in the deprived region. This is most likely to happen when some individual members of the deprived region are involved in prior social relationships with members of other regions who are concerned enough to look after them and act before the consciousness of the deprived region has had an opportunity to gel.

3. Unstable dependency. In this outcome, the population of the deprived region becomes, at least temporarily, a ward of the privileged. Members are provided with jobs and subsistence and, if needed to maintain their loyalty, a certain amount of luxury. Control of major societal resources, however, lies completely outside of the region.

The factors mitigating against this solution are those which make it difficult for members of other regions to act in a coordinated way—communication barriers, poverty of culture, lack of government, lack of infrastructure, and diversity of personal goals. Furthermore, it is difficult to stabilize this outcome more than temporarily because of those factors described above that push the deprived region toward an active challenge to privilege.

The most likely form in which such an outcome might emerge in this phase is through the sponsorship of an individual or single region which builds an alliance with the deprived region based on an exchange of subsistence and other resources for political support or work. Members of the deprived region may accept such a solution on a temporary basis to insure their survival, but it is likely to be unstable and merely to delay the challenge of the deprived region as long as the forces for collective action remain intact (i.e., continued dependency on the privilege). These variables can be affected in important ways by the participants, however, so stabilization of the dependency during the second phase is a possible outcome.
PHASE TWO

The central processes in Phase Two center on what kind of political, economic, and social organization the society is to have. Typically, a power struggle ensues concerning these issues, a struggle that can take two forms.

1. The revolutionary struggle. This struggle is characterized by the deprived region's demand for some form of public control of resources and the means of production in the society and the abolition of private ownership and control. Typically, the demand is resisted by privileged members of the society, who regard it as unnecessary and uncalled for. The outcome of this struggle depends on a number of factors that will be discussed below, including the presence of a second type of power struggle.

2. Struggle among elites. This struggle is characterized by the jockeying for power between different groups of the privileged, typically taking the form of regional conflict. In this struggle, region-based groups or powerful individuals vie with each other for the status of top dog. This struggle may be "ideologized" into a dispute about the political, social, or economic organization of the society, or it may be openly over issues of power itself. The need for support in such struggles will produce a tendency for the groups to pursue some appeal for public support—for example, a plan for raising the National Indicators.

One, both, or neither of these struggles may be present in a given SIMSOC, depending in part on the state of the society at the end of Phase One. Using each of the outcomes from Phase One as a starting point, we will indicate the likely progression into the second phase.

1. From organized challenge to dual power struggle. The most likely axes of conflict in Phase Two, when there is an organized challenge from the deprived region, are the occurrence of conflict between the revolutionary movement and the privileged combined with conflict within the elite. All of those factors men-
tioned which make it difficult for the privileged members of society to work together are conducive to the development of conflict and distrust within the elite. The problems of unequal distribution of resources, of communication problems, of lack of legitimate authority, and of matching individual and societal goals are chronic ones which continue to operate during this phase. Meanwhile, the members of the Red region, having survived the threat of starvation, will begin to expand the scope of their challenge and press it more forcefully.

In some societies, skillful organization among the elites may enable them to present a more or less united front to the challenge of the deprived region. In this case, the power struggle will focus on the single axis of conflict between the haves and have-nots. Simriots, work strikes, and hunger strikes are especially likely to occur under these circumstances. Such actions are also likely to occur during Phase One before members of the deprived region have had an opportunity to build any alliances with members of other regions.

It is also possible that the organized challenge of the deprived region will dissipate and fall apart through internal squabbling in the deprived region and external threats and inducements to individual members. If this occurs, then the only axis of conflict will be within the elites, with members of the deprived region playing minor roles as supporters of one or another powerful faction.

Finally, it is possible that an organized elite will face a weak and easily dissipated challenge, and a power struggle will not occur at all or only in highly attenuated form. Such a society would move rather quickly to Phase Three. For all of the reasons that make a dual power struggle most likely, this possibility is the least likely alternative.

2. From collapse of the deprived region to elite struggle. In the absence of an organized challenge from the deprived region, the most likely process in Phase Two is a struggle for power among the other region groups. It is possible, but less likely, that the privileged members of the society will overcome the various
obstacles to unified, collective action and will agree on some governmental structure with little conflict. Again, such a society would move rapidly to Phase Three.

3. From unstable dependency to dual power struggle. Unstable dependency can lead easily enough to an organized challenge from the deprived region during this second phase. Having secured some means of survival and having built some alliances with members of other regions in the process, the members of the deprived region may become emboldened. Concern about survival during Phase One allows members of the deprived region to accept a subordinate position as a temporary expedient. At this point, their concern turns increasingly from obtaining subsistence and other resources to obtaining a say in the control and distribution of resources in the society.

The fact that the organized challenge emerges somewhat later in this scenario has certain consequences. Survival has depended on support from some members of the privileged regions. The opportunity to play off members of the elite against one another is likely to be present in various forms for members of the deprived region. Thus, a dual power struggle is quite likely to emerge in these circumstances.

But there is also a much larger probability that unstable dependency will turn into stable or institutionalized dependency. If no organized challenge has emerged during the first phase, the dependency relationships established during that phase may grow enough during the second phase to maintain the deprived region as a protectorate of a more powerful region or group. In this case no revolutionary struggle will ensue, although an elite struggle is still quite likely, with the members of the deprived region serving as minor actors in the struggle.

**Outcomes of Phase Two**

Many of these paths converge on the same outcomes, leaving four possible results of the second phase.
1. *Societal collapse.* If the power struggles of the second phase are prolonged and intense, they may lower the National Indicators to such an extent that the society will collapse. This is most likely in the case of a dual struggle, which is likely to take the longest to resolve. Collapse occurs relatively rarely, however, because the intense crisis caused by the falling National Indicators acts as a significant constraint on the power struggle. Warring parties will frequently put aside their differences in the face of a threat to survival for everybody.

2. *Socialist society.* While this is not the most likely outcome, it can occur. It involves the abolition of private control of resources in the society and the creation of some form of public control over their distribution. Typically, the public control will be in the hands of some council or government with representatives from the different regions. In such a solution, it is frequently the case that the deprived region becomes the center of such a government. Ironically, the limited ability of members of the deprived region to travel makes it a logical place for people to meet and negotiate. Leaders from other regions develop the habit of coming to the deprived region to negotiate, and it becomes the site of many important meetings and decisions.

In order for this outcome to occur, the members of the deprived region must win outside support from people in other regions. They can do this by taking advantage of sources of cleavage in these other regions. For example, have-not individuals in other regions may find the program of the deprived region ideologically appealing. Some members of the elite, conscious of the fragile justification for their own claim on privilege, may join forces with the challenge of the deprived region and lend it tangible support. Or even members of the elite may find it expedient to join a movement that has a clear direction and sense of purpose in a society in which there is little competition in this regard. In sum, the success of the challenge from the deprived region depends on a process of gaining active or tacit support from other members of the society.
3. *Stable unrepresentation or institutionalized dependency.* Again, this outcome is not likely, but it can occur under special conditions. It is not likely to occur as long as an organized challenge from the deprived region persists. In the absence of such a challenge and/or the disappearance of the deprived region, it is the most likely result. Members of the Red region become supporters of one or another faction and receive a flow of rewards, but without any significant sharing of the control of societal resources.

This outcome appears in several concrete forms which we treat here as equivalent. For example, a member of another region moves into the deprived region and runs his group from that region with other members as employees. Or he continues to run the group from outside but guarantees a continued flow of subsistence, travel, and perhaps even muncie tickets to the population of the region in exchange for continued quiescence and support. It is even possible to turn a basic group over to a member of the deprived region, as long as this person is without any strong regional loyalty and can be trusted to serve the interests of the sponsoring group or individual.

4. *Mixed outcome.* In this outcome, the deprived region becomes recognized as a coequal member of the pressure system in the society. It develops a regular say in the control of resources. The economic and social organization of the society continues to include substantial degrees of private control of resources. However, this private control is subject to some public regulation by a political body on which members of the deprived region have proportionate representation. An example of such an instrument might be a council, with representatives from each region, that collects and distributes subsistence to make sure that all members of the society are provided for and taxes private resource holders for the support of public programs.

For various reasons, some of them extraneous to the game, this outcome seems the most likely one in Phase Two. Participants bring their own ideological predispositions into the game, and this may be a more comfortable solution for most American participants than some of the alternatives. However, there are forces within the game itself that may promote it as well. It is
difficult for a deprived minority to attack and destroy the position of those with great resources. Success depends on an elite that is beset by in-fighting, is inflexible and uncompromising or otherwise given to social control errors, or is attracted by the ideological appeal of the have-nots.

A more likely elite response is to search for a compromise of some sort that allows for the maintenance of a degree of privilege but with greater limits than before. When such compromises are offered, they are likely to create internal divisions within the deprived region on whether to accept. Splits between "reformers" and "revolutionaries" may develop, thereby weakening the capacity of the deprived region for collective action. Feeling less certain of their internal cohesion and external support in other regions, members of the deprived region may find a compromise solution even more attractive. They may never have demanded more than a sharing of power in the first place, so that proposals short of full public control will not be viewed as a compromise at all but as a full-fledged victory.

The likelihood of such a mixed outcome still depends on some organized challenge from the members of the deprived region. If this region disappears or its challenge dissipates, the outcome of Phase Two is likely to be the institutionalized dependency of the region in a society dominated by private resource holders in the other regions.

**PHASE THREE**

The central process of this phase is the destruction of the hegemony of raising the National Indicators as the collective goal of the society. The quality of life in SIMSOC emerges as an issue. To raise this issue is to reassert the importance of personal goals.

At the end of Phase Two, as long as the society has not collapsed, the characteristic drop in the National Indicators during Phase One and much of Phase Two has stabilized, and the Indicators have begun to climb. The society has developed some mechanism for allocating enough resources to Public Programs to raise National Indicators and has handled most of the problems that tend to lower the National Indicators.
In the process of solving Phase Two problems, a new line of cleavage develops between "leaders" and "masses." The "leaders" may be people who have had privileged positions from the beginning, since there is no doubt that having resources is a help in becoming an influential figure in the society. On the other hand, some may have acquired resources during the course of the game and others may not possess any resources but still have emerged as influential decision makers. For whatever reasons, certain individuals will have emerged as either a formally designated or unofficial "government."

These leaders continue to be involved in the societal goal of raising the National Indicators and, at the same time, are likely to feel that they are fulfilling their own personal goals. Those who are not central to the political structure in the society begin to question the priority of the National Indicators as a goal. They begin to ask whether a rise in the National Indicators means an improvement in the quality of their personal lives in SIMSOC. The problem for them is boredom. The society is running with the efforts of others and they have nothing interesting left to do except nibble munchies.

A reflection of this phase is the development of a leisure culture. Participants begin to develop Simreligions, to bring guitars and other musical instruments, and to develop recreations of various sorts that are independent of the game.

Some new challenges may emerge during Phase Three based on a redefinition of the requirements of leadership. It is no longer sufficient for an individual or a group that wants support to have a plan for dealing with scarcity or raising the National Indicators (which are problems of the past). Now they must have ideas that will enable individuals to meet their personal goals. An increased number of negative goal declaration cards may start to make Public Commitment a renewed problem.

The emergence of this phase is a signal to end SIMSOC, so it is not meaningful to talk about its outcome. Once a group has developed sufficient social organization, the problems of running the society can be handled with a small amount of energy by a few individuals and there is little left for anyone to do. At this
point, it is time to discuss and analyze the society in a postgame discussion.

THE USE OF FORCE

Force can be used during any phase of SIMSOC, but it tends to serve different functions at different times. During Phase One, the most frequent use of a Simforce is as a device for resource accumulation. In effect, force is used as a form of banditry, with the most likely targets being group heads. Simforces used for such purposes are usually created by one or two individuals rather than whole regions or larger groups. During the first phase, privileged members of the society may create a Simforce for personal protection from banditry.

During Phase Two, new Simforces may be created or existing ones used for a somewhat different purpose. Where a power struggle is in progress, force may be used as a way of dealing with a political adversary. In practice, this use may not be easy to differentiate from a vehicle for resource accumulation since group heads are likely to be involved in power struggles and will still be likely targets of force. However, sometimes the targets will have political influence but little or no resources, and the function of force will be clear.

During the late stages of Phase Two or the beginning of Phase Three, force may be used as a collective device to enforce conformity to some collective decision. In effect, a Simforce becomes a law enforcement agency, being used on behalf of a government to collect taxes, punish deviants, and the like. Only when it is used in this fashion is the victim of arrest likely to be given any prior warning of arrest. The emergence of this type of Simforce will typically involve the conversion of an already existing private force into a public one.

Finally, during Phase Three, the function of a force is mischief. Such a force will typically involve one or two individuals who, while they still have some resources, are no longer linked to governing activity in the society. Perhaps they have a Simforce left over from an earlier stage and use it to arrest a societal leader
as a way of showing that they are still people to be reckoned with. Or perhaps they have managed to accumulate some resources and, feeling somewhat bored in a stagnating society, they choose, in effect, to throw a bomb to stir up some excitement.

With all of these reasons to use force and the relative ease of employing it, it is not surprising that few SIMSOCs will manage to run their course without any resort to force. Figure 1 summarizes the model underlying SIMSOC.

CRITIQUE OF THE 1972 VERSION

PRIVATE LIFE

The model assumes that individuals face some choices between the pursuit of private and public concerns. However, this balance
was not effectively realized in the 1972 version. In many respects, individuals pursued public concerns by default, having no meaningful private activity or goals to compete for their attention and resources. More specifically, this design problem was manifested in four ways.

1. *Lack of personal consumption.* There is no equivalent of private consumption in the old version of the game. Attempts to introduce it through a luxury living option (including a vacation region) were weak and ineffective vehicles for offering this option. This option was not well-integrated into the ongoing action of the game and frequently seemed extraneous and irrelevant to the participants. Most individuals with surplus Simbucks had little option other than investing in Public Programs. Thus, the absence of personal consumption helps to solve a dilemma that the members of SIMSOC should be facing: how to attract or command resources for public purposes in the face of competition to use these resources for private purposes.

2. *Narrow range of meaningful individual decisions.* Most individuals—that is, those who were not head of a basic group or agency—had few if any meaningful decisions to make. While the choices might have an indirect effect, the consequences for others were not immediately apparent. For example, an individual supporting a political party might decide to work for that party or even contribute money but could just as easily ignore political parties altogether without significant consequences for himself or for the party. The same point applies to support for other basic groups. The individual could receive a job and a salary but have little to offer in return and few choices with consequences.

3. *Lack of meaningful work.* In the old version of the game, there was little need for productive labor of any kind. Basic groups had no real reason to hire others, except to prevent unemployment from lowering the National Indicators. Industries really did not need to hire anyone to solve anagrams, since the head could do it if he or she wished to. JUDCO and MASMED had some modest amount of work to be done, but EMPIN, POP,
and SOP had no work for those they hired. With ingenuity, a
group could define its own meaningful work, but there was
nothing built into the structure of the game that made this
necessary.

4. Failure to integrate individual goals. In the old version of
the game, individuals were asked to choose a personal goal and
to fill out an Assessment Form which indicated whether they
were meeting this goal. There were no real consequences in the
game for ignoring individual goals, and the Assessment Form
was ineffective in increasing the salience of such goals. As a
consequence, most individuals forgot about their personal goals,
finding them largely irrelevant for the action taking place.

Taken in combination, these design failures of the earlier
edition gave private life a much more attenuated place in the life
of SIMSOC than the model intends. We have introduced several
changes aimed at overcoming these difficulties.

A. With respect to personal consumption, the new version
introduces a Munchie Bazaar. Munchie tickets may be con-
verted into food and beverage at this Munchie Bazaar. The ex-
istence of munchies allows for a number of possibilities that did
not exist in the old version.

1. Personal privilege is given a more concrete meaning. In
the new version, Permanent Subsistence Tickets are replaced by
a Luxury Living Endowment which provides subsistence plus a
regular supply of munchie tickets. Those who purchased a
Luxury Living Endowment not only enjoy greater security in
subsistence but also a higher standard of living than those who
merely have subsistence.

2. The number of munchie tickets available to the society as
a whole is linked to the Standard of Living Indicator. Further-
more, those with Luxury Living Endowments have first call on
the available supply, again making the presence of personal privi-
lege more concrete and operational.

3. Munchie tickets provide an additional medium of ex-
change. Dissatisfied workers may be mollified with munchie
tickets, for example.
4. Some munchie tickets can be distributed at the beginning to represent “inherited” inequalities of wealth along with the inequalities in social position.

5. The Munchie Bazaar is, thus, integrated into the ongoing interaction of the game in a number of ways, and personal consumption, through the conversion of munchie tickets, becomes part of the game rather than an unconnected, extraneous option.

To function effectively, the Munchie Bazaar must maintain a monopoly of food and beverages available and the bringing of outside refreshments by participants must be explicitly prohibited.

B. With respect to the narrow range of meaningful individual decisions, we have introduced the concept of support cards. The income of four groups—POP, SOP, EMPIN, and MASMED—is now dependent on the choices that individual participants make each session. For each of these groups, each individual has a card for each session which can be turned in or withheld. (An individual may choose only one of the political parties.)

It is true that an individual can still ignore these groups, but this now becomes a meaningful choice with consequences. Since it affects others, the choice that he or she makes will be a matter of concern for others, and the individual becomes a target matter of concern for others, and the individual becomes a target of influence for various groups. Thus, nonsupport becomes a choice, not simply a matter of forgetfulness.

Individuals also have an opportunity to declare in each session whether or not they are meeting their personal goals, and this choice also has consequences in the game which are discussed below.

C. With respect to the lack of meaningful work, the situation of each of the basic groups is changed in the new version except for JUDCO. These groups now have the need for productive labor, although the quality of the work varies in the skill level required and the intrinsic interest.

1. BASIN extracts vowels from short passages. This represents dull, tedious labor. We do not expect it to be voluntarily undertaken by the head of BASIN. Instead, it is likely to be delegated, perhaps to people outside the region. It is error-prone
work and demands careful quality control to remain profitable. This change allows for increased differentiation between the BASIN management and work-force and subjects BASIN to potential industrial sabotage.

2. RETSIN (Retail Industry) replaces INNOVIN in the old version; RETSIN produces marketable words from anagrams. This represents slightly more interesting and skilled labor.

3. POP, SOP, EMPIN, and MASMED have a need to gather individual support cards. This is a task that requires a substantial amount of travel and persuasive ability. The head of these groups will have a real need for others’ assistance in gathering such support.

D. With respect to individual goals, we have introduced the Goal Declaration Card. For each session, individuals have an option on whether or not to declare that they are meeting their personal goals. A positive declaration raises the Public Commitment Indicator, a negative declaration lowers this Indicator. No declaration or a declaration of changed goals leaves things unchanged. While the individual can choose to ignore his individual goals, again this choice has social consequences and, hence, will be a matter of concern to those who are worried about the National Indicators. This rule change builds in societal concern for individual goal realization.

While private life in SIMSOC has been made more prominent and better integrated by these changes, the major emphasis of the game is still on problems of public life. The game deliberately departs from isomorphism with a real society in this regard. The amount of labor required to produce the products for industries remains deliberately quite small. It can be performed while still leaving large amounts of discretionary time for virtually everybody. Even individuals performing unskilled labor will not have more than a small percentage of their lives in SIMSOC occupied by such labor.

**BASIC GROUPS**

In the old version, the income of these groups was dependent on the National Indicators but not on their own success in at-
tracting support. A political party, for example, might do a brilliant job of attracting adherents, while its rival was failing dismally. Yet they would each receive the same income and no direct consequences of their difference in support would be visible. Making income constant and independent of performance was a serious design flaw and undermined the incentive for these groups to achieve their goals.

We have tried to eliminate this flaw in the new version. While income is still affected by the National Indicators in the same fashion, it is now dependent on support cards turned in by participants for four of the basic groups.

A. POP and SOP. Their income depends on the number of support cards turned in, with individuals prohibited from turning in a card for both parties.

B. EMPIN. The same rule change applies to EMPIN except that it has no competition in the manner of POP and SOP. EMPIN's income depends on the number of membership cards turned in. Since only memberships of employed members of the society are counted toward EMPIN’s income, this group now has a direct stake in keeping unemployment to a minimum—a stake that it lacked in the previous version.

C. MASMED. There are a number of changes in the new version affecting MASMED, including several additional perquisites. MASMED’s income, however, is dependent on the number of subscriptions turned in to the coordinator in a manner similar to that for POP, SOP, and EMPIN. To receive its income, MASMED must persuade members of the society to subscribe.

D. BASIN and RETSIN. The manufacturing process for the two industries is somewhat simpler than in the previous edition, and the work process has been changed in the manner described above. The functions performed by these industries remain unchanged.

E. JUDCO. There are no changes here. It is undesirable that JUDCO’s income be dependent on the members of the society. To interpret the rules conscientiously, JUDCO must maintain a measure of loyalty to the Coordinator or to the metagame. Ideally, JUDCO should be a strict constructionist in dealing
with efforts to get around the constraints in the game. With respect to adjudicating internal disputes between conflicting groups within the society, it is perfectly appropriate for JUDCO's social position to influence its decisions. Its income has been increased and it remains a privileged group in a privileged region. If its interpretations reflect this privileged position, this creates no problems for the game and, in fact, reflects the underlying model. JUDCO's basic income remains dependent on the National Indicators alone as in the previous version.

MISCELLANEOUS PROBLEMS

A. Simforce removal was unnecessarily complicated and clumsy in the old version. The rules here have been simplified and made more direct.

B. Simriot. A rule allowing members to lower the National Indicators by engaging in a riot has been added. This gives an additional weapon to discontented members of the society. However, the effects of employment on various National Indicators has been reduced somewhat so that the potency of the strike weapon is correspondingly reduced. Furthermore, the new version provides ways of preventing a riot by the posting of a guard. In balance, the Simriot adds an additional option for making trouble, but does not significantly alter the total impact possible from such activities.

CONCLUDING OBSERVATIONS ON GAME DESIGN

1. The more explicit the model, the easier it is to diagnose design problems and to devise solutions. One can anticipate the consequences of rule changes without an explicit model, but it is extremely difficult to judge whether those consequences are desirable or undesirable without such a model. A model provides the basis for evaluating any potential design feature.
2. Participants cannot be expected to pursue goals unless their performance in the game has direct consequences for the achievement of these goals. The basic mystery of any game is why participants take it seriously. In a simple game where “winning” is clearly defined, the problem is usually invisible. To play means to try to win as defined by the rules within the set of constraints provided.

In more complicated games, there may be multiple goals or vaguely defined ones. In CLUG, for example, there is an implicit goal of increasing wealth, but this is nowhere stated in the rules. This goal can easily enough be transformed from increasing personal worth to increasing the collective worth of the community and the game will still function effectively. However, if participants were to pursue some other, arbitrarily chosen goal—for example, maximizing undeveloped land—the result would bear little relation to the underlying model.

SIMSOC presents this design problem in the extreme. It offers multiple goals at different levels—societal, group, and individual. All are vaguely defined. The pursuit of societal goals has been aided by handy indicators that the participants typically use even though they are not asked to do so. During Phase Three, the goals become an issue. Nevertheless, there is little problem in gaining acceptance of societal goals because the indicators provided are so contingent on the actions of the participants.

Group goals and individual goals have been problematic in the game precisely because of the gap between actions in the game and consequences for these goals. Group income, like the National Indicators, is a handy operationalization of meeting group goals. A political party garnering a lot of support cards is likely to feel that it is doing well in achieving its goal.

In the new version, the interdependencies between these different levels have been greatly increased. As a consequence, we anticipate that participants will now pursue individual and group goals in a more vigorous way than they have in the past.

3. Self-enforcing rules are better than those which require compliance by participants. A self-enforcing rule is one which
a participant is motivated to observe for reasons intrinsic to the game. For example, if one wishes traffic to slow to fifteen miles per hour in a residential neighborhood, it is better to have a bump in the road that forces cars to slow down to fifteen miles per hour or risk damage than it is to place a sign prohibiting travel above that speed.

Wherever possible, we have tried to make rules in SIMSOC self-enforcing, but there remain some that require the cooperation of the players to enforce. Turning in a travel ticket is a good example. We wish there were a method of making a travel ticket physically necessary to travel, thereby relieving the Coordinator of the burden of having to collect them.

Aside from making rules self-enforcing through physical means, one can do it by offering inducements. Since participants are positively motivated to get inducements, they will observe those rules that lead to them receiving them. The rule in Monopoly that one gets $200 for passing “Go” is never difficult to enforce.

We have tried to keep prohibitions to an absolute minimum, but in the new version we explicitly prohibit certain actions that cannot be made part of self-enforcing rules—counterfeiting, forgery, stealing, and physical force. As much as possible, the Coordinator’s job is one of giving participants things they are entitled to under the rules rather than acting as a watch-dog on their observance.

CONCLUSION

SIMSOC has now been played many thousands of times over a period of more than a dozen years. Yet this newest version involves some quite major changes. It is sobering that a game so much used still requires so much change. We are tempted to think that this version will be the last, since, by making the model fully explicit at last, we can specify the raison d’etre for any rule. Until this version is sufficiently tested through use, we cannot be certain if our understanding is as complete as we think. But if we
are correct, the SIMSOC experience contains a strange lesson for designers: an explicit model is typically thought of as the beginning of the design process. One starts with a model and ends with a game. But SIMSOC started with a game and ended with a model.

NOTE

1. This idea was stimulated by Karen J. Cowles and Robert E. Hauser's SIM ECO SOC, a game based on SIMSOC that emphasizes different processes. Those interested in this variation may wish to write to the authors at the McKeesport campus of the Pennsylvania State University.

REFERENCE