

VII.F. Meeting of the Council on Cybernetic Stability: A Scenario

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Editor's Comment: *The leader by Murray Turoff, our Advisory Board Member, uses a fictional format to focus on an issue of mounting significance for long range planners. Scenarios have been used extensively in technological forecasting as a vehicle for summarizing the results of fairly involved studies. In a sense one may look on those types of scenarios as positive ones. Much less used, but no less useful, are what one may term as the negative scenarios. This is the process of extrapolating certain trends and situations to their extreme, but often logical, conclusions. While few people would rate the probability of such scenarios actually occurring as high, their real objective is that of highlighting current problems and thereby maintaining low probabilities of occurrence.*

Subject: Three Hundred and Seventy Third Meeting of the *Council on Social and Economic Cybernetic Stability* (CSECS-373, Extraordinary Session)
Topic: Transcription of the Remarks of Dr. Murray Turoff (Senior Coordinator, Level One)
Key Index: INSTABILITY, PRIORITY, ACTION
Date: February 13, 2011
To: Master Control Computer Records
Viewer
Authorization: *Level One Control*
Content:

My fellow members of level one and senior council members, I called this extraordinary session of the council immediately after scanning a report that came in view on my terminal. This report provides a high level of confirmation that this council has grown considerably lax in carrying out its mission. Because of this, I am submitting this report, and the supplemental material that will be gleaned from our joint efforts, to the MASTER CONTROL COMPUTERS for a full stability analysis.

However, in order to familiarize you with the seriousness of this matter, I will briefly highlight material from this report.

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The subject under review in this report is a resource allocation manager (SS-553-71-7915) who, in fifteen years, has held five occupational positions with various organizations and has moved from an initial level ten to a level two position. The subject has never moved his place of residency and has always, of course, operated in his job function from the computer terminal setup in his home. For those of you not familiar with this occupational classification, it was the duty of this individual's occupational group to solve nonlinear analytical matrix problems involving the requirement to balance a given set of organizational resources against a required set of organizational objectives.

The individual's history file, until last year, showed absolutely no abnormalities other than a higher than average ratio of pride in his job function. At no time in the routine monitoring of his activity was the fact uncovered that he manually transcribed, from his transient view screen to permanent paper, the final matrix solution for each resource allocation problem he had ever solved. It seems he kept these as some sort of sentimental scrap book of his personal accomplishments. A review of this document uncovered some 991 solutions he had generated over his occupational period.

In January of last year, the subject was given a 200 by 300 matrix problem (60,000 elements, type number 735) which he successfully completed and for which he received proper commendation from his level one supervisor. Apparently, the instability developed when the subject was browsing in his scrap book and discovered that every entry of the solution matrix, for his recent problem, agreed exactly (to five places) with a problem he had solved ten years earlier.

When he appropriately called this to the attention of his level one supervisor he was given an explanation that it was probably a fluke of chance, but would be investigated. A special investigation team was immediately set up; but before it could begin operation the subject, without previously notifying anyone, took the unprecedented step of traveling across country to visit the supposed location of his company's major operational site. Since the subject visit was unauthorized and unscheduled, this particular site has signs and labels, at the time, intended to simulate an organization different from the one employing the subject.

Since the subject was becoming quite distraught and probably reaching a partially accurate evaluation of the truth, the special investigation team decided, on the basis of an incomplete background evaluation, to provide him with an OPTION C EXPLANATION.

The OPTION C EXPLANATION is specifically tailored for those subjects who, upon discovering their job function is in reality the playing of a game with the MASTER ORGANIZATIONAL COMPUTER, would probably not be content to join the 1.031 percent of the population (level one supervisors) responsible for creating games for the majority of the work force. In the C option the subject is given the choice either of joining the level one supervisor group, or of joining a secret research institute dedicated toward investigating the causes of the current society structure and proposing steps to correct the situation.

It was justifiably felt by the investigation team that, because of the subject's high job pride ratio, he would not be able to immediately accept the validity of the

current societal makeup, and would therefore need a transition period at the research institute to adapt to the inherent logic of PSM - the PRIME STABILITY MODEL.

Except for the unusual behavior of the subject in making an unscheduled organizational site visit, there was no abnormality in the events that occurred to this point as compared with the case studies of the 2.193 percent of the population which ultimately discovers the gaming nature of current occupational functions.

As was expected, the subject, being too young for retirement and completely distraught over his recently acquired knowledge, immediately chose to join the research institute.

As you all know, these institutions are carefully programmed to insure that subjects of this type, after spending three to four years reviewing the literature provided, will arrive at the logical conclusion of which we are all aware, that is:

"The current social-economic structure is the only possible cost-effective one exhibiting a high stability index."

But, fellow level oners, the subject, in less than a year, has come to a position and set of conclusions completely contrary to the view intended. The research unit, in this case, proved to be a complete failure. In fact, the other 83 subjects at this particular institution may have been contaminated beyond help, with views I can only refer to as emotional, illogical, and completely unscientific.

It is our most urgent concern to determine why this occurred and to reprogram all such institutions so this does not happen again. I can best alert you to the seriousness of this problem by quoting to you the subjects' evaluation of what brought about the current situation. I should remind you, once again, that the subject reached these observations in about nine months time-considerably below the two year norm for which the research institute was set up. Now, quoting from the subject's personal note file:

"In the sixties, governmental, corporate, and institutional organizations had become large and highly structured. These structures evolved to meet what appeared to be independent missions of these respective organizations. However, in the late sixties and early seventies these organizations were confronted with a new set of problems which cut across structural and even organizational divisions. Most of these problems were a product of the increasing complexity of the urban industrial environment of the time.

"Organizations found that the typical response of reorganizing their structure was insufficient to handle meaningfully the diversity of problems encountered. As a result of this, more and more emphasis was placed upon the construction of computer models of the society and various processes within it. A new generation of specialists evolved who were adept at constructing such models. A major development occurred in the late seventies when large scale efforts were started to tie many of these models together into what was the beginning of what we now know as PSM, the PRIME STABILITY MODEL.

"Through the eighties, this model (PSM) began to exercise direct control over the process of matching the supply and demand for materials and resources. It appears that by the late eighties no group of individuals could lay claim to an understanding of the operational details of PSM or to having any direct control of the model as a whole. The only

constraint on the model to assuming greater control was the built-in requirement to assure jobs for the work force. As near as can be determined, the model itself introduced in the early nineties the first virtual jobs. This was done for the purpose of maintaining stability in the occupational supply and demand category. (This capability was adopted from the model's programmed educational and exercise components.) With PSM's creation of the virtual job concept, the number of actual jobs dropped to less than 10% of the total in a ten-year period. Since PSM no longer had to worry about putting people out of work, there was no constraint upon its assuming responsibility for the real jobs."

Of course, my fellow controllers, none of this is news to us. However, the subject, instead of realizing that this was a beneficial outcome in terms of the overall efficiency and stability of the society, reaches an entirely different conclusion; and I further quote:

"The result today is an artificial society. The original intent of the modeling effort was to represent in quantitative terms the functioning of the society, so that *humans* could better understand how to modify it for the general good. However, when the models were allowed to exercise the judgment or decision process the structure of the *model* now became the template for molding the society. What we have today is a society forced to conform to a computer model, and not a computer model which reflects a human society."

Fellow professionals, have you ever heard such a degree of deviant thought? The dangers of this are evident. I wish you to further note that this subject was even able to establish, from the literature available at the research center, a quasiscientific basis for his view. The types of material which must be weeded out of the research files so that this unfortunate incident does not reoccur are indicated from the following remarks by the subject:

"The primary emphasis of applying objective model structures as the vehicles to solve the social-economic-technical problems of the 70's resulted from the attempt on the part of the social sciences to emulate the physical sciences by adopting a Leibnitzian view of the world. Such a view held that there existed "valid" or true models of the world which were independent of data or the representation of the data associated with any particular problem. Counterattempts by individuals such as Churchman and Mitroff to establish other philosophical foundations for the scientific investigation of these problems, were ignored."

As you see, my colleagues, it is evident we must eliminate the literature by Churchman and Mitroff which deals with non-Leibnitzian Inquiring Systems. The additional assertions, put forth by the subject, provide a complete misrepresentation of the reasons for the introduction of large scale computer model efforts in the 70's. For, the subject goes on to say,

"Since the standard organizational structures could no longer deal with the problems facing society, many humans came to view their role in the organization as an ineffectual game they were forced to play. The primarily hierarchical nature of these organizations prevented the type of effective lateral communication, within and without the organization, which humans would have needed to deal with these problems.

"Since the Leibnitzian models and their associated Management Information Systems were data independent, they were highly responsive to the humans who began to

utilize them. This computer responsiveness became a subconscious surrogate for effective human communication so that many humans began to give up attempts to communicate with other humans and turned their efforts instead to communicating with the computer."

My friends, we cannot help but admire the ingenuity of the subject's rationalizations. However, this in no way changes the totally erroneous nature of his assertions. The subject does not even hesitate to attack that segment of the society which in the seventies provided the expertise for the efforts that led to PSM. I quote:

"The most disheartening aspect of the early seventies was the inflexibility of the university-type organizations. They completely failed to break down their strong department structures, which in turn forced individuals to constrain their approaches to problems along somewhat antiquated disciplinary lines, which had no real relationship to the scope of any of the major problems of the period. The typical university was no better at fostering lateral communications among humans than were governments or corporations."

Furthermore, the subject had the audacity to suggest that there existed in the 70's an alternative approach to the utilization of computers to deal with the situation. He states that:

"The last concerted effort to correct the situation was the attempt by a small segment of the professional community to introduce the Delphi technique, as a mechanism to allow large groups to communicate meaningfully about the complex problems of the period. In essence this was an attempt to put human judgment on a par with a page of computer output. There is even one instance in the literature where this effort got to the point of automating a Delphi communication structure on a computer so that individuals spread over wide geographical distances could meaningfully communicate with each other by conducting continuous conferences over weeks or months."

As you see, it is quite clear that our original decision to include literature on the Delphi process, as an example of a technique that failed to deal with the problems of the late 20th century was a serious mistake. I strongly urge that this council recommend the purging of such items from the research literature. The subject was furthermore able to attribute the failure of the Delphi Conferencing concept to a completely different rationale than the one programmed. He claims that:

"The concerned organizations of the period went to great lengths to distinguish between communication systems as things to be regulated, and computer systems as things not to be regulated. Since the Delphi Conference capability did not fit neatly in either pigeon hole both government and industry did their best to ignore its existence, lest the established divisions between computer and communication systems be disturbed.

As a result, the ability to do conferencing via a computer was never implemented on a sufficient number of computers to have any major impact. Since man-to-computer communication was not viewed as a communication process, there was no correspond-

ing inhibition in creating the Leibnizian models or the associated Management Information Systems."

The subject in his notes continues to ramble on about such things as recommending a resurrection of the Delphi process as a mechanism for forming a collective human intelligence capability and using such a mechanism to take back control of society from PSM, and re-establishing the control along human values. However, all of you have been provided with a complete transcript of the subject's notes, so there is no need for me to continue with these idiocies. I think the excerpts I've quoted above are sufficient to impress upon you the seriousness of the deficiencies in our current operation.

The subject is expected to realize within the next six months that the research institute is intended as a nonsurgical reconditioning unit. At that time he will have to be committed for surgical reconditioning. However, because of the seriousness of this case, a special three month delay in reconditioning will be granted, during which time tests may be conducted on the subject's emotional characteristics to determine if we can turn up subsequent deviates of this type before they have gone so far.

It is indeed fortunate that it was decided to destroy all documentation on PSM's programs and structure a decade ago. Thus we may safely rest assured that no deviates, such as this subject, would have an opportunity to tamper with the current stability and efficiency of our society.

Fellow controllers, since we in effect hold the only real jobs available in our present society, it is our sacred trust to see that we execute our jobs with the utmost of our abilities. I am sure you will give this matter the consideration it deserves. I thank you for your attention. I've certainly enjoyed this opportunity to exchange our professional views on this matter.

Subject: Prime Control Analyses
Topic: Evaluation of CSECS Activity
Date: February 13, 2011
Viewer Authorization: Prime Control Only (PSM)
Content:

Objective One

0.92 probability that members of CSECS will be job-occupied for at least three months with current exercise

Objective Two

Virtual data for council analyses effort established to provide 0.89 probability of CSECS adopting recommendations desired by PRIME CONTROL.

Objective Three

Analysis of emotional syntax of remarks by senior coordinator indicates possible subconscious agreement with subject's position. Increase monitoring level on senior coordinator to 0.8.

Objective Four

Purging of following items and references to them from research files:

1. The Delphi conference, *Futurist* V, No. 2 (April 1971).

2. Immediate access and the user revisited, *Datamation Magazine* (May 1969).
3. The design of a policy Delphi, *Technological Forecasting* 2, No. 2, 149 (1970).[†]
4. Delphi conferencing (i.e. computer-based conferencing with anonymity) *Technological Forecasting* 3, No. 2, 159 (1971).
5. Implementation of an interactive conference system, *Spring Joint Computer Conference Proceedings* (1971).
6. Delphi and its potential impact on information systems, *Fall Joint Computer Conference Proceedings* (1971).
7. "Party-line" and "discussion"-computerized conference systems, *International Conference on Computers and Communications*, Washington, D. C. (October 1972).
8. EMISARI: An on-line management system in a dynamic environment, *International Conference on Computers and Communications*, Washington, D. C. (October 1972).

END OF TRANSMISSION

[†] *Technological Forecasting and Social Change*