13314 0360-14

SISCEMICIO

NUMÉRO SPÉCIAL « BIOLOGIE ET SYSTÉMIQUE »

Vol. 2, N° 4, 1988

afcet

Dunod

AFSCET

Revue Internationale de



volume 02, numéro 4, pages 505 - 507, 1988

Compte-rendu de colloque Jean-Pierre van Gigch

 $Num\'erisation\ Afscet,\ janvier\ 2016.$



ce qui change en général la structure dudit diagramme. Il serait intéressant d'examiner les types de modifications subies par ce diagramme lorsque l'on opère les divers changements raisonnablement envisageables dans l'ordre temporel d'apparition des états sur les différents caractères. La question serait alors de savoir si l'on peut définir des critères de choix entre les diagrammes ainsi obtenus (ce pourrait être, par exemple, l'absence de plusieurs chemins entre tout couple de sujets effectivement observés).

Tout cela demande à être discuté, mais il est assez clair que la véritable question de fond est là, c'est-à-dire dans l'ordre d'apparition des états sur chaque caractère et dans les contraintes éventuelles entre les états respectifs des différents caractères à un instant donné. La meilleure façon d'aborder ce problème me semble résider dans les propositions qui viennent d'être évoquées : relevé des relations d'ordre éventuelles apparaissant entre les états des divers caractères sur l'ensemble des sujets effectivement observés, et argumentation physiologique sur les compatibilités ou incompatibilités entre les états simultanés de ces caractères.

ERRATA

Dans le texte de présentation de l'article de Georges Th. Guilbaud, «Pilotes, stratèges et joueurs : vers une théorie de la conduite humaine». paru dans le numéro 3 du volume 2 (rubrique Archives), il faut lire : page 321, ligne 3 du second paragraphe : Beaufrère (et non Beaufils) et page 322, ligne 7 : auraient (et non avaient).

COMPTE RENDU

Réunion Annuelle de l'Internation Society for General System Research (mai 1988).

The 32nd. Annual Meeting and Conference of the International Society for General Systems Research was held in St Louis, Missouri, USA, on May 23-27th. 1988 under the presidency of the out-going President Dr. Russell L. Ackoff. The meeting was honored by the presence of Drs. C. West Churchman (President-Elect), K. Boulding, P.B. Checkland, J.J. Miller, A. Rapoport, T. Cowan, J. Warfield, and L. Troncale.

One of the main events of the annual meeting –the Ludwig von Bertalanffy Lecture— was delivered by Dr. Anatol Rapoport. He spoke about the role of General System Theory in the guidance of human affairs. He questioned the use of science and technology to seek knowledge, without questioning the value of the goals pursued. As citizens of the world, Rapoport urged us to rethink having a blind belief in the benefits of science. General Systems Theory must counter blind faith in science and idolatry of technology. These orientations are the driving forces behind the arms race. It is imperative that we uncover the false reasoning of those who push for an increase in armaments to improve security. The war machinery functions like an organism. It fights extinction by adaptation. It owes its survival and continued existence to successful adaptation to hostile environments. War is the product of creative science research devoid of ethics. As Rapoport asserted, war is an institution of modern societies which functions like a cancer: «It is a malignant growth» that is impossible to eradicate. It cannot be cured through «a technological fix» which leads to more armaments in the name of deterrence, itself a superstition. Rapoport noted the fallacies and paradoxes which justify the continued existence of the war machine. Only a change of thinking will save humanity from utter destruction. The systems movement can show the absurdity in the thinking that pervades the arms race. Is there hope and can we remain optimistic that the cancer will be exorcised?

As the reader will appreciate, Rapoport's address was inspiring and contributed to the meeting's overall success.

Another highlight of the meeting was the presentation of the Sir Geoffrey Vickers Award. This is a contest which involves students who present papers of relevance to systems. The winners of the first prize presented papers on «A Solution to the Problem of Closure in Information Systems» by Bela A. Banathy (son of Bela Banathy) and on «Natural System and Natural Complex» by Elias L. Khalil. The Banathy's paper was very interesting because it discussed the dilemma which opposes, on one hand, the tendency of systems toward simplicity (in order to improve reproducibility and to be «user friendly») and on the other hand, the need to keep the design open for improvement and innovation. He called the former tendency «the Principle of Least Astonishment» i.e. in order to be able to mass produce a product it must have a stable design. In system terms, the design must be declared «closed». This, of course, is the antithesis of progress in that only designs, open to creativity, can ensure progress. This dilemma is also present in the need of a corporation to, on the one hand, apply constraints to control its budgets in order to be profitable and, on the other hand, the fact that only an open organization structure allows its members to be creative. This is the dilemma that John Sculley (Apple Computer) faced in the early 1980's. Apple Computer was suffering a slump in sales. Sculley changed the organization structure of the company and forced Steve Jobs to leave in order to restore it to profitability. The question that remains to be seen is whether Sculley killed the open, creative atmosphere that made Apple so successful. Banathy referred to the necessity of institutionalizing a «delta code» at the organizational metalevel which can signal the need for evolution and change. This code would recognize a system's environmental deviations and interactions and would ensure the system's evolution and eventual survival. In referring to information systems, Banathy asked how and where is this code present and how it can be imprinted in the organisation's «genetic code».

In the other paper presented for the Sir Geoffrey Vickers Award, Khalil proposed a new taxonomy of systems that would provide a place for artificial forms and artifacts in the sense given to this concept by H.Simon in his *Sciences of the Artificial*. Khalil emphasized the characteristics which differentiate natural systems and natural complexes.

The theme of the conference was «Systemic Redesigns of Organizations». Papers on redesign of corporations, government agencies, communities and welfare, business and industrial systems applications,

hierarchical structures were presented. There were plenary sessions on Education and on Health Systems.

On the business side, Dr. C. West Churchman was installed as President-Elect of International Society for General Systems Research. Informal discussions were held about the publication policy of the Society and the relationship of the various systems journals such as Systems Practice and Systems Research as well as Revue Internationale de Systemique. The need to better coordinate the dates of the various systems meetings throughout the world was also voiced. Dr. Russell Ackoff presided the closing banquet.

J.P. van Gigch California State University School of Business and Public Administration, 6000 J. Street, Sacramento, CA 95819. Etats-Unis