The present thesis deals with systems engineering approach to the management of school organisation. The world has been managing schools ever since civilisation began, but the concept of schools as organisations is quite a recent one. The concept of organisations as organisms developed during World War II when the entire world was facing the challenge of survival, and under that challenge research was developing on all fronts. The research work of war years was essentially devoted to making war weapons and war strategies more & more efficient. After the war was over, the research generated was utilized in the world of business, in the health industry and in education.

Education was the last industry to receive the attention. It was during war years itself that such concepts as operational research, systems theory, cybernatics, uncertainty decisions analysis, etc. took their birth. It was increasingly recognised that the different fields of work are inter-related, that there are only a few laws of nature that pervade everywhere, that understanding these laws that are common to different disciplines will solve & ease the problems of scientists.
Much earlier than World War II, Leibnitz had recognised this principle. He believed that different scientists were like different blind men trying to identify an elephant, each one giving his own version of how the elephant was like depending upon the particular part the blind men touched. Unless the different blind men co-ordinated their experience, they would never be able to know the real elephant.

Thus, Leibnitz meant to point out that unless different scientists do not co-ordinate their experience, they will never be able to know the true reality. For this purpose, Leibnitz believed that there was need of a common language through which the different scientists could talk to each other & understand each other. This language, Leibnitz thought, was the language of logic, which was later on developed by Canter & B. Russel in the form of sets.

During war years, Norbert Wiener made an empirical attempt to develop such a language. He organised a multi-disciplinary team of scientists who tried to explain to each other the work done in their respective fields. All this was done in such a manner that researches in mathematics became understandable to psychologists and vice versa.

Thus the natural scientists & the social scientists began to develop a dialogue among themselves which resulted ...
into a new field that was called cybernetics by Norbert Wiener\textsuperscript{2}, & defined by him as "the science of communication & control in man & machine".

At about the same time, Norbert Wiener, with Rosen Blueth\textsuperscript{2}, was working towards exploration of multi-disciplinary approach to inter-disciplinary problems. During these very years Von Bertalanffy\textsuperscript{3} was developing the concept of general system's theory.

In developing the general system's theory, Von Bertalanffy was trying to recognise the fact of utilising the principles & laws of one field in other fields. The general system's theory encouraged cross-disciplinary research - a research which tries to discover & utilize the laws and principles that cut across different disciplines. He pointed out that Gestalt law, "whole is not the same as sum of parts", is analogous to the law of chemistry, viz., the properties of a compound are not the same as that of its constituents. He further observed that laws discovered in one field, if applied in other fields, will save the time & energy of our researchers & will help science to go forward by leaps & bounds. Under the concepts of the general systems theory all organisations are systems & each system is a set of sub-systems, interacting among themselves for promoting the objectives of the system.
By the time the war was over, such concepts as operational research techniques, cybernatics & information theory, uncertainty decision analysis, general systems theory, etc., were already in the air, and research people belonging to different industries were trying to understand & utilise these concepts in their respective fields of work. All this resulted in tremendous success.

During the post-war years, these new theories and techniques had a great impact on management of organisations. The management began to be looked upon as a science. More & more researchers started working towards making it more & more sophisticated, understandable, predictable & controlable. It was by & large recognised that systems efficiency largely depended upon its proper management. In fact it began to be recognised that the world, for its onward peaceful march to ever greater prosperity, very much depended upon good managers.

The human body itself was considered as a system which further consisted of so many sub-systems, like circulatory system, digestive system, skeletal system, muscular system, excretory system, endocrine system, respiratory system, nervous system, reproductive system. These sub-systems do not stand in isolation. In fact, they cannot stand in isolation for the living organism. They have to continuously interact to keep the whole organism alive, happy & healthy...
In the same manner each organisation is like an organism, composed of a set of sub-systems, interacting among themselves to keep the whole organisation alive & in a fit state of healthy interaction with the outside environment. The role of management in running a system is comparable to the role of the central nervous system in the human organism.

It is the management system that keeps the different sub-systems of an organisation under purposeful interactional condition. Under a proper & healthy management the different sub-systems develop, co-ordinate with each other, regulate & control their own activities towards ever greater efficiency. Under a poor management, the different sub-systems fall apart, lose the interactional linkages, till the whole system collapses.

In developing management of school organisations, the present thesis tries to look upon the school as a system composed of a set of sub-systems, viz.;

1) Input System,
2) Structural System,
3) Operating System,
4) Output System,
5) Control System,
6) Information Feedback System.

The function of the management becomes to co-ordinate, regulate & control the activities of the different sub-systems.
THE PURPOSE OF THE PRESENT STUDY

The purpose of the present study was:

i) To develop supra system structure in such a way that it is capable of producing self-generating, self-coordinating, self-regulating, self-controlling & self-evolving teaching-learning systems, & to study the nature of such supra system structure;

ii) To discover the necessary & sufficient conditions for commitment to a job;

iii) To compare the human systems elements working under Theory-X and Theory-Y administrative structures with respect to:

a) Job effectiveness,

b) Job commitment.
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