

.....CHAPTER 5 : THE
INFLUENCE OF THE BROADER EDUCATIONAL ENVIRONMENT
ON THE CURRICULATION OF PUBLIC RELATIONS EDUCATION :
A SYSTEMS VIEW

5.1 INTRODUCTION

Chapter 2 showed that there are differing approaches to public relations education which create a chain of problems leading to a lack of scientific status and a lack of professionalisation of the field.

As the approach to education directs the perspective adopted for curriculum, and as it is curriculum which governs content, Chapter 3 began with an examination of the two approaches utilised in public relations education, being the *generic education* model and the *vocational education* model. Weaknesses identified in these two models were causally connected with the paucity of research and the consequent lack of a body of knowledge and regular testing for updating theories, which scientific status demands. The latest approach to education, being the *outcomes-based* model, was examined to see if it could meet the needs of public relations education. It was established that the outcomes-based model could serve public relations education well, provided the process between tutor and learners reliably focuses on knowledge and the link between learning outcomes and a student-centred approach. An outcomes-based framework was suggested to illustrate a structure which could provide for this.

Chapter 4 discusses how the issues explored in Chapters 2 and 3 manifest in the South African context.

It can be said that public relations itself was born of a need (or an opportunity) which materialised from the interplay of various forces in the surrounding environment. Yet once public relations took form, the broad environment continued to impact upon its practice and thus on its education and on its curriculum. The reference to the European Economic Community and its far-reaching consequences for public relations, particularly, for example, the promotion of international public relations (which has also been greatly promoted by globalisation) serves as an example. It has already been

stated that aspects such as national tradition - such as the focus on a particular education approach - have great bearing on the curriculum of public relations education. Yet it needs to be added that the broad environment exerts its influence continually, to a greater or lesser degree. Some of this influence may be mild and its effect wane rapidly, but some influences require rapid adjustment in professional practice and in education, and thus also in curriculum.

The following diagram illustrates the conceptual links between the preceding chapters and Chapter 5:-

Figure 11: Conceptual links between Chapters 2,3,4 and 5.



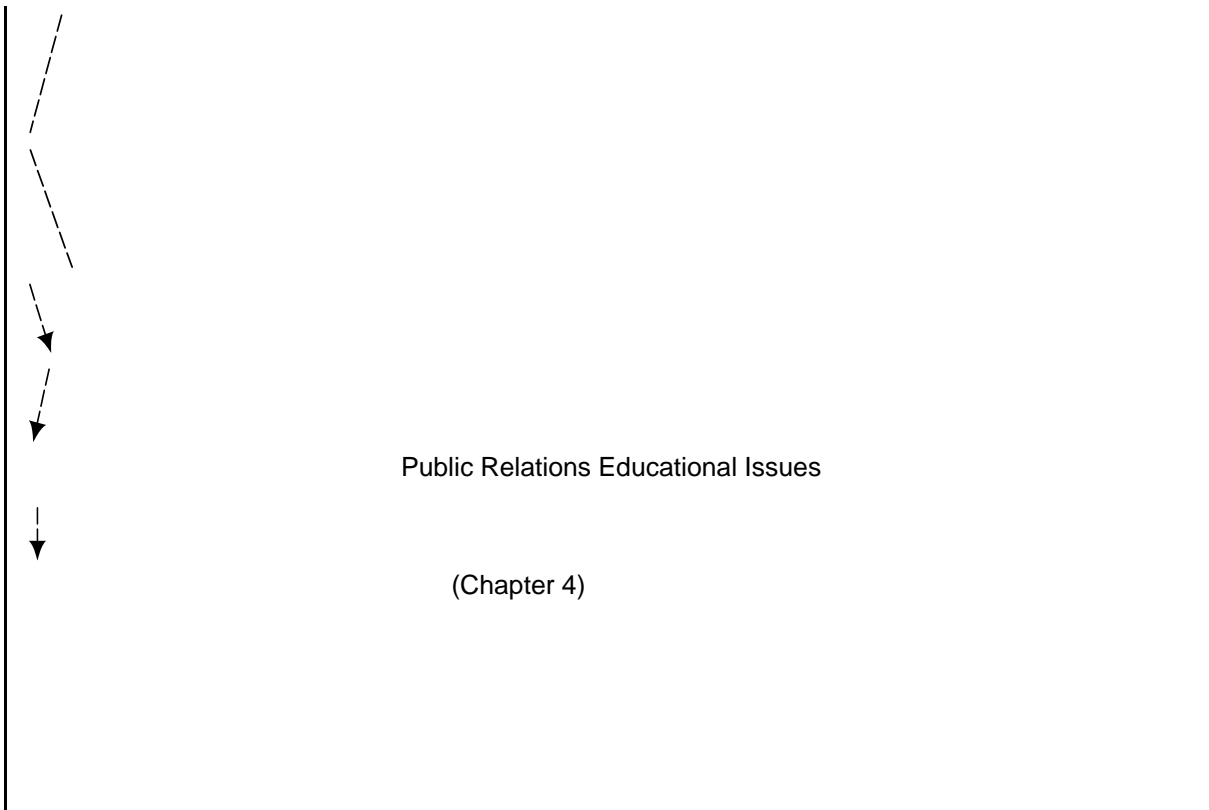
Public Relations Educational Environment
(Chapter 5)



Public Relations Educational Approach
(Chapter 2)



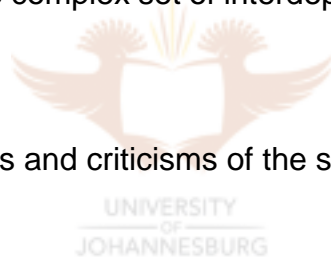
Public Relations Curriculation Issues
(Chapter 3)



The above concepts need to be placed in some theoretical position to each other. Thus it can be seen that in public relations issues can stem from changes in the broad environment impacting in turn on the educational approach to public relations, and so forth. For this reason, it is important to view curriculum within a broader context, because, as explained, public relations education is always informed by the broader educational context in which curriculum takes place, firstly, through the educational approach which influences curriculum strongly, and secondly, through curriculum consequently giving rise to issues of public relations education.

The broader environment informing the curriculum of public relations education can include constraints which issues such as worldview, values and prevailing ethics may place on the context of public relations curriculum. Once again, it can be said, the history of curriculum approaches dealt with in Chapter 3 illustrates this. It is important to understand the complexity of the influences which impact on the educational environment and so on the process of curriculum, particularly in an *outcomes-based education* takes as its starting-point the intended outputs of the relevant education programme, and that demonstrated performance of such intended outputs are measured. Moreover, industry contributes to setting the standards of competences and

also to the nature of competences which are set. This demonstrates the vital link between *outcomes-based education* and the environment. In other words, it can be said that *outcomes-based education* is highly relevant to the environment. In section 1.4 it was explained that Functionalism is not seen as an appropriate theoretical perspective for this study mainly because it sees change and adaptation merely as a tool to reinstate any deviation from the status quo. It can readily be seen that this would not provide for adaptations to curriculum which arise from environmental influences. When an *outcomes-based education* model is adopted, it follows that this will provide an educational approach which is strongly linked to the environment. In section 1.4 it is also said that Von Bertalanffy (1968:32-36) states that General Systems Theory can formulate principles for *complexes of elements in interaction*. Systems theory can, therefore, provide for adaptation and change resulting in restructure for growth. Systems theory can thus provide an integrative framework which will promote understanding of the context of culture, of curriculum, of education and of professional practice in interaction with the broader environment in which public relations curriculum takes place. In this way, the complex set of interdependent variables can more readily be understood.



In the next section, strengths and criticisms of the systems approach are discussed.

5.2 STRENGTHS AND CRITICISMS OF THE SYSTEMS APPROACH

Monge (1973:11-12) sees using the systems approach as holding the following methodological advantages:-

- The systems approach uses situation-specific generalisations, which offers greater complexity on the level of analysis;
- In the systems approach any given event may be explained without examination of all other similar events, thus induction is superfluous;

- The systems approach separates the logical and empirical processes - the empirical event is examined by the researcher for recognition of the logical system;
- In the systems approach, alternative explanations may be given for the same phenomenon, as alternative logics may be employed, on the basis of purpose;
- The systems approach permits partial explanation, which is very useful despite being less powerful than complete explanation, especially in a young and growing science like communication.

It can be seen that these methodological advantages will be extremely useful in a multivariuous phenomenon, such as public relations. The third strength named above is particularly appropriate for the promotion of research in public relations, for the empirical event of public relations - the case history - can be utilised by the researcher for recognition of the logical system - communication theory.

Monge (1977:29) also points to the three main general advantages of the systems approach, namely:-

- (1) The framework consists of a set of concepts and relationships that are theoretically and logically interrelated;
- (2) It permits integration of knowledge from a variety of currently disparate academic areas; and
- (3) It is parsimonious, using far fewer concepts and theories than alternative approaches.

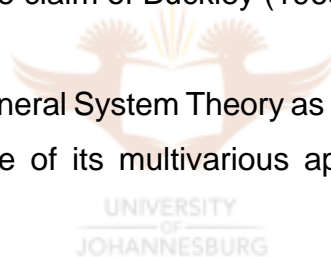
The potential for integration of interdisciplinary knowledge mentioned by Monge (1973) in the second general advantage above, is also supported by Fisher (1978(b):101) who sees it not only as system theory's most significant strength, but also as its apparent

need.

In Chapter 2 it was said that in its Gold Paper on Public Relations education, IPRA (1990) stresses that an *interdisciplinary approach* must be followed. Thus the general advantage above that the systems approach permits integration of knowledge from a variety of currently disparate academic areas makes it very appropriate for public relations, while the advantage of a framework which consists of a set of concepts and relationships which are theoretically and logically interrelated accommodates the rigour necessary for well-grounded research.

Boulding (in Buckley 1968:4) says that specialisation has broken knowledge up into sub-groups, obstructing the sharing of knowledge. Like Monge (1973) and Fisher (1978(b)) mentioned above, Boulding (Buckley 1968) sees as one of the main objects of General Systems Theory this inter-disciplinary sharing of knowledge, or the development of "*generalised ears*". The 21st century is seeing interrelationship being advanced by globalisation, re-inforcing the claim of Buckley (1968).

Littlejohn (1983:37) sees General System Theory as an excellent tool for communication research, precisely because of its multivarious approach and the multi-disciplinary nature of communication.



Blauberg, Sadovsky and Yudin (1977:96-97) point out that attempts have been made to meet the inadequacies of systems research by finding new principles based on already existing sciences. Although Blauberg *et al.* (1977:96-97) see this as useful, they also see this as but an intermediate practice for the improvement of systems theory. They (vide) point to Ackhoff's view that General Systems Theory should form a methodological basis by integration of the advantages of the various systems approaches. Blauberg *et al.* (1977) see this sought-after basis as defining the exact scientific content of the principles of the systems view and also the place of these principles in current scientific knowledge. A specific proposal Blauberg *et al.* make (1977:101) is that it be acceptable that *concepts* be registered as *categories*, which will promote the organisation of knowledge and cognition. This suggestion leaps across the various gaps pointed to by critics relating to "generalisation".

While Fisher (1978(b):102) states that a weakness of systems approaches is the sacrifice of ontological insight for epistemological strength in empirical investigation, other critics point to the lack of substantive theoretical claims underpinning systems approaches. However, Blauberg *et al.* (1977:102-3) explain that the substantive approach in scientific thinking, which also included any theoretical concept, "*was founded upon the idea of some basic entity concentrating the essence of the object under study*". This idea applied to the physical, and also to ideals or spiritual ideas. In classical science, such entity was required to be unique or exclusive. Complex objects undermined this belief, an example being the gene in biology, which was afterwards shown to have different structural levels. The concept "gene" then no longer held an exact meaning. Subsequently, according to Blauberg *et al.*, methodological reflection forms an integral part of research, and advances in science will in future require the flexibility and the integration offered by systems approaches.

Fisher (1978(b):102) refers to Laszlo's implication that inter-disciplinary integration will not present any barriers in systems approaches, as the form of systems approaches remains unchanged while its content or referent changes.

Methodological reflection is also referred to by Gray and Starke (1984:45-47), who, while stating that the major disadvantage of systems theory is its complexity, render a positive assessment of systems approaches by pointing out that as social systems are extremely dynamic and complex entities which often defy description and analysis, managers should view decisions from a systems viewpoint in order to operate realistically and effectively.

Fisher (1978(b):81-82) says that all scientific theories possess strengths and weaknesses, but that the researcher chooses a theory most likely to accomplish the purpose of research. Fisher (*vide*) states further that should the systems approach be rejected for valid reasons, rejection must be accepted. However, Fisher (*vide*) considers that the systems approach is often rejected for superficial reasons. Fisher (1978(b):82-86) deals with four common misconceptions which lead to rejection of the systems approach:-

- (1) Systems are mere analogies with explanatory value.

This misconception fails to recognise that systems theory provides a heuristic framework composed of empirical referents of common phenomena for the discovery of generalisable laws and rules, thus providing great potential for scientific explanation.

- (2) The goal of systems theory is to provide a general theory for the unification of all sciences.

Fisher (1978(b):83-84) sees this claim as holding little significance and as being of little practical value. Fisher (vide) says it is not established that this claim is in fact the main aim of systems theory. Fisher (vide) sees systems theory as a perspective providing insight into the phenomena of communication. Fisher (vide) quotes Ruben and Kim who affirm that while such a claim remains unsettled, the insightful ideas of systems scholars confirm the value of the contribution of scholars of General Systems Theory.

- (3) System theory is a rigid logical formalisation which imposes its structure on the empirical world.

Fisher (1978(b):84) states that logical systems are adapted to empirical systems, not the other way round - systems approach utilises a wide spectrum of conceptualisations and research methods, observational techniques and formal structures. Moreover, says Fisher (1978(b):84) the formalisation of a theory *follows* such principles, having received widespread empirical support.

- (4) Systems approaches are dependent upon the purposes of inquiry.

Fisher (1978(b):85) says that "*any epistemologically-based theory begins with a focus on the purposes of the investigation*". A researcher utilises an approach which is loaded with concepts which are a function of the researcher's purpose. Yet different systems approach researchers utilise different focus-concepts and there is thus no methodological constraint.

Littlejohn (1983:376-377) holds that the very complexity of the communication process points to the utilisation of General Systems Theory for research, as this theory

accommodates complexity and posits three qualities of open systems which emphasise this complexity:-

- systems are organised sets of interrelating variables;
- the system survives by interacting with its environment;
- as systems are organised hierarchically, each system can be viewed as a suprasystem or a subsystem.

The strength of General Systems theory can be pinpointed by focusing on its basis in a simple way: it is a science of organisation and thus has universal application; as such it offers the researcher broad theories for general application on the macro level: at the same time it imposes upon the researcher the freedom and the responsibility of applying research techniques which will produce data on the micro level that will be recognised as relevant and valid for that specific research question. It is thus a modern approach of scientific investigation which is both accommodating and demanding.

A brief background of General Systems Theory is provided in the next section.

5.3 A BRIEF BACKGROUND OF GENERAL SYSTEMS THEORY

General Systems Theory developed in response to a need to explain phenomena from a social science perspective. That need arose through the inability of the classical approach of physical science, on the "If so...then so" basis, to explain phenomena of biological science and of social science. The classical approach rests heavily on the language of mathematics to provide descriptions on a common basis of phenomena which may or may not differ greatly in their content. The view of the classical approach known as vitalism which held that the fact that, unlike inanimate phenomena, living beings are governed by goals and purposes, rendered life study unsuitable for the analytical classical approach. While this teleological view is excluded by physical science, it is, nevertheless, believed that the process of life can be explained by physical laws up to a point. However, the laws of physical science cannot offer a full description of living entities, for "*Biological processes are simply too complex to yield to the analytic method*". (Rapoport 1968:XVII).

Kefelas (1977:27) says that Ludwig von Bertalanffy, Boulding, Rapoport and Gerard were responsible for the development of General Systems Theory. Boulding (1956:197-208) states that General Systems Theory can be seen as the skeleton of science because it seeks to provide a framework on which the meat (content) of disciplines can be laid in an orderly manner. Boulding (vide) goes on to say that General Systems Theory is likely to prove a powerful tool because of its emphasis on communication systems and organisation structure, emphasising its differentiation from the single level cause-and-effect approach of classical science and also from the stimulus-response model of psychology. This widely-applicable theoretical structure of General Systems Theory has challenged the validity of the application of physical science models to the field of human behaviour (Kefelas 1977:26), while, as said above, Von Bertalanffy (1972:407-426) bases his formation of General Systems Theory on the point of departure that the most basic science is that of organisation, because all sciences wrestle with problems based on organisation.

Definitions of General Systems Theory are given next.

5.4 DEFINITIONS OF GENERAL SYSTEMS THEORY

Von Bertalanffy (1968:32-36) defined General Systems Theory as a general science which takes as its subject matter the formulation of principles that are valid for differing entities which can be considered *"as systems, that is, complexes of elements standing in interaction"...* *"whatever the nature of their component elements and the relations or 'forces' between them"*.

Boulding (Buckley 1968:3) describes General Systems Theory as the name given to theoretical model-building representing general relationships of the empirical world. Rapoport and Horvath (1968:73) see the key concept as being *"organised complexity"*. By this they mean an entity, a collection of interconnected relations. Krippendorff (Penman 1980:8) states systems theory accepts as a basic principle that it is concerned with the study of systems and the interrelationship of its parts. Krippendorff (1977:150) also identifies three fundamental characteristics of systems. These are:-

- structure, that is, a system consists of connected parts,

- function, which is the outcome of the maintenance of a stable condition of material systems. In order to accomplish stability, such a system must interact with its environment. In so doing, it utilises energy and other materials. Its reaction will be relative to changes in its surrounding systems, and
- evolutionary change, which can be seen as adjustment, development or growth.

Krippendorf's (Penman 1980:8) statement above that systems theory is concerned with the study of systems and the interrelationship of its parts marks systems theory as being particularly appropriate for this study. The properties of General Systems Theory have bearing on its application to public relations. These are shown in the next section.

5.5 COMMON PROPERTIES OF SYSTEMS ACCORDING TO GENERAL SYSTEMS THEORY

Von Bertalanffy (Buckley 1968:13-14) refers to the concept General Systems Theory as the theory of complex, dynamic systems. It has the character of a basic science, thus there are common properties readily identifiable.

These common properties are:-

(1) HOLISM AND NON-SUMMATIVITY

Blauberg *et al.* (1977:100) state that it was shown in a number of sciences that the whole cannot be reduced to the sum of its parts. This thesis of non-summativity is supported by Watzlawick *et al.* (1967:125), who state that the very fact that the elements taken separately cannot account in total for a system, gives rise to the great interest in the systems approach.

(2) INTER-RELATEDNESS

According to Buckley (1967:46-47) different types of systems will manifest a varying nature of relations between components. The more complex the system's structure, the wider the flexibility of the interrelationship of its parts. Blauberg *et al.* (1977:100) claim that the interaction of parts in a certain system of connections gives rise to new qualities and properties which characterise wholeness for such system. This statement agrees with that of Laszlo given above for wholeness and non-summativity, but views the state from the aspect of activity of parts of a system rather than from the aspect of wholeness. According to Littlejohn (1983:32-3) interrelatedness, or interdependence, means that a change in any one part of a system will produce changes throughout the system. This interdependence thus acts as a constraint on all parts of the system, which is not the case if the parts of the system are independent. Fisher (1978(a):197) says that when component parts are related interdependently, the resulting system takes on its own identity which is separate from that of all of the components. Fisher (*vide*) defines interdependence as mutual dependence among parts so that any change in one part "*automatically and inherently affects every other component*".

(3) STRUCTURE, FUNCTION AND EVOLUTION

The interdependent relationships referred to in (2) above, can, according to Fisher (1978(a):198) be covered by the three interconnected elements of structure, function and evolution. Fisher (*vide*) explains that structural connection can refer to spatial position or status position of components relative to one another. In a social system, Fisher (*vide*) describes the actions of a person as identifying the functional relationship with other people, the actions being components of the system rather than is the person. A system's evolutionary relationship is its history, in which over time the structural and functional relationships change.

(4) SELF-REGULATION AND CONTROL

Scott *et al.* (1981:52) state that a self-regulated system is one which utilises some of its internal energy in order to maintain its pre-set norm condition. Von Bertalanffy (1968:147) says that self-regulation has come to the fore with *cybernetics*. Laslo, Levine and Milsum (1974:82) maintain that negative feedback makes the system compensate

so that regulation of action will return the system to its previous equilibrium. Vorster (1985:46) says that open systems possess the attribute of self-regulation whereby they can adapt in accordance with their goal-orientation. Groenewald, Pitout and Nieuwmeijer (1985:18) agree with Vorster as they also see self-regulation lending open systems the ability to make an important contribution in determining the outcome of activities. Like Laslo *et al.* referred to above, Groenewald *et al.* (1985:18) see negative feedback as functional, and mention that positive and negative feedback can act to strengthen/diminish deviations in system operation. Feedback is thus seen as essential for goal achievement by Laslo *et al.* (1974:82). Kefelas (1977:30) sees setting and achieving goals as crucial to the survival of a system, and says that this encompasses the property of self-regulation. Watzlawick *et al.* (1967:31) explain that in interpersonal systems negative feedback decreases the output deviation from a set norm while positive feedback brings about amplification of output deviation, and is thus positive to the existing trend. Both negative and positive feedback are thus goal-oriented. The thesis that self-regulation takes place through feedback and is goal-oriented is also shared by Littlejohn (1983:34). Koestler (1967:97) says that the principle of self-regulation is fundamental to the hierarchy concept, which requires this capability so that a holon (system) may function as a semi-autonomous sub-whole.

(5) BALANCE OR HOMEOSTASIS



Koestler (1967:99) says that homeostasis operates on every level and keeps the system operating steadily. Koestler (*vide*) thus connects homeostasis with self-regulation. Littlejohn (1983:34-5) also connects homeostasis with self-regulation. He says that an open system must work in order to maintain balance, and that this is accomplished as a primary task of its interacting subsystems - this is the point at which self-regulation is involved, operating through feedback. Littlejohn (1983) says this avoids the fate of the closed system - increasing entropy. Rogers and Agarwala Rogers (1976:60) state that entropy is expending more energy than is imported, causing diminishing energy and eventual demise. Negative entropy is the importation of more energy from the environment by the system than is expended. A cycle of negative entropy is maintained by organisations, according to Katz and Kahn (1966:23-25) with importation of energy (input), transformation of energy (throughput) and exporting as some product (output). The aforementioned three activity phases lend the characteristic of cycles of events to

systems which are organisations, the constancy of the pattern of the cycle of events providing balance. This constant movement towards balance must be qualified in its application to complex systems - Katz and Kahn (1966:27) state that this movement can result in growth and expansion. Thus homeostasis which seeks to maintain the system should be seen as dynamic homeostasis, in which the system does not merely restore its prior state but establishes a more encompassing and thus more complex equilibrium.

(6) EQUIFINALITY

Several authors use the same definition as that offered by Von Bertalanffy. They include Budd and Ruben (1972:104), Penman (1980:11), Littlejohn (1983:34), Katz and Kahn (1978:32) and Buckley (1968:332). Von Bertalanffy's (1968:398) definition reads: "*...the same final state may be reached from different initial conditions and in different ways*". Pace and Faules (1994:43) state that machines, organisms and organisations all hold certain properties in common and can thus be seen as systems. The property of *equifinality* means that organisations which start with the same initial conditions may reach different end states (Pace & Faules 1994:44). Littlejohn (1983:35) points out that the final state which is the goal of an adaptable system can be achieved in many different environmental conditions. Processing of input can be effected in different ways to meet the output goal. Katz and Kahn (1978:33) point out that the organisation as an open system also requires selectivity, for its choice of the way in which it meets the output goal is vital to its continuing existence. This focuses attention on the potential for interaction with environment. Our most modern system, the *organisation*, has spawned off many different approaches representing the basic idea of *equifinality*.

(7) ORGANISED COMPLEXITY AND HIERARCHICAL ORGANISATION

Fisher (1978(a):202) states that *complexity* is a differentiation of functions. Pringle in Fisher (1978(a):202) discusses increased complexity as a function of evolutionary process: open systems "*evolve into a pattern of increasing differentiation of functions within the system*". This leads to increasing levels of complexity. Fisher (1978(b):88) sees complexity as an important quality of systems. Penman (1980:9) says that *organised complexity* refers to both the complex set of relations within systems and to the complex hierarchy of relations between systems on different levels. Fisher

(1978(a):203) says: "A system becomes a suprasystem or a subsystem only because of its relationship with another system". Littlejohn (1983:33), like Fisher, sees hierarchy as one of the most important qualities of a system. Littlejohn agrees with Gerard (Buckley 1968) that every complex system consists of a number of subsystems, so the system is a series of levels of increasing complexity. Laszlo (1972:51) says that in a hierarchy each level-structure is constituted so that its components are systems of a lower level. These lower level systems are called subsystems. The system above the particular level structure referred to - of which it itself will form a subsystem - is called a suprasystem. The terms *subsystem* and *suprasystem* are, therefore, according to Laszlo (1972) relative. Laszlo's (vide) identification is supported by Laslo, Levine and Milsum (1974:85). Von Bertalanffy (Buckley 1968:12) says that organised complexity involves the interaction of a large number of variables, for which linear-causal trains (one cause and one effect or at most a few variables) would not suffice. Fisher (1978(b):89) claims that organised complexity implies discrimination between the various possibilities for a system at a particular time. Kefelas *et al.* (Fisher 1978(b):88) sees complexity as including functional specialisation of the parts of a system.

The foregoing explanations of levels and complexity and increasing complexity can appropriately be applied to organisations and also to socio-cultural systems. Johnson (1986:258-261) says that because levels are arranged hierarchically, each level operates as a subsystem of that just above. In a developing society, the socio-cultural system rules become more pliable in order to foster growth and development, largely because more choices are offered to members. In any example we may refer to, it will readily be seen that communication will play a dynamic role in organised complexity and in hierarchical organisation.

Hierarchical organisation with regard to system level is analysed by Fisher (1978(b):88) with great simplicity:-

The system is closely related to

- *the subsystem(s) within, which define and limit or contain the level in question; and*

- *the suprasystem, which embraces the system and is the context in which the significance of the system in question is defined.*

Koestler (1967:48) sums up this analysis by a comparison with the Roman god Janus - two faces looking in opposite directions - the system has one face turned towards its subordinate levels, its self-contained whole of subsystems, and the other face turned towards its suprasystem as a dependent part.

(8) SYSTEM/ENVIRONMENTAL INTERACTION

Ruben (Budd & Ruben 1972:101) says that systems are embedded in conditions called environments, which can be of a physical, spatial, temporal or symbolic nature. Ruben (1972) also refers to Churchman's description of environment as a set of conditions which are relevant but not directly under the influence of a system, and also to Miller's (1972) statement that environment is the suprasystem minus the system. Miller (vide) also says, according to Ruben (1972), that the entire environment includes in addition to the foregoing the suprasystem and systems at all higher levels of this containment.

Folger, Poole and Stutman (1993:56) state that when a system interacts with anything in its environment, such interaction determines meaning on the lower levels. Laszlo (1972:103) cites Parsons who says that the environment is in itself systemic in nature. Gibson *et al.* (1985:11) state that organisations are created in and by society and that the society is its environment. Hall and Fagen (Buckley 1968:83) describe environment as

the set of all objects a change in whose attributes affect the system and also those objects whose attributes are changed by the behaviour of the system.

Rogers and Agarwala-Rogers (1976:53) state that an organisation inputs matter-energy from the environment, processes it and outputs it. Katz and Kahn (1966:24) state that the output being exported into the environment provides the sources of energy for the input to be repeated, and the resulting pattern lends a cyclic character to the organisation's activities. Interaction with its environment is thus seen as an essential feature of open systems (Buckley 1967:50). While matter-energy is exchanged between an organisation and its environment, the *energy* in social systems is *information* (Fisher

1978(a):204). Thus the exchange of energy between the suprasystem and one of its systems (or system and subsystem) is indicative of the function of the system (subsystem) in the overall structure. The exchange referred to takes place because the boundaries of a system are permeable. Ruben (Budd & Ruben 1972:100) state that boundaries, according to Miller (1972), are regions at the outside edges of a system which exclude or admit matter-energy. Katz and Kahn (1966:65) identify boundaries as "*demarcation lines or regions for the definition of appropriate system activity*"; these admit into the system and allow interaction two ways. Littlejohn (1983:24) sees an element in the environment affecting the elements in a system as a suprasystem affects its subsystems and vice versa. Thus, says Littlejohn (1983) "*The system affects the environment; the environment affects the system.*"

(9) CHANGE AND ADAPTABILITY

Laszlo (1972:47) says that system/environmental interaction can also result in a change in the system. Boundaries can be affected and the system reorganise itself structurally. An example can be growth in a system, where structural reorganisation becomes necessary. This arises when the element in the environment to which the system is reacting adopts the nature of a constant (Laszlo 1972:41). Littlejohn (1983:35) says that complex system interaction occurs in order to maintain equilibrium (homeostasis) in the face of alteration within the system or the environment, but that in complex systems, such as socio-cultural systems, more than accommodational change is required, for the system must be able to re-structure itself under environmental pressure. Laszlo (1972:47-51) considers that it is easier to see self-organisation of a system from the viewpoint of its suprasystem, for the reorganisation which takes place structurally in response to environmental pressure, frequently involves a population of systems. The reorganisation may also then involve structural alteration of system relationships, and an overall hierarchical re-arrangement of system levels. Ashley (Buckley 1968:113-4) states that "self-organizing" should be taken to mean "self-connecting". A change in organisation within system components and/or between systems, therefore, means a change in their way of being connected. This structure-changing aspect is labelled by Littlejohn (1983:35) *morphogenesis*. Littlejohn (1983:35) says that adaptability and change highlight the dynamic nature of the complex, open system.

(10) OPENNESS

Blauberg *et al.* (1977:171) refer to Hall and Fagen's insistence on the *relative* character of discerning system from its environment, "...a system together with its environment makes up the universe of all things of interest in a given context". This focuses attention on the vital quality of a system which makes it an *open* system: "A system is open if some exchange of matter, energy, or information takes place between the organism and the environment" (Mortensen (1972:54). This definition of *open* is supported by that of Vago (1980:53), French and Bell (1973:76), Beebe and Masterson (1993:34), Trewatha and Newport (1982:191), Penman (1980:10). Littlejohn (1983:35) lists all the properties of an *open* system, and also succinctly describes its opposite: "A closed system is one that has no interchange with its environment. It is oriented toward progressive internal chaos (entropy), disintegration, and death". However, Fisher (1978(a):202-203) says that the totally open or totally closed system is an ideal type, for openness is a variable property which systems possess to some degree. Social systems are open, and their degree of openness will govern their tendency to promote or to resist change.

The following are distinguishing properties of open systems:-

- open systems possess equifinality, which means the initial state does not determine the final or subsequent state (Fisher 1978(a):203), or as Rogers and Agarwala Rogers (1976:51) explain an open system can achieve the same goal despite different initial conditions due to equifinality;
- open systems may decrease entropy (decrease of order) and may manifest an increase of order, (Fisher 1978(a):201-202), and this order increase can also bring increased organisation both of which are due to the *choice* of response rather than an ability to re-act only;
- open systems tend towards increasing complexity or an increase in differentiation among functional relationships as a function of evolutionary processes and complexity is thus an integral property of openness (Fisher 1978(a):202);
- open systems "*vary in their self-regulating capacities and thus also vary in their ability to adapt to environmental changes*". Fisher (1978(a):203), and Von Bertalanffy (1968:158) add that the feedback model is applicable with regard to

its internal working and can also be applicable to its external environment;

- open systems are re-energised by sources from the environment in the cycle of input, transformation and output (Katz & Kahn in Lewis 1980:34);
- Vorster (1985:45) says that openness varies within the system and also over time.

The properties common to General Systems Theory underline aspects of the focus of this study:-

- In outcomes-based public relations education, it is the outcomes which will enable graduates to meet changing needs of business and of society, thus education will have to be *open* to changes in the surrounding system, and ready to *adapt*.
- This means that environmental change can result in a change in the (public relations education) system. It can thus be said that *system/environmental* interaction will be a constant feature.
- *Interrelationship* in systems means that should one part of the system be impacted upon by the broad environment, this will also affect other parts of the system. In education, a change in curriculum in one part may, for example, require a contribution from some other part of the system. Such a situation could well arise should a curriculum for public relations undergo change.
- It was mentioned in Chapter 2 that differing trends in public relations are noticeable as public relations develops. It could be said that the globalisation and technological changes towards the end of the 20th century are resulting in the *evolution* of public relations. Fisher (1978(a)) has explained, as mentioned above, that evolution is marked by changes in structure and function. This is challenging public relations education to adjust its structure and function.
- In order to accomplish changes in *structure and function*, Laszlo (1972:47-51) considers that it is easier for this to be considered from the viewpoint of the suprasystem, for a whole population of systems/subsystems could be involved,

bearing in mind the property of interrelationship. The implementation of the recent *outcomes-based* model of education emanates from the suprasystem, usually the department of education in the country concerned.

- It is because systems have the property of *organised complexity and hierarchical organisation* that the suprasystem (or department of education), is able to implement changes, for *complexity* means, as Fisher (1978(a):202) said above, a differentiation of functions. This enables the suprasystem to gauge the effects of change upon its systems and subsystems, because of the property of interrelationship existent in systems.
- The property of *equifinality* enables systems and subsystems to reach goals through divergent paths. This offers public relations education opportunities to meet goals in differing ways, which is very important when it is borne in mind that the broad environment imposes constraints upon the system and, of course, broad environments are never the same either with regard to location or the passage of time.
- *Holism and non-summativity* are seen as an advantage of using the systems approach, for it brings about a consciousness of the gain which can be achieved through co-operation of all the parts of a system.
- The co-operation between various parts of a system can conserve energy, so that *balance* of the system is more easily maintained.
- The parts of a system are able to co-operate and so conserve energy for the whole system through the measure of self-regulation and control which they have. Usually the higher in the hierarchical order the system part is placed, the higher the measure of self-regulation and control.

The self-regulation and control referred to above is the response of the system to feedback. Negative feedback makes the system compensate so that it can return to its previous equilibrium. Positive feedback re-inforces existing trends of output. This aspect of self-regulation and control renders the systems approach particularly suitable

for application to organisations. This responding to feedback in order to maintain balance is why it is stated that organisations must be “open” systems. Grunig (1984) is just one of several writers who emphasise this need in order that the public relations practitioner can follow a symmetrical (two-way) approach in public relations. The next section, therefore, turns to the application of the systems approach to organisations and also to higher education institutions, which can be seen as organisations.

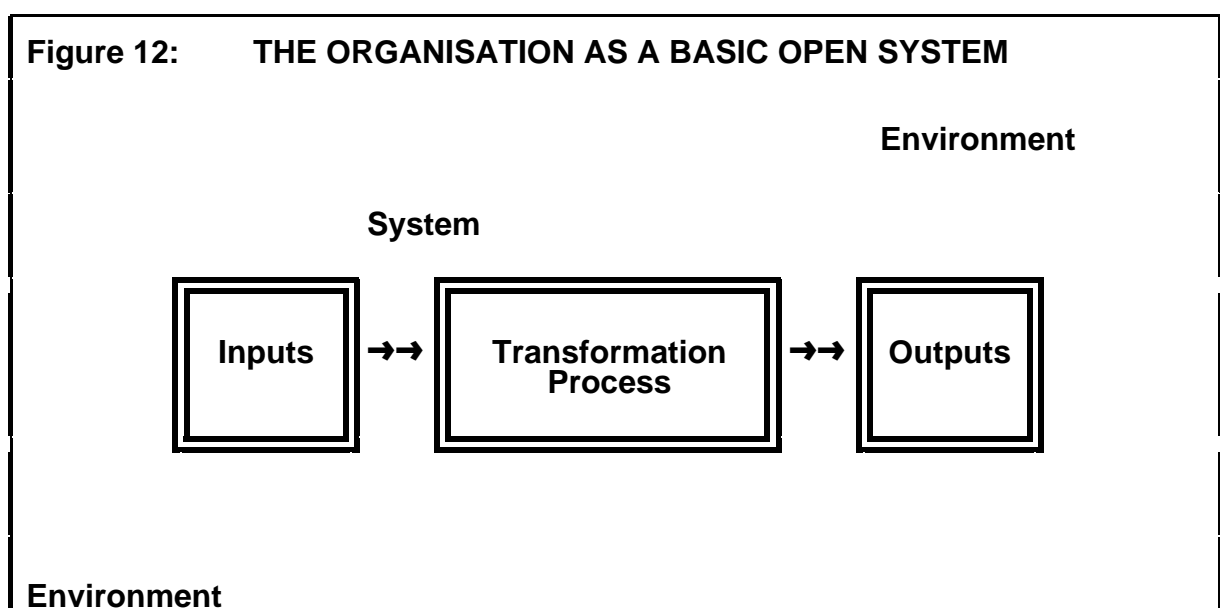
5.6 THE APPLICATION OF THE SYSTEMS APPROACH TO ORGANISATIONS AND TO HIGHER EDUCATION INSTITUTIONS

General Systems theory can be seen as the basis of organisational or management theory. Viewing the organisation as an organism and so as a living system taking input from the environment for transformation into output for the maintenance of the system, provides the strong link between organisational theory and General Systems Theory (Scott *et al.* 1981:47). Thereby the interdependence of system-environment is underlined. Material as input is taken from the environment, transformed and the resulting product-material returned to the environment. The dynamic demands of this openness have expanded organisational theory to include theories of management, information planning, and others. Higher education institutions can also be seen as organisations, for they are subject to the same systems principles, and can, as with organisations, be seen as open systems.

5.6.1 The organisation and institutions of higher education as open systems

Pace and Faules (1994:43) say that "the concept of *system* is so encompassing it defies easy definition". Robbins (1990:12) defines a system as "*a set of interrelated and interdependent parts arranged in a manner that produces a unified whole*". Robbins (1990:26) defines an organisation as a "*consciously co-ordinated social entity with a relatively identifiable boundary, that functions on a relatively continuous basis to achieve a common goal or set of goals*". Most business organisations include making profit as a primary goal in their mission statements. Yet not all organisations seek to make a profit. Some organisations seek to serve, and the service they provide to the community is their primary goal. This applies particularly to institutions of higher education falling under formal education. Institutions of the informal education sector, however, may well

seek profit as an auxiliary goal; such institutions are part of the informal sector and are more loosely connected to the formal education sector, perhaps needing only to register their courses with the relevant authority. Those higher education institutions falling within the formal education sector have more official constraints but also usually enjoy more financial support than those of the informal sector, by strength of the fact that they operate as organisations within a supra-system - the formal education system - which itself is affected by other systems in its environment, and is part of the larger supra-suprasystem of government or other educational authority suprasystem. Robbins (1990:4-17) also states that organisations develop structure consisting of components of complexity, formalisation and centralisation, co-ordination and control in order to process input and transform it to the finished product for exchange with the environment, with which there is a relationship of interdependence. Katz and Kahn (1966:16 & 144-145) state that organisations can be seen as open systems because of their *genotypic* function, that is the exchange of energy points to the behaviour of individuals who are carriers of energy input while the energy output points to the absorption of such open system by its larger environment. French and Bell (1973:75-76) explain that organisations which do not attach full significance to every dimension of *function* make themselves more vulnerable to *entropy*. *Entropy* is the propensity of a system to disintegrate. This means that organisations are open systems because they have an interdependent relationship of exchange with their environment. Robbins (1990:13) illustrates the exchange which takes place between the organisation (open system) and its environment in the following diagram, which has been computer-adapted:-



(1) Environment

"An organisation's environment is everything beyond its borders" (Angelopulo 1990:11), but Rogers and Agarwala-Rogers (1976:61) say "*we would thereby define a limitless set of objects, individuals, and systems*". According to Carroll and Tosi (quoted by Angelopulo 1990:11), *relevant environment* can be defined as "the groups, or institutions, beyond (the organisation's)... boundaries which provide immediate inputs, exert significant pressure on decisions, or make use of the organisation's output". Dill, in Bedeian (quoted by Angelopulo 1990:11), suggests *task environment* for those environmental elements which are "relevant to or potentially relevant to goal setting and goal attainment", while Organ and Hamner (quoted by Angelopulo 1990:11) define *task environment* in terms of four sections : sources of inputs, receivers of outputs, competitors, and regulatory groups.

Robbins (1990:15-17) says that the interdependency between the system and its environment is one of the most obvious characteristics of the open system. Changes in either will affect the other. The open system is a cycle of events: the system's output to the environment furnishes the means for new input for repetition of the transformation which the system brings about. The open system imports more energy from the environment than it puts out, and so is able to maintain itself and even grow. This is a state of negative entropy, and a relatively steady exchange of energy, or dynamic homeostasis, is maintained between the organisation and its environment. In such a steady state of energy exchange, an organisation can move towards growth and expansion.

Arnold and Feldman (1986:6-7) point out that an organisation must take cognisance of the economic, political, social and cultural environment in which they function, for otherwise any one of these can militate against favourable conditions and this could even lead to the demise of the organisation. Van der Meiden and Fauconnier (1982:106) state that as the organisation functions internally and externally, its external environment, which is made up of various facets, can, at one and the same time, consist of facets which are stable, unstable and turbulent.

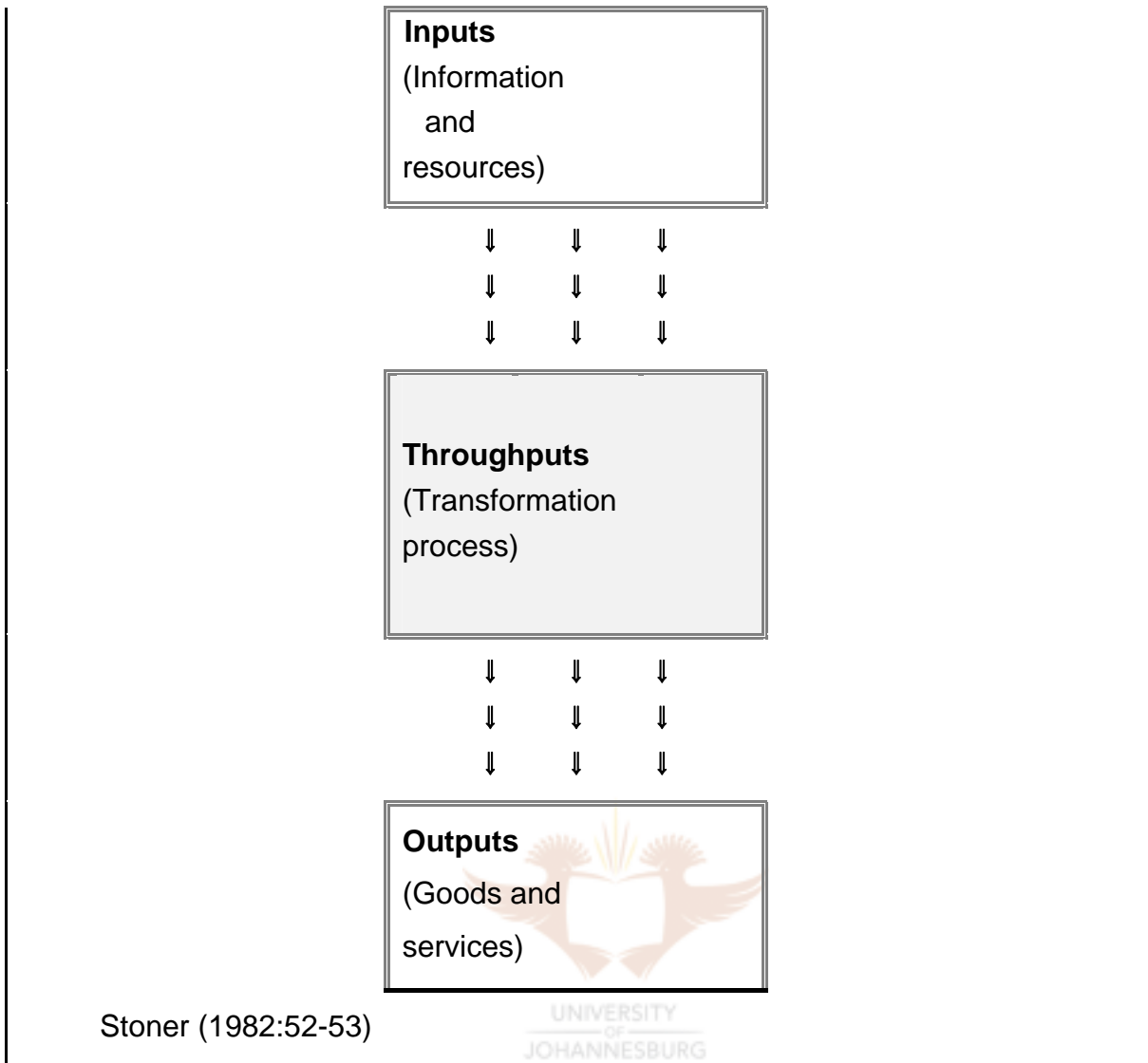
Carroll and Tosi's (1977:168) "relevant environment" referred to above applies to higher education institutions. Technical colleges, technikons and universities are themselves elements of a higher order system or suprasystem. Technical colleges, technikons and universities are part of the tertiary education system and the suprasystem is the relevant education authority. An education authority is part of the larger social system. The social system, the economic system and the legal system are all some of the other systems in the education environment. While the suprasystem, the education authority, lays down the broad functions of technical colleges and universities, it is the other systems in the environment which provide the input and absorb the output of each higher education institution as an organisation. The interdependency of a higher education institution and its environment may, for example, bring about changes in language policy, or other basic policies. The claim mentioned above of Van der Meiden and Fauconnier (1982:106) that stable, unstable and turbulent facets can exist in an organisation's external environment is borne out by the rapidly-changing current situation in South Africa, whether it be political swings or the decline in the numbers of jobs available because of economic difficulty. Each higher education institution is affected by its environment, and only as an open system can it make essential adjustments. In section 3.6 the history of curriculum approaches shows how changes in civilisation impacted greatly upon curriculum itself down the centuries. A systems perspective of higher education institutions will enable understanding of the impact of influences which values/beliefs and the social construction of context have on education and its curriculum, and which influences can never be separated from the suprasystem in which public relations education takes place.

(2) Inputs

The open system interacts with its environment mainly through its operation cycle. The following is a computer representation of Stoner's diagram illustrating this:-

Figure 13: OPERATION CYCLE OF THE OPEN SYSTEM





Stoner says (1982:53) that a system has flows of information, material and energy (including human) which enter the system as inputs. Raw materials are a good example of the inputs of a manufacturing organisation. The inputs of an organisation are closely related to its needs. Human energy will include the skills necessary for the performance of the organisations' cycle. Information flow as input may include new technology. A sufficient flow of inputs will enable the organisation to maintain dynamic homeostasis.

In order to effect their missions to provide education, higher education institutions must have input on a regular basis of suitable candidates (students who meet the laid-down entrance requirements) for the necessary education and training (transformation process). In the Report of the Department of National Education of South Africa (Nated 01-300(91/06:35), students entering the education system are

identified as *"the raw materials to be refined in the education process in order to produce useful manpower"*. The Input also includes the elements required for the Transformation such as Material, for example, books and technology, State Subsidy and Human Resources, and also includes Feedback Information which is taken into account in forward planning. Stakeholders are thus involved with Inputs. In higher education institutions the path of Input elements is through Adaptation Mechanisms en route to Transformation.

(3) Transformation

Stoner (1982:53) also calls the transformation process "throughputs" to indicate that the raw materials, for example, are being put through a process. Stoner (vide) describes the transformation process as a system of operations which alters the inputs. Robbins (1990:176) states that the transformation of inputs into outputs requires technology, which refers to the necessary information, equipment, techniques and processes for the particular organisation. The arrangement of component parts within the organisation for the co-ordination of the events of the input-transformation-output cycle, is known as the organisational structure (Stoner 1982:262). The Transformation area includes core processes. Transformation is the refinement in the education process with, for example, in the case of technikons, the aim of producing manpower useful to the business sector. The organisational structure of a higher education institution will thus show how the institution relates all its parts and sections into a unified whole for the co-ordination of the events of the input-transformation-output cycle in order to meet its goals. This shows that it holds a basic property of a system - its components are interrelated. The structure will also show that the heart of the transformation of the input (students) takes place in the lecture forum, where the curriculum provides the basis for the lecture. Internal Operating Efficiency will influence the core processes strongly. The Programmes of the Faculties are seen as the core processes with the Curricula as being central, for this is where students as input are transformed in order to gain qualifications. Qualified students thus become the product which is fed into the economic environment. The vocational education model will yield students qualified to serve as technicians, while the generic education model will yield students prepared (after gaining experience) to serve as managers or as strategists, as mentioned in Chapter 2. While the transformation of input into output referred to above takes place

within the institution of higher education, this is not a self-contained body - it is not a closed system, but is, rather, an open system. This is why there is provision for Adaptation Mechanisms, which are situated in a position close to the Socio-cultural Environment and also to Management Administration, Maintenance and Support Services, while the Socio-cultural, Political, Legal and Economic environments are not separated from one another, a natural flow (or adjustment) taking place between them.

At the heart of the Transformation which is brought about within a higher education institution, lie the Ethics and Values which have been adopted by such an institution. These are intertwined with the curriculum approach, which was discussed in Chapter 3.

(4) Outputs

Stoner (1982:53) states that the energies which enter the organisation as inputs, after being transformed, exit the organisation as outputs. These outputs take the form of goods and services. Robbins (1990:13) says that organisations are dependent upon their environment for the absorption of their output. This active interaction results in profit for the organisation which it can use for maintenance and growth. Pace and Faules (1994:146-147) point out that information flow outward from the organisation is also an output. Stoner (1982:52) says that outward communication is essential for marketing products. Pace and Faules (1994:147) state that information output focuses on the impact of emergent social structures and technological development. They also point to technological development altering input requirement and output of information to such a degree in recent times that it brings about changes in organisational boundaries. It can be seen, therefore, that the cycle of input, transformation and output in an organisation marks it as an open system.

The Output of an institution of higher education includes Competent Students with Certificates, Diplomas and Degrees as the product of the institution, and they are also the building blocks of Reputation and Efficacy, giving rise to the Image of the institution; these students with diplomas, degrees and certificates are the Output into the economic system, representing Productivity like the goods and services of an organisation; the economic environment gives feedback on the Output, which can, in

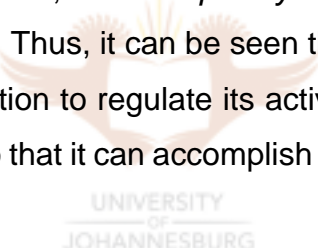
turn, be fed back into the system as Feedback Information. Another important product of a higher education institution is Research Output, which also contributes to Reputation and Efficacy and can make an extremely important additional contribution to the output. As the strong link between well-grounded research and scientific status has been explained in Chapter 2 and illustrated by the findings of Medsger's investigation which was discussed in Chapter 3, the focus should fall not only on the positive contribution which research can make, but also on the negative and far-reaching impact of the lack of well-grounded research.

Points of relationship between the higher education institution and its Task Environment can be identified in the Input, Transformation and the Output areas and show interaction, such as with the socio-cultural environment, which yields students, material and human resources as Input and the economic environment, which provides feedback on students. The political and legal environments also have bearing on the institution's operating cycle, as does the technological environment, which ushers in adaptation at a rapid and ongoing pace including concepts such as distance education. Dominant among the systems in the Task Environment will be the government authority for education. The highest authority is likely to be termed the Minister of Education who will head the Department of National Education, which will have a branch of Higher Education. These comprise the suprasystem of the system of the higher education institution. The government's higher education policy, certification requirements and state subsidy emanate from this suprasystem, and this plays an influential part in the educational environment, not only on the Task Environment level, but also on the National Macro Environment level. Other forces, such as the economy and the dynamics of industry, also come into play strongly on the National Macro Environment level. Due to the globalisation which is rapidly taking place, the National Macro Environment is continuously affected by contiguous events in the International Environment, and this, in turn, impacts on institutions of higher education. However, it is notable that in the section on the dual approach to education in Chapter 2, despite Ogbondah and Pratt having drawn attention to the need for education programmes to cover international public relations in 1991/1992 and also in 1996, in the year 2000 Taylor commented that few schools in the USA offer courses in international public relations.

Noteworthy is the fact that Stakeholders are a prominent feature of all the environments - the Task Environment, the National Environment and also the International Environment in the case of institutions of higher education.

(5) Feedback

Robbins (1990:16-17) states that feedback is a process whereby a portion of an organisation's output is returned to the organisation (system) as input (such as information or money) "*so as to modify succeeding outputs from the system*". Robbins (1990:16) says that this information is continually received by the system from its environment. Robbins (1990:12) also points out that the system is itself a subsystem of a suprasystem, and, as such, needs information as feedback for dynamic interaction with its environment. Robbins (1990:18) also says that both maintenance activities and adaptive activities are necessary for survival, and that "*stable and well-maintained organisations that do not adapt as conditions change will not endure long*". It is feedback which enables the open system to work against entropy and maintain a steady state, and so "*open systems move toward growth and expansion*" (Robbins 1990:17). Thus, it can be seen that feedback performs a vital role in that it helps an organisation to regulate its activities in co-ordination with its environment and its changes so that it can accomplish its goals with a continuing life cycle.

The logo of the University of Johannesburg is centered on the page. It features a stylized sunburst or flower-like emblem above the text "UNIVERSITY OF JOHANNESBURG".

Littlejohn (1983:33) says that systems are goal-oriented organisms and are governed by their purpose. They use *cybernetics* (feedback by control) in order to adjust to the requirements of their environment. It can thus be said that feedback from the environment enables the open system to achieve its goals. Richmond and McCroskey (1992:23) state that feedback is critical and that it performs a regulative function for organisations, while Stanton and Futrell (1987:421) state that feedback is the basis for planning ahead. These claims are supported by the definition of feedback by Robbins (1990:16-17) that feedback is a process whereby a portion of an organisation's output is returned to the organisation (system) as input "*so as to modify succeeding outputs from the system*". Higher education institutions use student evaluation of facilities and of lecturing in order to identify areas which are perceived as needing improvement. Thus, for example, a need for an extension of support services may be pinpointed and taken into account in future planning. Feedback from

sources which utilise the product of higher education institutions is also seen as extremely valuable. Thus technikons/technical colleges see part of the value of their co-operative education scheme resting on the feedback from employers re the capabilities of students, and programmes can be adjusted so as to meet shortcomings in the education and training. Responding to feedback establishes the openness of institutions of higher education and, at the same time, shows system/environmental interaction.

5.6.2 Evaluation of systems approach to organisations

Robbins (1990:11-19) mentions the following points in support of the application of systems theory to organisations:-

- organisational systems take input, transform them, and produce some output
- the organisational system is characterised by differentiation and integration which are provided for in subsystems, such as roles and levels of hierarchy, which interact dynamically
- as an open system, the dynamic interaction of the organisation with its environment is recognised
- while the demarcation of an organisation's boundaries can be problematic, as they can be physical or psychological, the concept is essential for an understanding of open systems
- the organisation and its environment are interdependent and interact in multiple ways
- feedback from its environment enables the organisation to adjust dynamically to changes
- maintenance and adaptive activities of the organisation result in changes in one subsystem influencing activity in other subsystems

Littlejohn (1983:321-2) says that there is complexity in both the field of communication and the field of organisations, and as communication is an integral ingredient of organisation, there are seven points supporting the use of systems theory in organisational communication. These are:

- systems theory has shown how the structure of an organisation emerges from the inherent communication patterns in the organisation; and
- the systems approach brings together and explains the interrelationship of individual goals and group productivity through communication processes; and
- system theorists describe how the organisational structure sets the pattern of communication networks which, in turn, impact on the nature of the organisation's communication; and
- system theorists have shown that the organisation is largely defined by communication interaction among the individual members; and
- the systems approach has shown that authority in the organisation is established not only by the hierarchical structure, but also from below, whereby communication credibility is established; and
- as information is carried by communication, communication is an essential part of organisational decision-making; and
- as communication focuses on information flow, systems approaches give due recognition to both formal and informal communication networks, unlike some other theories. This is vital in assessing the execution of functions in the organisation.

It was mentioned earlier that Trewatha and Newport (1982:190) also strongly support systems theory as a suitable approach for studying organisations. However, it was also mentioned earlier that Gray and Starke (1984:45-47) state that the major disadvantage of systems theory is its complexity, while Blauberg *et al.* (1977:102-103) see the flexibility and integration offered by the systems approach as advantageous. Littlejohn,

according to Verwey (1990:62) mentions also the criticism that systems theory is not specific enough for prediction and so cannot be found wrong and he states that there is unanimity among scientific philosophers that a theory which cannot be shown to be wrong, must be rejected as inadequate. At the same time, Littlejohn (vide) states that the criticism of over-simplification is ironic, because of system theory capability of dealing with multi-complex issues. Earlier it was said that Fisher (1978(a):202) states that *complexity* is a differentiation of functions, and that Penman (1980:9) labels *organised complexity* as the complexity of relations with the system and also the complex hierarchy of relations between systems. Verwey (1990:24) says that the systems approach provides a theoretical framework for the integration of knowledge and for the study of complex variables. Verwey (1990:24) also says that systems theory is a parsimonious approach and is particularly useful for multi-level constructs, providing for an increase in complexity.

While Delia (1977:51) states that identification established at conceptual level often does not hold on empirical level in its application to differing fields, Monge (1977:29) points to the set of concepts and relationships of systems theory as being theoretically and logically interrelated.

The claim mentioned earlier that systems theory is ahistorical, and thus overlooks organisational development, as made by Littlejohn(1983), is a question which has received attention. Goldhaber (1986) in Coetsee and Pottas Zyl (1990:43-44) identifies *organisational development* as a method whereby an organisation may alter its values, beliefs, attitudes and structure in order to accommodate and fit in with the changing and turbulent environment of future decades. Angelopulo (1990:5-19) suggests that the adoption of Heidema's paradigm of systems perception showing the organisation's nature along the conservative-progressive dimension will provide a useful tool for measurement of an organisation's values, structure, *et cetera*, and thus help in measuring organisational development. It can be seen that organisational theory, as an offshoot of General Systems Theory, uses adaptation of system/environment in order to meet changing business and social, and even political, needs.

Scott in Pace and Faules (1994:42) says that "*the only meaningful way to study organisation...is as a system*". The same sentiment is expressed by Rogers and

Agarwala-Rogers (1976:59), who stress the importance of the interconnected variables of organisational behaviour and environment.

It seems that emphasis is placed by several writers on the capability of a systems approach to embrace complexities on a macro level and also allow for change in the variables on a micro level, so necessary for the organisation because it operates as an open system. Here a parallel can be drawn between an organisation and an institution of higher education which offers a programme of public relations education. Chapter 2 has shown that in its early days in the USA, public relations was hewn from journalism as an offshoot "*craft*". The broader environment of the social construct and its values and beliefs influenced the path of public relations as an academic field and also the practice and professional standing of public relations and thus the approach to public relations and curriculum in the USA. The broader environment in Europe, being a different broader environment with different values and beliefs and social construct, has influenced public relations differently. These influences can never be separated from the suprasystem which provides the context in which public relations education takes place.

Thus the systems approach is seen as appropriate for a theoretical framework for public relations education, accommodating complexities and change on both the macro and the micro level. A systems framework can offer integration of all these multivarious influences.



5.6.3 Evaluation of a systems approach to higher education institutions

The operation cycle of inputs, transformation and outputs from, and into, their environment, confirms higher education institutions as basic, open systems. Were they closed systems rather than open systems, they would be oriented towards chaos, disintegration and demise, as said by Littlejohn (1983:32). A further relevant point is made by Katz and Kahn (1978:31) qualifying the emphasis on openness. They point out that openness implies "*system properties, stable patterns of relationships and behaviour within boundaries*". Should a system become so open that it lost these properties, it would no longer be differentiated from its environment. Thus it would cease to exist as a distinct system. Katz and Kahn (1978:31) point out that an open system must be open to inputs, but *selectively* (the writer's emphasis). Thus Katz and Kahn (vide) hold that a system must have both the property of openness and of selectivity. This last point casts

new light on the question of adaptation and change.

There are also particular properties of higher education institutions which further identify them as open systems

- **Holism and Non-Summativity**

If we were to total all the diplomas, for example, issued for a given period by a particular higher education institution, this would not equal its total contribution to the environment. The reason for this is that such institution operating as a whole yields more than the sum of its parts. For example, by employing people who are not directly involved in teaching, such as cleaning staff, an added contribution is being made to offering employment and thus to the economy. Thus the yield of the whole is higher than the sum of its parts.

- **Interrelatedness.**

The relationship between components of the organisational structure, yields the interrelatedness of the system.

- **Structure and Function.**

The structure is also indicated by the organisational structure.

- **Equifinality.**

The fact that equifinality permits a goal to be achieved through divergent paths, helps to make provision for necessary adjustment, particularly with regard to unforeseen developments. An example could be the adjustment of entry standards in order to accommodate applicants from a multi-cultural society so as to achieve higher registration numbers and thus a higher subsidy.

- **Organised Complexity and Hierarchical Organisation.**

This is shown by the organisational structure of a higher education institution, with the Rector at the top and descending levels showing the linking of all staff sections in a complex, hierarchical arrangement.

Fisher (1978(a):202) explains *complexity* as a differentiation of functions. There are

employees who carry out a management function, a lecturing function, support services functions, administrative functions and cleaning and maintenance functions, as well as security functions in a higher education institution. There is, therefore, a great need for organised complexity and hierarchical organisation. It is doubtful whether any higher education institution could operate as a reasonably smooth functioning unit without organised complexity and hierarchical organisation.

5.6.4 A systems model of the environment of a higher education institution

It can be seen that the principles of system theory can readily be applied to higher education institutions. Moreover, the integrative property of a systems approach draws together the somewhat loose-standing concepts of the previous chapters into an integrated contextual framework. Verwey's (1990:169) social systems model represents organisational effectiveness, or the ability of an organisation to meet in both quantity and quality the demands of its environment for its output. Verwey's (1990) model has been adapted for this study so as to show the phenomena in the environment of an institution of higher education - such as a technikon/technical college or a university - which will have an influence on its effectiveness. This adapted model focuses attention on the complexity of influential factors due to the position whereby the inputs are yielded from the socio-cultural environment, but have to be transformed within requirements of systems from higher up in the suprasystem, and where the outputs must satisfy the needs of a different system - industry and the economic system. The model of the environment of an institution of higher education which has been developed for this study is shown in Figure 14:-



Figure 14: Model of the environment of an institution of higher education

The links between the higher education institution and its suprasystem are shown in the model signifying control of the input-transformation-output cycle to some degree. This is represented by the Certification Bodies, which certify that programmes are being implemented and operated according to the specifications laid down by the Qualifications Authority appointed by the Minister. The Higher Education Council label represents the body appointed by the Minister to make recommendations on matters affecting higher education, while the label Advisory Council for Universities and Technical institutions represents the Committee which gives the minister input on matters needing executive attention with regard to those institutions. These labels are used as generic representative labels.

5.6.5 Evaluation of systems model

The first point which can be raised as a weakness in the model is evident in its title : *A model of the environment of an institution of higher education*. It can be argued that including the environment will magnify the issues at stake and also hamper the relevance of solutions due to their being too environment specific.

However, in Chapter 2 it was shown that the approach to education has a marked bearing on curricula. It is the educational environment which strongly influences the approach to education which is adopted. This is illustrated in the diagram in the introduction to this chapter. It is, therefore, important to consider issues of public relations education in context. In this way, multi-various influences can be taken into account and those which can be attributed to influences of either a temporary or inconsequential nature can be assigned due value. This should also help to reinforce the allocation of issues as being of a generic nature or as being situation specific. The environment is closely involved therein, and it is thus seen as important to depict the environment of a higher education institution in the model.

The model shows that many influences are brought to bear on institutions of higher education, and also that curricula has a vital part to play in the process of transformation of students, as an essential service to society. A systems model means

that the relationship between different sectors can be kept in mind constantly, and thus the complexity of the influences at play with adjustments. It will also mean that effects can be gauged in an interdisciplinary way, for education must serve the economic and the social needs of the community, while conforming to the political and legal requirements too. It has been shown that the concepts of General Systems Theory have wide application and can, therefore, be applied so as to integrate influences of the impact-bearing factors at play in a particular study. This means that wide-ranging influences can be brought together in a theoretical approach that is unifying and logical, and also provides room for empirical processes.

The second point which can be seen as a possible weakness in the model is that it is a depiction incorporating as a unity disparate influences, such as *economic environment* and *political environment*, which can be extremely difficult to pinpoint at any particular time on the empirical level as holding any specific influence. Van Schoor (1979:35) says that *A model...is a graphic representation of the basic concepts assembled in logical cohesion relevant to a certain subject*, and the model depicting the environment of a higher education institution does this. The value of the model lies partly in it being a conceptualisation of all the different influences which impact upon a higher education institution, thus helping to prevent important influences being overlooked.

A point of strength of the model can be said to be that it provides a framework which encompasses all of the areas of influence in public relations education.

It can be seen that utilising a systems approach to education also promotes the adoption of a broader perspective, in that the model presents graphically all of the influences at play in a higher education institution, yet it does not present conceptual links which might persuade in any way. It can thus be said to facilitate objective interpretation. In this way it can be said to promote an interpretive research function.

A further strength of the model is its strong identification with the operation cycle of an organisation, which has been illustrated above.

Yet there still remains a property of General Systems Theory which is elusive to pinpoint but which is, nevertheless, essential for this investigation: this is its property of

constraint, for while General Systems Theory provides a basis for the integration of many factors of influence, its very focus on wide-ranging effects can guide the investigator through the pitfall of adopting a too-narrow approach, such as, for example, that of an underlying political ideology.

5.7 CONCLUSION

While Chapter 2 showed by its background that public relations education has been affected by its context, which brought strong influence to bear on the approach to education and thus the perspective of curriculum which was employed, Chapter 3 revealed weaknesses in the two approaches utilised for public relations education and established a direct link of these weaknesses with the lack of scientific status and so of professionalisation of public relations.

Section 3.6 illustrated how the broader environment - in other words, the public relations educational environment - impacts on curriculum. In Europe, the *generic education* model was utilised and broadened with the development of science, with which it was inextricably woven. Yet the Industrial Revolution led to the development of technology giving greater prominence to the *vocational education* model alongside *generic education*. On the other hand, the American approach resulted in public relations education adopting a *vocational education* approach right from its beginning.

However, it should be stated that establishing the weaknesses of *generic education* and of *vocational education* and encouraging the adoption of the most recent education model, that of *outcomes-based* education, may not be sufficient for ensuring education which nurtures the necessary research for enhancing chances of public relations acquiring scientific status. The reason for this statement is that it is clear from the history of curriculum approaches in section 3.6 that cognisance must be taken of the influence of the educational context on the curriculum of public relations education, in view of the fact that it has been shown that it can have a powerful effect on the approach and upon curriculum itself. Moreover, it should also be borne in mind that *outcomes-based education* is particularly vulnerable to influences from the environment, in view of the fact that the outcomes which are striven for are agreed upon by stakeholders of diverse interests, which includes industry. Also, as qualifying students need to be able

to meet the demands of the environment, it is important that curriculum be adapted so that changes in the environment which impact upon public relations practice are accommodated. The close link between *outcomes-based education* and the environment facilitates such adaptation and also re-inforces the pragmatism of utilising an *outcomes-based* model of education. The theoretical framework utilised must also be holistic, for this will indicate necessary compensating adaptations of parts of a system needed when impact-bearing adjustments are made to other parts.

A Systems Approach to Higher Education was thus considered and General Systems Theory examined as a possible theoretical approach appropriate to this study. Its suitability for application to organisations and to institutions of higher education was explained.

A systems model of the environment of a higher education institution was constructed through the adaptation of Verwey's (1990) social systems model of organisational functioning. Components of the model of the environment of a higher education institution have been identified with those of the cycle of operation of an organisation. The strengths and the weaknesses of the model and a systems approach to higher education institutions were evaluated.

The model of the environment of a higher education institution which has been constructed in this chapter will be used as a framework to analyse the case study. The background to the case study has been provided in Chapter 4.

The systems approach provides a suitable framework for understanding the curriculum of public relations education at technikon level. It depicts all of the influences in the environment which impact upon public relations education and thus upon its curriculum. The systems framework, being applicable to an organisation, helps to engender an approach of mission fulfilment as being of primary importance, yet within the broader perspective of all the multi-various environmental influences. It also, therefore, holds great integrative value for the study. This is particularly valuable for technikon education, because career-orientated education can be said to draw in an even greater number of influences from its environment, such as industry, than would be the case if it did not focus strongly on practical application. This point of practical

application also indicates the appropriateness of utilising a case study in order to seek confirmation of the weaknesses of public relations education, for a case study is an investigation of actual occurrences with people vitally involved with the topic. Thus the case study is also very practical, providing both direct evidence as well as information for interpretation. The close connection of curriculum with the students who are the vital focus in the case study offers a record of first-hand experience on a topic of high significance to the participants. This renders the case study approach one of great value for this study.

Chapter 6 provides the case study.

