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**The use of soft systems thinking  
as a process of inquiry  
to identify a relevant system  
to facilitate the change process  
of tourism education and training  
at a tertiary institution in KwaZulu-Natal**

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## Preface

These studies represent original work by the author undertaken under the supervision of the University of Natal. This dissertation has not been submitted in any form to any other tertiary institution. Where the work of others has been used it has been duly acknowledged in the text.

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# Abstract

Tourism is globally rated as the World's biggest industry by gross domestic product. In South Africa it is hoped that the tourism industry will show growth that will positively affect the economy of the country. In particular, as tourism is noted as a labour intensive industry, it is expected that growth in this sector will create many jobs. In order to support this growth this study examines the need for tourism tertiary education and in particular how the use of soft systems methodologies is able to guide the management team of a tertiary institution as it re-examines the responses of the institution to influences that surround tertiary tourism education.

The problem of tertiary tourism education proves to be particularly complex and unstructured in that it requires the coordination of many traditional disciplines that are each able to contribute elements to the study of tourism. Stemming from conventional scientific method a tradition of isolationism has evolved whereby individual elements of the tourism system operate independently with little interaction with other elements. Systems thinking recognises the interdependence and interrelatedness of all the elements in a system not least human elements. Although traditionally excluded from study, the subjective values and beliefs of people are actively solicited by systems thinkers who propose that only by embracing these beliefs, in a value full inquiry, is it possible to establish a self learning and self modifying education system suited to the changing demands of a turbulent industry such as tourism.

The primary purpose of this work is to use systems thinking to build and implement a framework for improvement by restructuring tourism education in a large tertiary institution. The research intends to plot the course of change and organisational learning as the tertiary institution endeavours to re-align itself to the ever changing requirements of its customers. The dissertation does not seek, nor does it find, a neat packaged solution to the messy problem of tertiary tourism education in KwaZulu-Natal. This is not in the nature of soft systems thinking, which is about inquiry and better ways of seeing, and not primarily about proving or disproving hypotheses.

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# CHAPTER ONE

## Introduction

### 1.1 Background to the research

As a worldwide human activity and as an industry tourism has undergone sustained growth for the past thirty years. The World Travel and Tourism Council (WTTC) estimated that tourism was the world's largest industry, responsible for over 10% of global gross domestic product (WTTC, 1996). This means that tourism directly and indirectly generates over 200 million jobs world wide.

It is clear that tourism can be a major force in the economy of a country. This has been recognised by the national and provincial governments of South Africa who have stated their commitment to economic growth through tourism (DEAT, 1996: KwaZulu-Natal Tourism Authority, 1999). These sources have also commented on the need for improved education, training and research in tourism. Although a series of acts of parliament (The SAQA Act, RSA 1995: The Equity Act, RSA 1998: The Skills Development Act, RSA 1998) have been implemented to encourage training and education, these apply to the workplace in general and not specifically to the tourism industry. There is little agreement and less alignment amongst the tertiary institutions of KwaZulu-Natal of what form an effective tourism orientated education and research response would take (Burger et al, 1999).

Tourism is an emerging discipline (Goeldner, 1988: Cooper et al, 1996) and as such has little formal academic status in tertiary institutions. Drawing upon multiple areas of associated discipline, human and cultural as well as commercial and environmental (Leiper 1981), to form the synergies that reflect tourism activity, tourism itself can lack identity as a discipline in its own right (Airey, 1988).

Although there is widespread agreement that tourism has the potential to improve the economic prospects of many people in South Africa, the uncertainty about the form of

tourism as a discipline has lead to uncertain tourism education policies. The problem is ill-defined, complex and unstructured and tends to change with environmental factors such as the global perception of South Africa as a destination, the value of the Rand and the income available to potential tourists to spend on travel. Traditional approaches to problem solving that rely on well-structured, clearly defined boundaries will fail in these circumstances. (Ackoff, 1973; Checkland, 1981; Jackson, 1992) This research turns to the methodologies of soft systems thinking in order to develop improved insight into this complex problem context.

## **1.2 Goals of the study**

The purpose of this research is twofold. Its primary purpose is to use systems thinking to build and implement a framework for improvement by restructuring tourism education in a large tertiary institution. Against a background of institution wide re-organisation this study sets out to focus a variety of, possibly synergistic, departments on the need to offer appropriate academic service to the province of KwaZulu-Natal in the field of tourism. The over-riding objective is not to uncover a solution but to 'create a more knowledgeable political process in which opposing parties are more fully aware of each others "*weltanschauungen*"' (Churchman, 1971). The research intends to plot the course of change and organisational learning as a tertiary institution endeavours to re-align itself to the ever changing requirements of its customers.

A secondary purpose of the research is to reflect on the operational attributes of critical systems thinking, and Total Systems Intervention (TSI) as it guides the use of soft systems thinking when employed amongst participants who, although academically experienced, may not be acquainted with soft systems thinking. Tsoukas (1993) has criticised TSI as being "practically incoherent" whilst Warren and Adman (1999) judged TSI as practitioner unfriendly although they concede that TSI did prove helpful in the design, delivery and acceptance of a new user support service in their library.

### 1.2.1 Sub-goals of the research

The sub-goals of the research can be defined as follows:

- to investigate the current state of tourism tertiary education in KwaZulu-Natal
- to explore systems ideas appropriate to the problem of improving tourism education at tertiary level
- to build a framework for improvement by restructuring tourism education in a large tertiary institution
- to implement the framework in real life field conditions and reflect on that process

### 1.3 Scope and de-limitations of research

Although widely assumed to be an important and positive catalytic element in the effort to improve economic performance, there is unease at the relative under-performance of tourism in the province. (KwaZulu-Natal Tourism Authority, 1999). There is evidence (Burger et al, 1999) to suggest that a more cohesive, better focused approach to tourism education would improve the contribution of the tourism industry to the economy of KwaZulu-Natal. There is no common vision of what form a more cohesive better focused approach to tourism education should take either on a global scale (Cooper et al, 1996) or on a national or provincial scale (Government Gazette, 1198 of 1999) (Burger et al, 1999) (CAO, 1999).

Following a series of workshops designed to establish the future purpose and role of Technikon Natal it was resolved it should become "*The leading educational and technological institution on the African Continent*" (Technikon Natal, vision statement, 1998). Whilst it was not clear to all parties what exactly this statement meant, it was understood to mean that the institution would have to change. Originally the research was to chart the way in which departments within Technikon Natal could consider whether they were providing the service required to the province of KZN. Although

within one organisation, the sectors of the Technikon to be studied seemed to have synergistic potential, but in practice proved to have wildly different organisational cultures with not only different world views on the changes required but indeed completely different opinions on whether change was needed at all.

Co-incidental to this research was the decision by the Senate of Technikon Natal to arrange a review of the entire academic ambit. Inspired by a paper presented to Senate by the Vice Principal Academic (VP Academic) the mandate was for the academic staff to review their current activity and present justification for future activity.

It is necessary to limit the range of investigation in an area that ranges as wide as tourism education in the tertiary sector. This delimitation has been established according to the fundamental systems principle of hierarchy and recursion. This principle suggests that the characteristics of a given system are to be found in the various sub and supra systems of that in focus. It is assumed that as a major provider of tertiary education in KwaZulu-Natal, any improvement in tourism education at Technikon Natal will have a concomitant effect on tertiary provision in the province as a whole. Even so, the research focuses down through the level of general academic review to the specific participants in an intervention designed to improve the understanding of the complexity associated with improving tourism education. The dissertation includes a discussion on the implications of participation in such an intervention and examines some of the implications of exclusion.

The whole concept of perspective, and the subjectivities associated with that, are central to soft systems thinking. This research makes no attempt to be detached and impartial. The researcher was a participant in the intervention studied, both as a researcher and as a Head of one of the departments involved. It is argued that it is not only impossible to be detached as an observer in human activity systems, but entirely undesirable.

A readable and concise discourse on this assertion can be found in Checkland and Holwell (1998 : 18ff)

The dissertation does not seek, nor does it find, a neat packaged solution to the messy problem of tertiary tourism education in KwaZulu-Natal. This is not in the nature of systems thinking, which, in the manner espoused by Singer, through to Churchman, Checkland, Flood and Jackson in all their writings, is that soft systems thinking is about inquiry and better ways of seeing, and not primarily about proving or disproving hypotheses.

#### **1.4 Significance of research**

Traditional approaches to the design of systems such as an improved tertiary response to an educational need have assumed that there is an optimal course of action that merely has to be uncovered. This research denies that there is one optimal method that will be revealed by the usual 'hard' systems approaches (Flood and Jackson, 1991:37). It is argued instead that the problem context is too messy and complex to be understood by such simplistic means. However conversational discourses, or mere observational accounts have been fully criticised as lacking rigour and structure, (Flood, 1995). This research draws upon rigorous methodology, declared in advance, to provide the framework of inquiry.

Whilst there is little literature specifically directed to the use of systems thinking in tourism Leiper (1995) argues that opens systems thinking is appropriate for tourism managers. More specifically, in a paper on the use of Checkland's Soft System Methodology (SSM) and tourism destination management Carlsen (1999) supports the use of soft systems thinking as an appropriate methodology of inquiry.

The research is therefore important as it moves away from the traditional isolationist and

reductionist approaches to tourism research (Carlsen, 1999) and towards soft systems thinking, and methodologies specifically designed to address ill-structured and complex issues.

### **1.5 Research method**

The research was conducted live in Technikon Natal. The meetings and workshops attended were not staged events 'to assist the researcher'. Much of the analysis was obtained from live documents used in the process of academic review and available for public scrutiny within the institution. This was an Action Research project which depended on three elements of this methodology. The *Action* element of Action Research was actively pursued by the researcher who was also a member of the management team at Technikon Natal charged with improving the institution's response to the needs of tourism education. Organisational change was expected during the process. The *Research* element of Action Research was to test the theoretical framework of the inquiry and to reflect upon the outcomes of the framework when used in the context of tourism. The final element was the assertion by Ackoff (1979) that attempts to establish detached objectivity are themselves subjective in the context of human activity systems such as the one under study. The author fully acknowledged his dual rôle and took an active "value-full" part in the process.

The research considers various methods of inquiry gleaned from the paradigm of soft systems thinking. Specifically it will consider Critical Systems Thinking (CST) as an alternative methodology to that of more conventional scientific methods usually employed by tourism researchers (Carlsen, 1999). However as Churchman (1971: 200) drawing upon the work of Singer (1936) points out that as an inquiring system has the purpose of creating knowledge concomitant must be the capability of choosing the right means for one's desired ends. To this end the research turns to the work of Flood and Jackson (1991) and their meta-methodology, Total Systems Intervention (TSI) which aims to operationalise the theory and philosophy of CST. One purpose of TSI is to



introduce a rigour to the selection process of a methodology or even methodologies. Using Total Systems Intervention as a framework and selection methodology, Checkland's Soft Systems Methodology (SSM) was selected for the inquiry. Guidance on implementation was obtained from Checkland and Schole's (1991:235ff) account of the use of SSM with a large group of Shell managers charged with an organisational design review. Any compromises of implementation that might be noticed by SSM purists were adaptations introduced by Checkland (ibid) himself and justified in the same source.

### **1.6 Overview of dissertation structure**

Chapter Two presents an overview of tourism. Starting from a global perspective the chapter examines the issues facing the establishment of a new discipline, tourism, and considers various definitions of tourism. Moving to the context of South Africa the importance of tourism to the economic ambitions of government is reviewed. Legislation and policy documents published by government at both a national and provincial level are outlined and the issues that influence tourism education identified. The dissertation establishes the need for improved tourism education at tertiary level in the province. There is a survey of the programmes and courses offered to potential students of tourism in this province by both the members of the Eastern Seaboard Association of Tertiary Institutions (esATI) and some of the multifarious private institutions that aim to serve this market. The focus then moves to Technikon Natal specifically and outlines the structures and current activity that might be said to address tourism education in the province of KwaZulu-Natal by that organisation. The chapter concludes that the field of tourism education in KwaZulu-Natal can be summarised as complex, unstructured, and messy, but underpinned by a genuine wish for improvement in tourism education at tertiary level.

Chapter Three opens with a review on the nature of systems thinking and inquiry and contrasts the traditional approach to inquiry with that proposed by soft systems thinking.

The major principles supporting soft systems methodology are examined and some of these methodologies are examined in detail. Given the alternative nature of soft systems thinking, the dissertation examines validation in systems methodology.

The chapter proceeds with a discussion about how problem contexts might be best matched to appropriate methodologies. The theme of matching methodology to problem context is expanded following Flood and Jackson's (1991) 'systems of systems methodologies'. Total Systems Intervention (TSI) is used to bring rigour to the process of selecting a methodology. The chapter considers criticism of this early version of TSI and examines later work by Flood (1995) which offers an improved version, in the view of many authors (Midgley, 1996 *inter alia*).

Chapter Four uses the discourse of Chapter Three to build an intervention framework based on the later version of TSI to conduct an inquiry into the process of academic re-design at Technikon Natal in order to improve tourism education. The chapter charts the process of change and the improvement in learning shown by the participants.

In conclusion the dissertation summarises the findings of the work and identifies some of the unexpected outcomes. Following an established tenet of soft systems thinking the dissertation ends by looking forward to the next level of iteration in the process of organisational learning and proposes areas for future research.

## CHAPTER TWO

# Background and Context of Tourism Education in KwaZulu-Natal

### 2.1 Defining tourism

There are few simple and concise definitions of tourism. Middleton (1988) gives the definition used by the Tourism Society:

*'Tourism is deemed to include any activity concerned with the temporary short-term movement of people to destinations outside the places they normally live and work, and their activities during the stay at these destinations.'*

This is a broad all encompassing definition but with little regard to circumstance or motive. It restricts itself to the activities of one who does not normally travel in the course of every day life. Although the definition does distinguish between a person who is travelling as a matter of course, and one who is travelling for some special reason there is no comment why this need to travel should have happened. The opening phrase *'deemed to include any activity...'* does not offer any specific insight into what the tourist actually does whilst away from their normal place of abode. Other writers have taken this uncertainty and developed the definition.

Cooper et al (1993) attempt to be more specific distinguishing between businesses that provide tangible products and those that provide services aimed at satisfying the needs of tourists. However Bennet (1995) takes this concept further reminding us of the early work of Middleton (1979) who determined the concept of the tourism product as *'... an amalgam of many components, the attractions of the destination, the facilities at the destination, and the accessibility of it'*. He went on to clarify this: *'The tourism product is therefore not only a hotel room, an airline seat, or a sunny beach, but rather an amalgam of many components, or a package which forms a composite product'*.

(Middleton, 1988). Mathieson and Wall (1982) offer the following definition for tourism activity: *'the temporary movement to destinations outside the normal home and workplace, the activities undertaken during the stay and the facilities created to cater for the needs of the tourist'*. This definition encapsulates the essential elements of tourism activity. These are given by Knowles (1994) who suggests that any definition of tourism must include the following four points:

- tourism involves the movement of people from one location to another outside their own community
- tourism destinations should provide a range of activities, experiences and facilities
- different needs and motivations of tourists require satisfying, and in turn this creates social impact
- tourism industry itself contains a number of sub-elements which in total generate income within the economy

Cooper et al (1996) in a discussion on tourism definition consider that following elements should be added to those listed above.

- that the movement of people can be considered as two separate elements
  - that of the journey to the destination itself distinct from that of the stay at the destination itself
- tourism activities on the journey and at the destination are distinct from the resident and working populations of the places through and in which they travel and stay
- destinations are visited for purposes other than taking up permanent residence or employment

These elements of the tourism definition have a characteristic of their own in that they

tend to emphasise the demand-side of tourism activity rather than the supply side. Cooper et al (1996) attributes this to the fact that it is very difficult to differentiate which tourism-related industries are serving tourists only and those which are serving local residents who are indulging in leisure. Concentrating on the demand side of the industry is much easier as those who are participating are much more easily identified. Smith (1989) regards this as rather like defining health care by describing sick people.

Despite the commonalities that can be observed in most definitions of tourism there is still more than a hint of fuzziness about all the definitions. To bring more clarity in 1991 The World Tourism Organisation organised an international conference on tourism definition and statistical measurement. The recommendations of this conference were adopted in 1993 by the United Nations as the internationally accepted definitions of both international and domestic tourism. These definitions are provided in diagrammatic form in Fig 2.1 and Fig 2.2.. Examination of these diagrams show them to be tightly bounded concerned with the actual activity of tourism and travel. They pay little regard to the process of tourism and the influences that act upon tourism. This approach has been criticised as reductionist (Carlsen, 1999) as tourism impinges upon and is affected by many elements seemingly not immediately concerned with tourism. The perceived importance of these elements is altered by the perspective of the observer.

There have been models made of the tourism process. Cooper et al (1996) consider that the model proposed by Leiper (1981), (Fig 2.3), is a useful intuitive way of thinking about tourism that forms the basis of many other authors' approaches to tourism models.

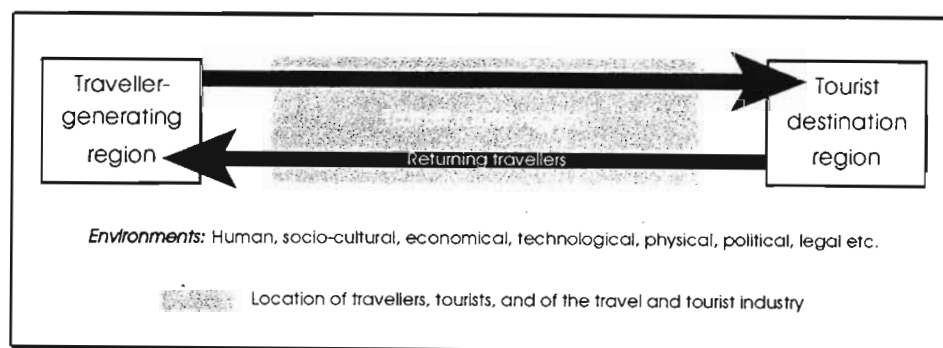
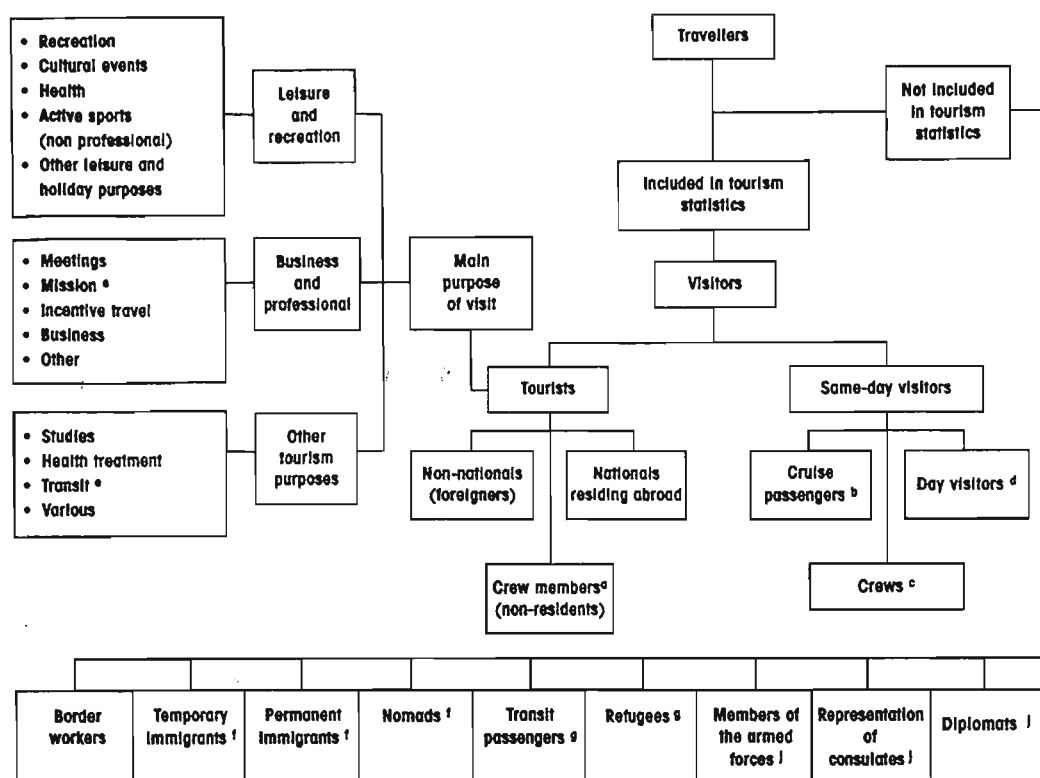


Fig 2.3 A model of the basic tourism system (Leiper, 1981)



### Resident

A person is considered to be a resident in a country if the person:

- has lived for most of the past year (12 months) in that country, or
- has lived in that country for a shorter period and intends to return within 12 months to live in that country.

### Tourist (overnight visitor)

A visitor who stays in the country visited for at least one night.

### Notes

- Foreign air or ship crews docked or in lay-over and who use the accommodation establishments of the country visited.
- Persons who arrive in a country aboard cruise ships (as defined by the International Maritime Organisation 1965) and who spend the night aboard ship even when disembarking for one or more day visits.
- Crews who are not residents of the country visited and who stay in the country for the day.
- Visitors who arrive and leave the same day for leisure and recreation, business and professional or other tourism purposes including transit day visitors en route to or from their destination.

### Visitor

Any person who travels to a country other than that in which he/she has his/her usual environments, for a period not exceeding 12 months and whose main purpose of visit is other than the exercise of an activity remunerated from within the country visited.

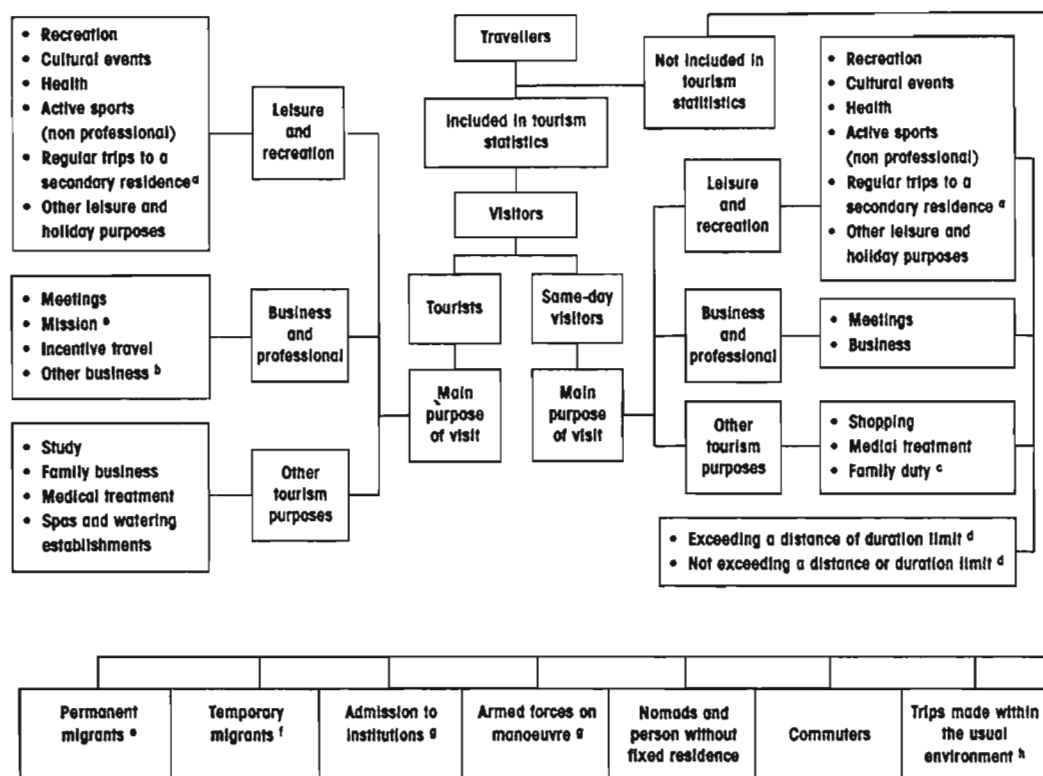
### Same-day visitor

A visitor who does not spend the night on a collective or private accommodation in the country visited.

- Overnight visitors en route from their destination countries.
- As defined by the United Nations in the Recommendations on Statistics of International Migration, 1980.
- Who do not leave the transit area of the airport or the port, including transfer between airports or ports.
- As defined by the United Nations High Commissioner for Refugees, 1967.
- When they travel from their country of origin to the duty station and vice versa (including household servants and dependants accompanying or joining them).

Fig 2.1 Classification of international visitors

(WTO,1994)



#### Notes

- a Weekly trips to the place of second residence (whether owned, inhabited free of charge or rented) should be classified separately under leisure and recreation.
- b Persons undertaking frequent trips within the country, eg. crew members, drivers, tourist guides, salespeople, itinerant sellers, inspectors, artists, sportspeople etc.
- c Attending funerals, visiting sick relatives, etc.
- d Minimum distance and duration of minimum absence and duration of journey may be required for a person to qualify as a same-day visitor.
- e For a period of more than 6 months, or the minimum time necessary to establish a new residence, including dependants.
- f For a period of less than 12 months with the purpose of exercising an activity remunerated from within the place of destination, including dependants.
- g Admission to a hospital, prison and other institutions.
- h Trips of a routine character, part of a regular business schedule or frequent visits to a place for whatever reason.

Fig 2.2 Classification of internal visitors (WTO,1994)

Each of these models presents a certain perspective on the subject. Murphy (1985) (Fig2.4) considers the psychological factors which influence demand. These include motivation, perception and expectations. Murphy (1985) shows how these demands are linked to the supply of travel facilities via intermediates in the marketplace.

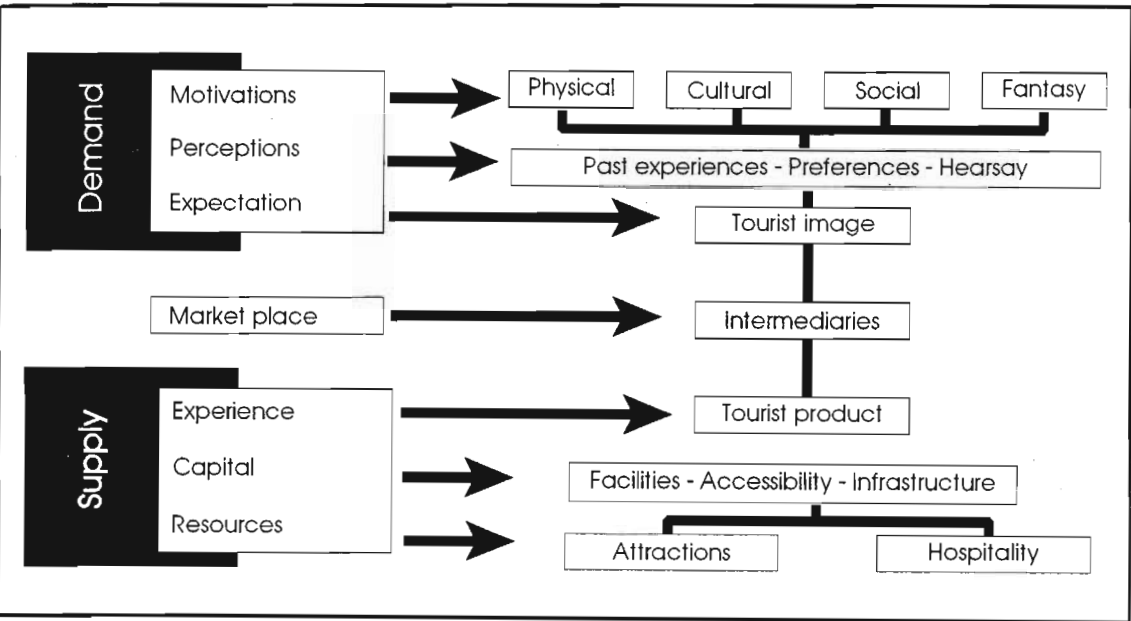


Fig 2.4 Modelling supply and demand for the tourism product (Murphy, 1985)

## 2.2 Tourism as a system

Gunn (1988) sees tourism as a system.

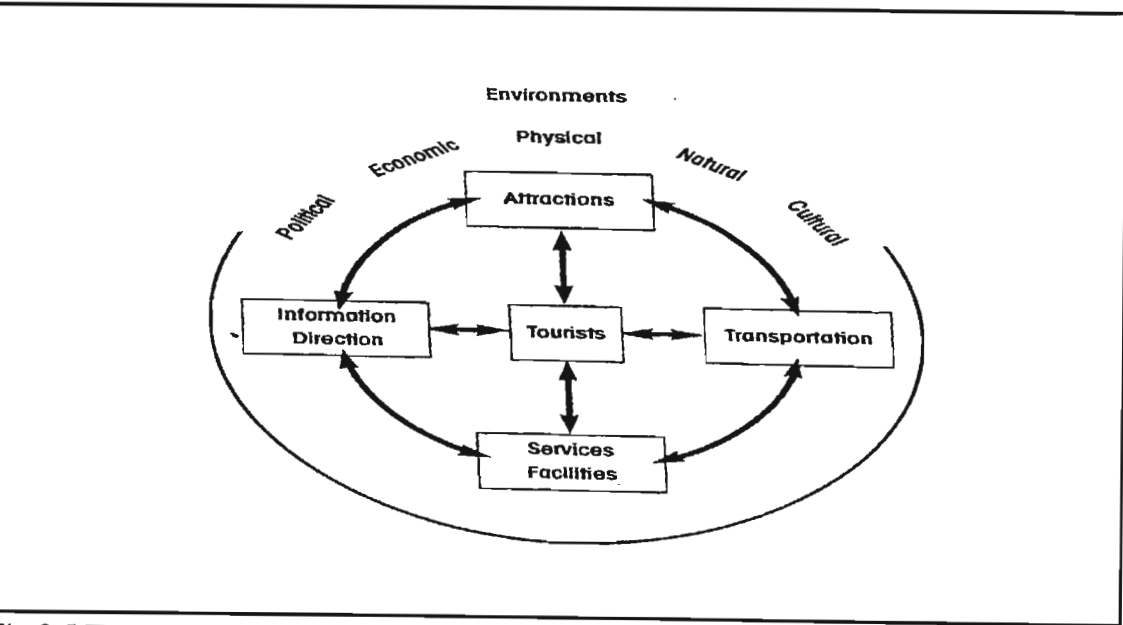


Fig 2.5 Tourism as a system according to Gunn (1988)



In this model (Fig 2.5) Gunn emphasises the interdependency of elements of the industry and also introduces the idea of mutual influence. Developing the idea of interdependence and mutual influence Mill and Morrison (1992) produced a cyclical model, (Fig 2.6) noting that the key components are the market, travel, the destination and marketing. This market-orientated view of tourism is driven by consumer behaviour.

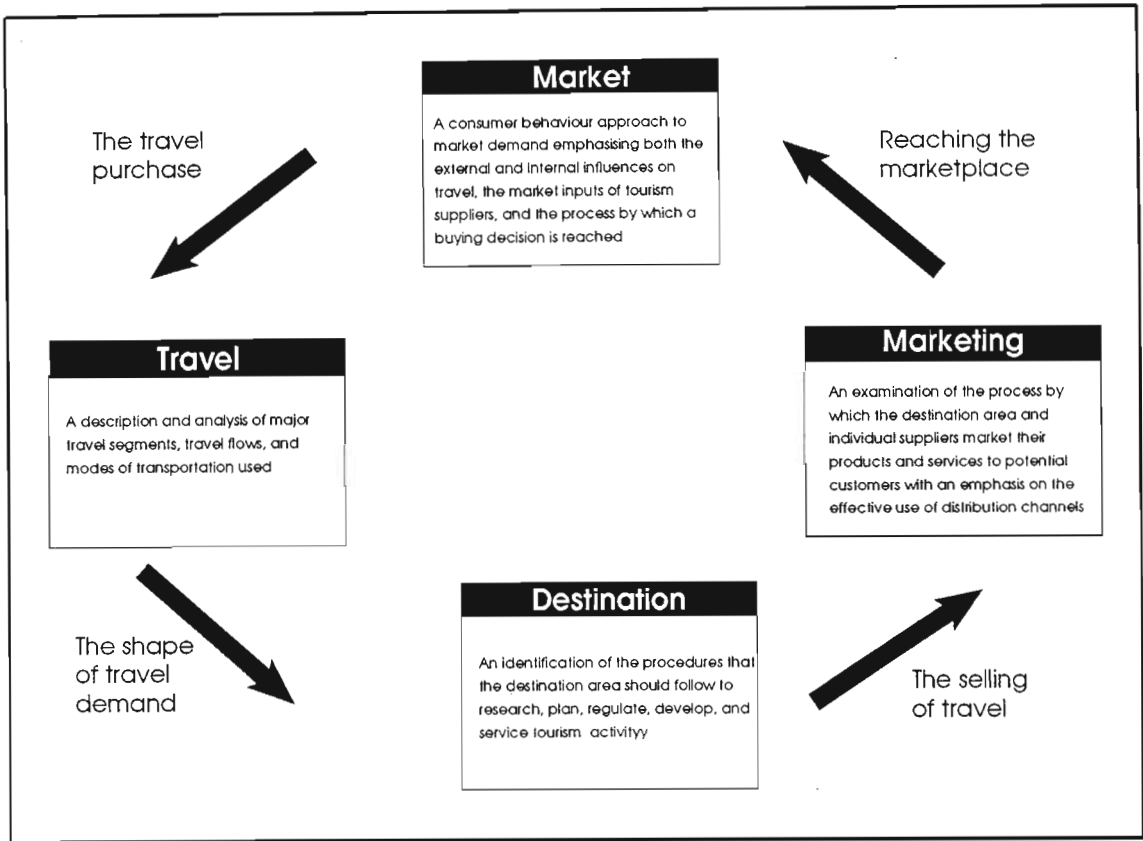


Fig 2.6 The interdependence and mutual influence of elements in the tourism industry (Mill and Morrison, 1992)

In contrast Westlake (1983) regards transport as central in linking demand for tourism with its supply. (Fig 2.7) In conjunction this model links the effectiveness of planning and development policies to the end users of tourism. He is suggesting that destinations which plan effectively for tourism are more likely to sustain demand and retain market share.

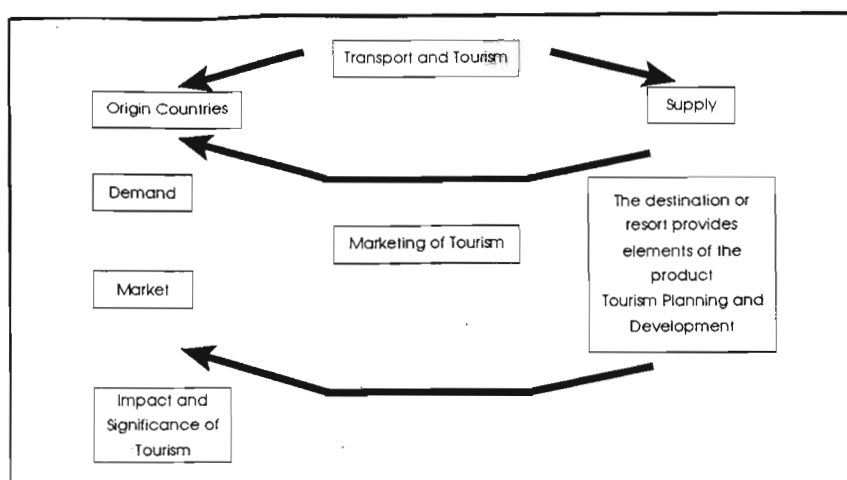


Fig 2.7 Transport as the link between tourism supply and demand (Westlake, 1983)

The Mathieson and Wall (1982) model (Fig 2.8) is the most complex but is still regarded by Cooper et al (1996) as being a simplistic overview of the structure of the industry. Nevertheless this view of tourism integrates dynamic, statistic and consequential elements. This view considers that the dynamic elements, the demand for tourism, combines with the static characteristics of the destination, the tourist, the type of activity, the length of stay, and carrying capacity. The impacts of tourism are seen as the consequential element of the tourism system which takes the form of physical, social and economic impacts. These need to be controlled by comprehensive management and planning policies.

These differing views of tourism can be summarised by noting that each of these definitions and explanations offers a slightly different perspective on *what* the tourism system involves and *how* the elements interrelate. This rather vague concept is taken a stage further by Carlsen (1999) who uses Soft Systems Methodology (SSM) to bring some sort of rigour to the inquiry. The paper, although an early attempt to bring SSM to tourism, is rather superficial in that it concentrates on the method of conducting an SSM intervention at the expense of uncovering real insight into the actual process of tourism as seen by the participants of the SSM.

From this it can be concluded that there is no absolute definition of tourism or indeed any universal accepted definition of what tourism actually is. This vagueness is

especially difficult when trying to determine where tourism should be placed in relation to other more established areas of study.

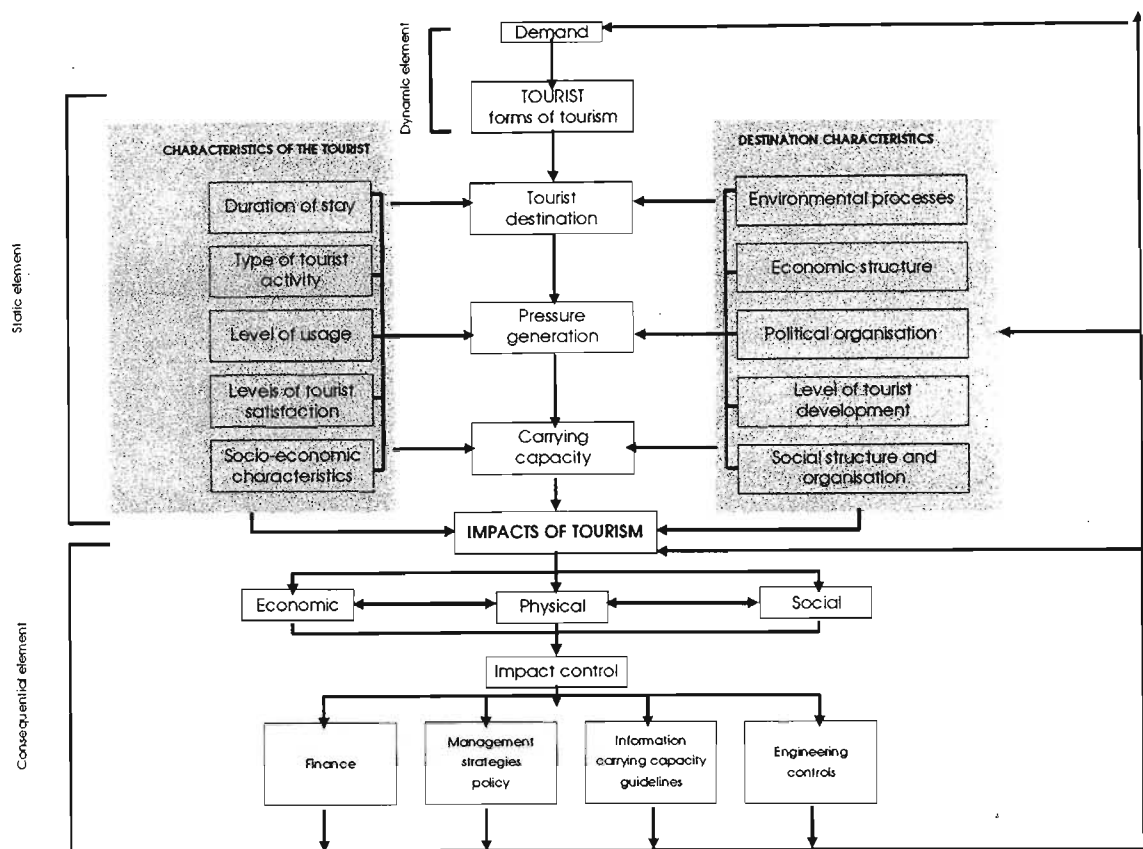


Fig 2.8 Tourism industry model integrating dynamic, static, and consequential elements (Mathieson and Wall, 1982)

### 2.3 The location of tourism education and training in the tertiary sector

Having examined tourism as an area of human activity it is necessary to think about whether tourism can be considered to be a discipline in its own right. Commissioned by the World Tourism Organisation, John Westlake, Chris Cooper and Rebecca Shepherd, tourism lecturers of the University of Surrey, examined the status of tourism education in tertiary institutions. (Cooper et al, 1996). They concluded that the relative immaturity of tourism as an area of study has seen tourism incorporated into many "*superficially unrelated departments and tagged onto a myriad of seemingly unconnected courses*".

### **2.3.1 Tourism as a discipline**

Although some writers such as Goeldner (1988) refer to tourism as a discipline in its early stages, Cooper et al (1996) are less sure. They cite three tests against which a new area of study can be compared to see whether or not it has reached the status of a discipline. These tests are listed below and are followed by a discussion on their relation to tourism.

- 1 A discipline has an established body of theory which has been fed and extended by research and debate which serves to underpin its curriculum.
- 2 A discipline is a formal, recognised branch of an institution which is perceived to be legitimate and worthy
- 3 A discipline has status and credibility and involves acknowledged mental training on the part of both the student and the educator

Goeldner (1988) estimates that tourism as a discipline is in its early stages, as Business Administration was in America in the late 1950s. Leiper (1981) began his discussion by arguing that as tourism has been used as an integrating mechanism across mature disciplines, it has been regarded as inferior to those other disciplines. He goes on to note that it is the synergy that can tourism can draw from such integration that makes the discipline worthy in its own right providing that there is the necessary theoretical development of these observations.

Historically tourism cannot compare with established subject areas such as those that accompany economics and geography (Airey, 1988). Tourism is often seen as contributing case study material to add interest to other disciplines. The multi-disciplinary approach taken by many tourism educators observed by Airey (1988) can add to this lack of identity. The human and cultural aspects of tourism are of particular

interest to geographers, historians, anthropologists, and behavioural scientists. Similarly the commercial and environmental facets of tourism are also attractive to established disciplines which deal with those areas, although it must be said often in isolation, in pure unrelated form and not grounded in the reality of application. The Airey (1988) paper also notes that there is no agreement on when tourism education can be said to have started. An example of this is offered. International mass tourism is a very recent phenomenon which does not really pre-date the 1960s. As tourism struggles to establish an academic identity which can offer insight to such a phenomenon the counter problem of the decline of mass tourism in places such as Benidorm presents itself at a pace faster than the discipline can evolve to explain it. In the context of few if any academic precedents, it is particularly difficult in the classic mode to develop widely held theory that is repeatable and universal whilst simultaneously observing and making sense of these changes.

Cooper et al (1996) illustrate how tourism education itself has developed into three streams of academic endeavour:

- as vocational courses for the travel and retail travel trade
- as enrichment for business studies courses by giving them a vocational orientation
- as a development from more traditional disciplines such as geography, sociology, anthropology and linguistics.

Cooper et al (1996) conclude that the design of tourism education will be affected by the diverse and fragmented nature of the industry. Tourism cuts across many established disciplines and embraces many operations. Given that definition and bounding of tourism has proved to be very difficult, the development of suitable and effective education at all necessary levels to meet the needs of an indefinable industry will be even more difficult. The role of formal research in this task will be crucial.

The importance of research to the body of knowledge of a discipline is central. According to Jafari (1(1) : 33-41) research that can be regarded as purely in the domain of tourism is in its infancy. Although the economic significance of tourism has seen major growth over the last 40 years there has not been a commensurate increase in tourism research. There are many reasons for this. Primarily there seems to be little motive to develop a pure research base. As previously mentioned tourism draws heavily on well established disciplines. Few experienced researchers have any incentive to leave those established domains to develop an entirely new body of knowledge. The current driving force behind much of tourism education is the tourism industry. The fragmented nature of this industry has precluded a co-ordinated approach to pure research. Much industry driven research is applied research and this tends to be relatively limited in its scope, operationally orientated rather than abstract or conceptual in nature. Applied research tends not to progress the body of knowledge, (Cooper, 1996) nor does it tend to develop the theoretical underpinning which is needed by tourism before it can be seriously considered as a discipline.

There is a consistent call to co-ordinate research, education and training (Jafari and Ritchie, 1981; Airey, 1988; Cooper et al, 1996; Burger, 1999). Although some co-ordination of current thinking does take place through formal journals these are not widely available beyond tertiary institutions. Without this co-ordination the body of knowledge of tourism will remain stunted. At this stage research must be regarded as the priority to facilitate the evolution of a structure framework to which students, educators researchers and industry can relate. (Jafari & Ritchie, 1981). Until this is in place it must be concluded that tourism is not a fully fledged discipline in its own right.

## **2.4 Expected economic effects of tourism**

### **2.4.1 The national perspective**

The *World Tourism Organisation* (1994) reviewed African tourism and considered South Africa to be "one of the most promising destinations on the African continent" The

following year the Department of Environmental Affairs and Tourism (DEAT) stated that South Africa had not yet been able to realise its full potential in tourism. The contribution of tourism to employment, small business development, income and foreign exchange earnings remained limited (DEAT, 1996) Going on to present figures the White Paper on Tourism Development and Promotion (DEAT, 1996) estimated that 480 000 people were employed directly and indirectly in tourism related activity in 1996. It was expected that this figure would double by the year 2000, an optimistic prediction as it turned out. How does that figure relate to the context of unemployment? It is difficult to put this figure into context as accurate figures for the size of the workforce are hard to calculate. The Department of Manpower (as it was known in 1994) estimated the Economically Active Population at 13.4 million, of whom 7.7 million find employment in the formal sector and 3.0 million in the informal sector. This left a minimum of between 3.0 and 3.5 million who are unemployed. Of these it is estimated that 1 million live through subsistence agriculture which leaves about 2.0 million who are unable to earn a living and are dependent on others.

#### **2.4.2 The context of KwaZulu-Natal**

KwaZulu-Natal is the third smallest province, by area, in South Africa, yet has the largest population which comprises of over 20% of South Africa's total population. This population is amongst the poorest in the country with an income per capita that lies 25% below the national average. Population growth is 2.4% per annum and is projected to rise to about 11 million by 2 000. (DBSA, 1994)

Compared to other regions the Human Development Index, cited by Münster & Foggin (1999), for KwaZulu-Natal is medium and is characterised by a poorly skilled labour force and high unemployment levels. Unemployment in KwaZulu-Natal is currently 32% .

#### 2.4.2.1 Tourism potential in KwaZulu-Natal

According to Münster and Foggin (1999) the diverse and abundant wildlife resource, the natural environment and the cultural and historical heritage of the Province gives it an important advantage over other provinces. This natural diversity is conserved by a system of protected areas that cover about 10% of the land surface of KwaZulu-Natal. Of this 8% is administered by KwaZulu-Natal Nature Conservation Services. Despite this advantage the established tourism sector has concentrated on only a small component of the potential market. Nevertheless it was estimated that this industry employed directly or indirectly some 200 000 people ( KwaZulu-Natal Tourism Authority, 1999: 8).

The increase in tourism related jobs between 1994 and 1999, although impressive, was less successful than had been predicted. As Minister for Tourism Pallo Jordan (1999), published the following statistics:

- South Africa had become Africa's leading tourist destination since 1994 and is ranked 25<sup>th</sup> in the World Tourism Organisation's top 40 holiday destinations.
- South Africa is among seven countries in the world which have experienced an increase in tourism of more than 10% in three years
- 187, 00 new jobs had been created over three years in tourism related activity
- tourism contributed R53 bill (8.2%) towards total GDP.

On reflection a telling sentence contained in the White Paper (DEAT,1996) may well offer a clue to this lack of performance. *"Perhaps the greatest inadequacy in the tourism industry in South Africa is the absence of appropriate tourism education, training and awareness teaching"* This statement was supported by reference to the estimated training capacity of about 10 000 when the industry was calling for around 100 000 additional persons per year for the next few years. Specifically a need was identified in



the area of community-wide awareness programmes as well as the urgent need for training in a wide range of basic skills. Although the KwaZulu-Natal Tourism Authority has run a series of tourism awareness workshops these were cut short due to lack of funds. ( KwaZulu-Natal Tourism Authority, 1999: 54). It is not clear what entity is responsible for developing a KwaZulu-Natal wide response to education and training which would lead to job creation.

## **2.5 A review of legislation affecting tourism education**

Since 1994 national government has introduced a series of parliamentary bills whose complementary purpose is to improve training and job progression for the working population, and the population available for work. Whilst applicable to all sectors of commerce and industry the nature of work traditionally available in the tourism industry makes this a favoured sector for the creation of jobs for a relatively low skilled workforce.

### **2.5.1 National government policy on tourism training and education**

The DEAT White Paper (1996) is clear on the requirements of governments and the support it was prepared to give to improve tourism in South Africa. These fall into the two main categories of funding and the nature of the training and education required.

Those relating to funding include:

- create a dedicated funding mechanism for training
- access to training opportunities through a system of student revolving loans, incentive schemes, and scholarships.

This manifests itself in the form of the following legislation.

#### **2.5.1.1 The Higher Education Act (RSA, 1997)**

This act not only redefines the role of tertiary education but also drastically alters the way in which government funding is allocated to institutions and programmes. At the

time of writing funding from the government is calculated according to the number of Full Time Equivalent (FTE) students enrolled for a programme, and is linked to the number of students who successfully pass the course. This is true regardless of the course followed although there are larger grants available for the technologies rather than the humanities as it was felt that the running costs of these programmes would be different. The radical change proposed by the Act is to grant funds according to three year rolling proposals that the government will measures against the needs that have been promoted in legislation, policy documents, and economic planning documents.

#### **2.5.1.2 The Skills Development Act (RSA, 1998)**

This act levies employers to fund training, and the various Department of Training and Industry (DTI) Learnerships which offer one year training courses in entry level skills paid for by the DTI.

The White Paper offered guidance on the type and quality of training it envisaged would be necessary to meet the human resource development needs if the tourism industry was to achieve its goals:

- develop a series of linked and accredited courses in accordance with the National Qualifications Framework (NQF)
- support on-going efforts to ensure that school programmes and curricula include sections on tourism
- establish an effective co-ordination forum for tourism training and education, where all institutions involved in the field are represented
- create a major new avenue of export earnings through the export of education and training services, through consistent and continuous investments in tourism education and training.

The record of the Government in meeting these targets has been less impressive. To some extent the Higher Education Act (RSA, 1997) re-defined and re-focused the role of tertiary education. Although only one component of the training and education capacity of the country it is nevertheless an important one not only for the capacity to educate and train but also in its ability to create and influence opinion.

#### **2.5.1.3 The SAQA Act (RSA 1995)**

This act intended to develop the framework of linked and accredited courses referred to in the Skills Act. Although at the time of writing no new courses in tourism related fields have been registered. This process is underway, and those involved will testify to the complexity of this task. This paper will return to this and the complex, pluralist and even coercive issues associated with the task.

#### **2.5.1.4 The Equity Act (RSA, 1998)**

This Act requires employers to establish staff improvement programmes. This is intended, in conjunction with the Skills Development Act, to oblige employers to train, re-train and educate employees. Specifically there is provision in the legislation to appraise the racial and gender profiles of employees in relation to their plans for training improvement.

#### **2.5.2 The implication of training legislation on the tourism industry**

Although none of these Acts is specifically related to the tourism industry they are all focused on existing employers and companies and with the likely effect that only those currently in employment will benefit. Of the intention to institute 'an effective co-ordination forum for tourism training and education, where all institutions involved in the field are represented' there is no sign unless the Sector Education and Training Authority (SETA) is the body used to fulfil this requirement. The tourism industry is represented on the Service Industry SETA by one person.

The tourism industry is characterised by a large number of small to medium enterprises who employ large numbers of people relative to the turnover of the company. The threshold level at which the Skills Development Act is enforced is on companies with a total remuneration to all employees and beneficiaries of only R250 000 per annum. This is very low and will ensure that even quite small companies will have to pay to the South African Revenue Service the 0.5% levy, (rising to 1% in 2001). Even on the threshold scale an employer will be required to pay R12 500 towards the cost of re-training employees regardless of whether they do in fact train any employee or not. Pressure from the Equity Act will compel larger employers of more than 50 staff to register training and development plans according to racial and gender profiles. Smaller companies, of less than 50 staff, will be exempt but will still pay the levy under terms of the Skills Development Act. This money maybe reclaimed if the employer sends employees on SETA approved training courses. As the employers are compelled to pay the training levy they might as well enrol employees on training courses.

As discussed earlier the SETA responsible for the tourism industry has one representative on a panel of nearly 20 members. It is unlikely that there will be any informed leadership on what constitutes sound training and worthwhile education unless it comes from the tertiary institutions themselves. In 1992 a conference entitled *Tourism Education in Europe: The Development of Quality* (TEE). It was noted by delegates that there was tension and lack of respect between educators and industry, especially in countries with large numbers of small scale tourism companies. In South Africa the tourism industry, with the exception of large operators such as the Thompson Travel Group and some of the large hotel groups, tends to be made up of small companies or even 'one-man-bands' often led by self made entrepreneurs. Inspection of the membership lists of the Pietermaritzburg Tourism Association and KwaZulu-Natal Tourism Authority database confirm the pattern of small fragmented tourism companies in the province of KwaZulu-Natal. Delegates at the TEE 1992 conference stated that as many of the small companies were led by 'self made' entrepreneurs with little or no

training or education there was little support for investment in training and education for their staff either.

Examination of the training and education legislation mentioned in the above section demonstrates that the nature of the government interventions is characterised by improvement through developing structures that will develop policy across a broad ambit of commercial and industrial activity. There is no specific guidance on how this should manifest in the tourism industry. Thus it is underlying perspectives on what constitutes economic improvement through tourism development that needs to be reviewed. The findings need to be accepted by both the education providers and the tourism industry. To effect such change is processual and not easily or quickly legislated. At present tourism education and training tends towards the skills and operational level as the review of current tertiary programmes presented later will demonstrate.

## **2.6 KwaZulu-Natal provincial tourism structures and legislation**

Schedule 6 of the 1994 Interim Constitution of South Africa delegated powers to undertake tourism activities to the provinces. In 1995 South African Tourism Board (SATOUR) closed its regional offices transferring the assets, liabilities and duties to the provinces. The KwaZulu-Natal government through two Cabinet resolutions, one of which created a Section 21 company to take over the role of SATOUR in KwaZulu-Natal, and the other created the Interim Provincial Tourism Steering Committee (IPTSC). The IPTSC was given tasks which included:

- drafting of legislation to establish a provincial tourism authority
- ensuring continuity in current tourism activities
- co-ordinating the restructuring of tourism activities within the province
- evolving and implementing new structures.

This is a broad ambit open to interpretation. The KwaZulu-Natal Tourism Authority Annual Review reports in some detail on the activities of both the Authority and the IPTSC. Although there were a series of workshops with regional councils initiated by the KwaZulu-Natal Tourism Authority on tourism awareness there seemed to be no mention of a policy position on education and training within the Province.

Given the proposed shift in funding and the policies articulated by government at national level, intuitively it seemed evident that greater co-operation should exist between departments in tertiary institutions with possibly synergistic programmes. Intuition alone is not a sufficient ground to institute profound change especially when there is no shared agreement not only about what form the change should take, but indeed if there was need for change in the first place.

It is now necessary to review the current status of tourism education at tertiary level in KwaZulu-Natal.

## **2.7 Tertiary tourism education in kwaZulu-Natal**

### **2.7.1 Assessing the need for tourism education in kwaZulu-Natal**

The report (Burger et al, 1999) included the findings of a study by Luclaire and Pillay which went beyond surveying what was already in place and attempted to assess future needs in tourism education and training in KwaZulu-Natal.

Although concluding that there was a need for further investigation in this area the researchers were able to establish that there was a real need for education and training in the ignored area of Community Tourism. They were also able to confirm that not nearly enough people were being prepared for the existing tourism industry.

The most telling finding was that there was little or no co-ordination in tourism research, education and training between any of the bodies active in these fields in the province.

### **2.7.2 A survey of the tertiary institutions of KwaZulu-Natal that offer tourism education**

In 1998 in receipt of financial assistance from the Centre for Science Development (CSD) Dr C J Burger of the Ecotourism Research Unit of Technikon Natal lead an audit of Tourism Research, Education and Training in KwaZulu-Natal (Burger, Airey, Pillay : 1999) .

Questionnaires were sent to institutions which included :

- tertiary institutions - universities, technikons, teacher training colleges
- technical and business colleges - private and para-statal
- nature conservation and environment bodies
- community organisations
- government and semi government bodies
- tourism and travel industry

An assumption made by the surveyors was that only those actively involved in tourism education and training would respond. This was not always the case. Some university departments, not obviously connected with tourism, were planning to offer tourism courses. These included:

- Department of Historical Studies, University of Natal, PMB
- Department of Drama, University of Natal, PMB
- Department of History, University of Zululand
- Department of German, University of Zululand.

Subsequent to the survey these departments were either closed or found themselves under threat of closure. Comparing these findings with those summarised by Cooper et al (1996) in the WTO-report confirms that KwaZulu-Natal is currently conforming to the world pattern of uncertainty when attempting to define and locate tourism study.

The Burger report found that there were over 30 private and government funded institutions / departments offering tourism training and education in the province. Although diverse in nature the courses offered by these institutions is aimed at the 'traditional' or 'established' areas of tourism. Tables compiled by Burger et al (1999) list, according to institution, the various programmes and qualifications on offer. Over sixty five programmes, modules, subjects, degrees, diplomas and certificates are listed as available to potential students of tourism in the province of KwaZulu-Natal. Analysis of these offerings reveals considerable disparity and lack of consistency. *What exactly is a diploma, who accredits it and how long is the course of study?* There is no common agreement on what level of programme can be termed a diploma. The length of a course of study leading to a diploma also varied and there was no requirement that programmes should be accredited.

Further analysis of the tourism courses listed is extremely difficult. There is no common agreement of what the terms used by various institutions actually mean. For example the term 'diploma' is used to describe courses that are clearly very different judging by the length of time a student must study to obtain one. Technikons use the term diploma to describe an award that follows three years of study, success in 15 subjects and 6 months of supervised practical placement in the workplace. The qualification is accredited by SERTEC, a certification council established by act of parliament. This can be contrasted with the diploma offered by a private institution, Working World - Travel and Tourism Division, which will award a diploma in eight months. The qualification is advertised as being accredited by TETASA which is the training arm of the South African travel agents association.

National government has been dissatisfied by the ambiguity and duplication of current qualifications and has introduced legislation. Established under the SAQA Act (RSA 1995) it is the task of the South African Qualification Authority (SAQA) to form a National Qualification Framework (NQF) that will establish relative levels of



competency between these qualifications as well as oversee issues of quality assurance. A further objective laid down in the Act is to reduce duplication between qualifications and ensure articulation between them. At the time of writing, (November 1999), SAQA is still at stage where qualifications that might be offered in the future are to be registered.

What is not laid down in the SAQA Act (RSA 1995) is exactly how the process is to take place. There are broad references to stakeholders and there is indication of how a stakeholder might be defined. How rigorous analysis of need is to take place is not clear. There is also no direction on whether need is to be defined as a national prerogative or accommodated through provincial perspectives. In the case of tourism these are likely to be very different. The process will be complex if the objectives reducing duplication and matching need to demand are to be achieved. The framework, once in place, will provide order and reason in what is currently a confused and inefficient situation.

### **2.7.3 Tourism related tertiary programmes in kwaZulu-Natal actually offered for 2000**

In 1999 the Central Applications Office (CAO) opened under the auspices of esATI (Eastern Seaboard Association of Tertiary Institutions) Eight tertiary institutions are part of esATI namely:

- Mangosuthu Technikon
- ML Sultan Technikon
- Technikon Natal
- Technikon Southern Africa (TSA)
- University of Durban Westville
- University of Natal
- University of South Africa UNISA
- University of Zululand

All programmes to be offered by these institutions during 2000 are registered with the CAO which group them into categories according to career possibilities. Applicants for these courses are now able to review the full range on offer from all eight institutions and apply to the CAO once. These applications are then distributed over the internet to the institutions concerned.

Despite the recency of the Burger *et al* (1999) report there are clear discrepancies between its findings and the programmes listed under tourism related careers which actually call for applications for 2000. These programmes can be viewed at the website of the CAO (1999). Many of the programmes listed in the Burger *et al* report were in the planning stage and have not been listed for the 2000 intake. There are ten programmes offered by five of the esATI members. These have clear entry requirements and term dates. The University of Zululand lists five more qualifications but does not set entry requirements or term dates. Of the institutions listed with clear entry requirements and term dates only Technikon Natal offers specific tourism related programmes that range from a one year National Certificate course through a three year National Diploma course and finally a Bachelor of Technology course which admits successful graduates to masters level research degrees at technikons. There is a clear path of progression for a potential student of tourism from the operational skills based study at certificate level, to advanced strategic planning of tourism offered to middle managers at Bachelor of Technology level. It is the existence of this range of programmes that are specifically tourism orientated, coupled with the presence of other established programmes that may be tourism related that makes Technikon Natal the appropriate institution for research on change processes in tourism education in the province of KwaZulu-Natal.

## **2.8 Tourism related programmes offered by Technikon Natal**

This chapter opened with a discussion on the nature of tourism and a review of tourism as a discipline. It was shown that there is no agreed consensus of what the component parts of a tourism education should be. This confusion is shared by Technikon Natal.

Part of the purpose of this research was to uncover opinions and develop insight into what might be deemed to be tourism education in order to group synergistically supportive programmes and departments.

There are three programmes offered by the Technikon that are undisputed as tourism related:

### **2.8.1 Certificate of Travel Agency Competancy COTAC**

This is a short course of one year accredited by TETASA who represent the training arm of South African travel agents. It is not a formal technikon programme recognised by the Committee of Technikon Principals but it does have the approval of Senate at Technikon Natal.

It is offered by the Department of Commercial Administration on the City Campus in Durban. It is designed to prepare students for frontline work in the travel retail industry.

### **2.8.2 National Diploma : Tourism Management**

This is a three year programme accredited by SERTEC, the Certification Council for technikons. It is a formal technikon programme recognised by the Committee of Technikon Principals.

It is offered by the Department of Tourism on the Pietermaritzburg campus. It prepares students for a wide range of activity in the tourism industry that includes, tourism planning, tourism development, tourism promotion and tourism delivery.

### **2.8.3 Bachelor of Technology : Tourism Management**

This is a oneyear programme accredited by SERTEC, the Certification Council for technikons. It is a formal technikon programme recognised by the Committee of Technikon Principals.

This programme is offered by the Department of Tourism on the Pietermaritzburg campus. It is aimed directly at practising tourism professionals who wish to develop and consolidate middle management skills in tourism.

**2.8.4 Programmes that influence tourism**

According to literature reviewed in this chapter other programmes offered by Technikon Natal might be considered to be tourism related. Fig 2.9 illustrates the root discipline of some of the subjects incorporated into tourism study.

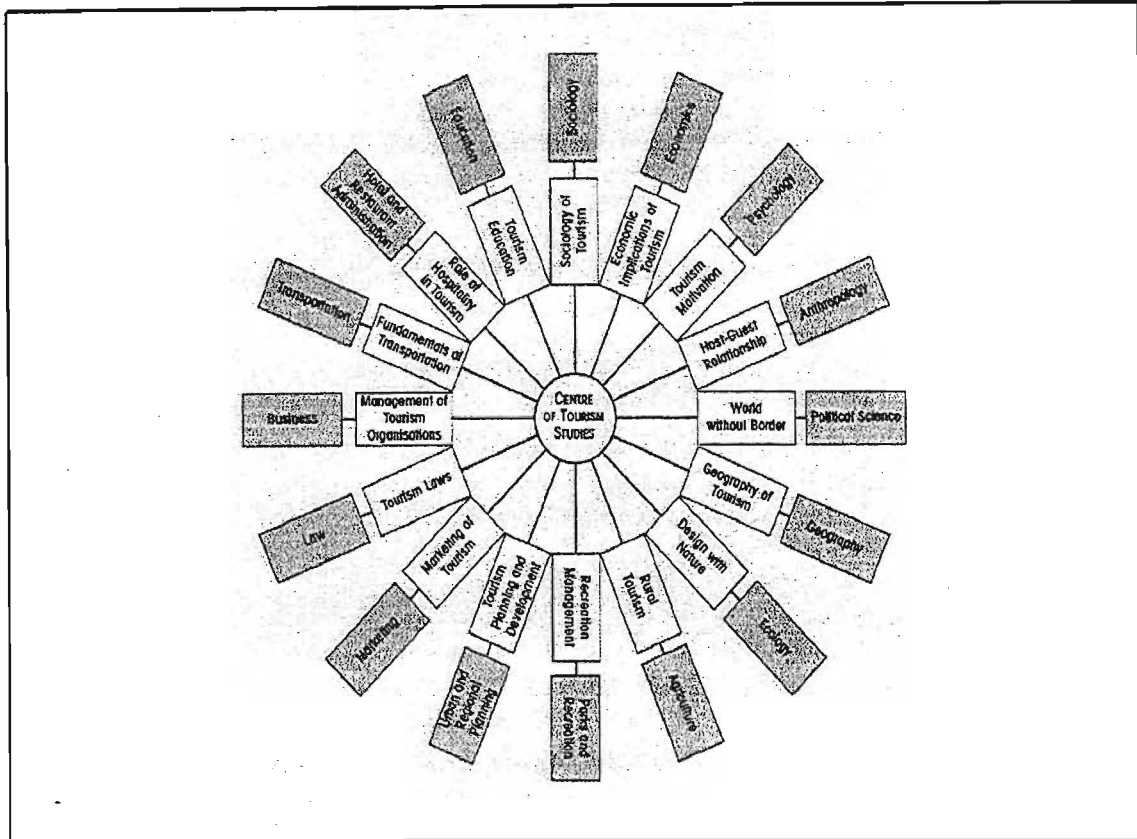


Fig 2.9 Tourism studies at the hub of associated and root disciplines (Jafari, 1990)

A comparison of the subjects listed in this diagram with the subjects listed in the handbook published by the technikon for each programme shows that there is at least a superficial connection, and certainly one worthy of further research. The careers leaflet published by each department for each programme offers guidance on what sort of opportunities lie ahead for successful graduates. Here is a summary of those prospects with specific reference to tourism links.

- National Diploma Food Services Management

This programme although also concerned with contract and industrial catering does prepare students for the food and drink supply side of the tourism industry.

- National Diploma Hospitality Management

A programme which focuses on the supply and management of accommodation and hospitality primarily in the tourism industry.

- National Diploma Public Relations

Although concerned with the planning, presentation, and maintenance of the public image of organisations a popular method of projecting a sound public image is through the organisation of an event or a conference. These usually require the support of services to be found in the tourism industry namely, hospitality, transport, accommodation and the entertainment and occupation of delegates partners which normally takes the form of visits to tourist attractions

- National Diploma Environmental Management

A wide ranging programme whose graduates can expect to find occupation in areas that focus on environmental impact assessment and management of environmental impact. This is particularly relevant to the South African tourism industry which is influenced by the popularity of sensitive rural destinations (KwaZulu-Natal Tourism Authority, 1999:7)

- National Diploma Landscape Technology

Primarily concerned with the planning, creation and management of artificial landscapes on various scales the traditional source of

employment for many graduates has been with government at both local and provincial level. This source of demand has declined in recent years and now demand comes from the private sector involved in new building development. There is considerable opportunity as the tourism industry develops for graduates specialising in indigenous work.

In conclusion of this review it cannot be claimed that the majority of graduates from these programmes will be directly employed in the tourism industry it is suggested in this research that it is likely that there will be close association with the industry. It is further suggested that there would be emerging benefits for all participants if these associated programmes could work more closely at the tertiary learning stage. A more systemic and less isolationist mode of co-operation between the programmes would provide benefits. The benefits would include the way that the programmes are taught, the way the students locate their own speciality in the real world, and the way that they employ their new skills in the workplace. At the outset of this research there was no consensus on this assertion with the departments who offered the programmes.

## **2.9 Academic structures at Technikon Natal that affect tourism education**

The structure of Technikon Natal can be regarded on several planes. This analysis has examined the formal structure layer by layer from Senate to Department. However as stated by Flood (1995) organisations, if they are to be understood have to be viewed from perspectives other than simply function. Notice has been taken of the the other dimensions that affect performance namely process, culture and politics.

### **2.9.1 Senate**

The senior academic body at Technikon Natal is Senate. Membership of Senate is open to the Deans of Faculty, all Heads of Department, Professors, and academics holding lecturer rank of Director. Senior academic support staff, such as Chief Librarian or Head of Academic Quality Unit are also members, as are nominated students from the SRC.

All academic committees formed to discuss any issue in the academic ambit are sub-committees accountable to Senate. This means that it exercises final scrutiny over proposed changes before recommending them to the Council of Technikon Natal for implementation, referring them for further inquiry, or rejecting them as inappropriate. Any change proposal must pass this body or it cannot be implemented and as such can be regarded as the most powerful body in the technikon.

Senate is the custodian of academic integrity. As it consists of members drawn from widely different academic disciplines this can lead to disagreement on what is or is not acceptable academic practice. Members are able to debate these issues on equal grounds as members of Senate and not as their rank outside the body would normally allow, with preference given to advice from those members with acknowledged academic accomplishment.

The Department of Tourism, formed in 1997 as an independent department, is newly represented at Senate. Most of the members of Senate are drawn from much older well established disciplines and find difficulty in locating tourism as a discipline. Comments from members during debates confirm that many of the members have a very vague idea about the purpose of tourism teaching and feel that it must have something to do with travel agents. This is not regarded as being of much academic weight. However as the Department has now established a track record of students placed in wide ranging tourism related careers and has established a Bachelor of Technology degree programme this assessment is improving.

### **2.9.2 Faculty**

At the beginning of the research there were five faculties. These consisted of the Faculties of Applied Science, Art and Design, Commerce, Engineering, and Health. During the course of the research this was reduced to four.

The closure of one faculty proved to be an important element in the problem situation surrounding tourism education.

Faculties consist of departments grouped by discipline and which offer associated programmes. Although under the academic leadership of a Dean much of the work of faculties at Technikon Natal, according to the Faculty Board minutes presented to Senate, may be regarded as operational and administrative. Recommendations for change are scrutinised by Faculty before being submitted to Senate. It must be noted that at Technikon Natal very little contentious material is submitted to full Faculty meetings. A smaller executive faculty board (BOFEX) made up of the Heads of Departments and the Dean exists to sound out new proposals and deal with the day to day issues of the Faculty. It is BOFEX that actually wields power in that it controls much of the material passed to the full Faculty meetings.

In the case of the tourism education at Technikon Natal the existing faculty system has an obvious flaw in that it is not obvious in which department it should be located. Currently in the Faculty of Commerce closely associated programmes, according to external opinion (Cooper et al, 1996), such as Food Services Management are located in the Faculty of Applied Science whilst Public Relations is located in the Faculty of Arts and Design. Neither of these two faculties provide suitable academic association as it is obvious that whilst Tourism is associated with Food Service there is no common ground with other departments found in the Faculty of Applied science. Similarly the programme Environmental Management is to be found in the Faculty of Health.

The question of faculty constituency is under review at Technikon Natal at the time of writing. In a discussion paper written by the VP Academic of Technikon Natal it has been suggested that a new faculty of tourism be established to accommodate tourism related disciplines.



This suggestion has not been favourably received some members of Senate, according to response documents submitted by them. Examination of their stance will be part of this research.

### **2.9.3 Department**

The smallest unit of academic grouping at the Technikon is the department. It might be assumed that the department would be the easiest entity to define in the academic ambit. Although it has been suggested (Faculty of Commerce, 1999:55) that a department will offer a series of programmes associated with a given discipline. There is disagreement in this definition as programmes grow bigger and proliferate within departments. These vary considerably in size, both in terms of the number of students, the number of lecturers and the number of programmes offered per department. The Department of Accounting in the Faculty of Commerce had 1 093 registered students in 1998 whilst the entire Faculty of Applied Science had 745 ( Department of Management Information, Technikon Natal) The nature of the subject disciplines offered by each department is supposed to be reflected in the ratio of teaching staff to students. Some departments have managed to survive with very few students and are heavily subsidised by departments that have high numbers of students per lecturer. There is no agreement or even guidance to how much teaching a lecturer could be reasonably expected to do, and this varies considerably from department to department according to the nature of the teaching. Laboratory based subjects have fewer students per lecturer than subjects that can be taught in classic lecture mode to a large group.

Whilst the department is the key academic unit at Technikon Natal. The head of a department (HoD) has a wide ranging set of responsibilities. These are listed as a Technikon Natal policy document and fill fourteen pages of A4 sized paper. The post carries considerable power and influence within the department in that it is the prerogative of the HoD to allocate teaching loads, set the spending budget and set the broad academic agenda. Whenever it has been proposed that departments should be

merged or closed there has always been strong resistance. Although unsaid it is likely to be power issues that support this resistance and not those of technical merit. At this stage this is an assumption to be tested in the course of the research.

#### **2.9.4 Ecotourism Research Unit (ERU)**

This entity is one of five research centres established in 1996 by the Research Committee, the body which oversees formal research activity at Technikon Natal. Physically separate from the Department of Tourism which is in Pietermaritzburg the ERU is administered and run by a Director whose offices are at City Campus in Durban. Although application has been made to the Minister of Education no technikon may offer higher level research based degrees in tourism disciplines until 2000. The Ecotourism Research Unit is in receipt of grant aid from the CSD and co-ordinates a provincial wide tourism research network. the Director of the unit oversees much of the tourism research leading to higher degrees which are, of necessity, awarded by universities.

At the start of this research a major anomaly was that the Ecotourism Research Unit enjoyed close ties with various disparate university departments none of which were specialists in tourism, whilst Technikon Natal was the only institution in the province offering an M+4 qualification, the Bachelor of Technology, Tourism Management, and this was being taught by a department that specialised in tourism teaching and nothing else.

## **2. 10 Conclusion**

The questions surrounding the problem situation of tourism education at tertiary level in KwaZulu-Natal can be placed in two categories. The 'what' questions deal with the perceived nature of tourism itself. Whilst the 'how' questions consider what form the education itself should take.

Although there is evidence to support the development of tourism as an independent discipline (Cooper et al, 1996) it is argued in this research that there is also evidence to suggest that there is little agreement on what constitutes the discipline of tourism. Although this academic evidence can be presented support the argument for a more holistic approach to tourism education that would require expertise from more than one group of disciplines there seems to be little evidence to support this proposal in the technikon structures.

There is expressed need for tourism education from a variety of sources. There is government policy in place which espouses the importance of tourism. Tourism is seen by planners as an economic activity of growth and opportunity. Tourism is a popular career choice amongst school leavers. (634 course applications for the National Diploma Tourism Management at Technikon Natal for the 1999 academic year). However there is little co-ordination or co-operation between or even within institutions. The varied response by other tertiary institutions (Burger et al, 1999 and esATI CAO, 1999) to the perceived needs of tourism education in KwaZulu-Natal and supports the contention that there is no widespread consensus on either what inquiry is necessary to determine what needs to be taught or indeed how the problem situation might be improved.

There is a whole literature describing how traditionally those seeking improvement in a context such as the one described in this research would set a mission, undertake a systematic analysis of need, define goals and objectives and then determine the most efficient way of achieving those goals and objectives. This pre-supposes that there is a

simple problem to uncover and a solution to match the problem that only needs identifying. This form of procedure, although common, has neglected other aspects that might have bearing on the problem situation. This research will adopt a broader inquiry in order to investigate the implications of the human activity system that is neglected when only a technical analysis is undertaken. Ellis and Hall (1994) maintain that the link between the meta view of education, in this case articulated by the national government in the white papers and legislation discussed earlier, and the values and decision-making of the individuals tasked with delivery, in this case tertiary lecturers, make for powerful synergy. *"They complement each others' strengths, while not magnifying each others weaknesses"*. (Ellis and Hall: 1994) They go on to point out that historically the dimension of human relations to change has been neglected at the expense of operational effectiveness. Jackson (1991) shows how systems theory introduced many years ago has been good for the technical part of management science, but that social interaction is not only seen as more difficult to control, but also difficult to quantify. This is one weakness that suggests an alternative to classical analysis planning techniques should be considered.

The overview of the problem situation set out in this chapter hints strongly at underlying conflicts on the human plane. Unspoken power play, personal improvement at the expense of the greater good, and even attempts to retain the status quo to secure domestic harmony all simmer and occasionally surface in documents or are stated during heated discussion. Within the technikon itself a strong there is a strong cultural belief, supported by high pass rates, strong student numbers, and successful career placement that there really is no problem situation. Many teaching staff are long serving and have little comparative experience. Reference to long standing practice is seen as laudable by this contingent and an example of stagnancy by other younger stakeholders. There is certainly no consensus on what might be an improved future for the institution. It is against this swirling context that improvement in tourism education is sought even though it is not clear or agreed what form that improvement should take or who should

improve it. In short the problem situation is classically messy, ill-defined, complex and is set in a context of strategic confusion. These are the circumstances where traditional approaches to problem solving, that rely on well-structured problems with clearly defined boundaries, will fail. (Ackoff, 1973; Checkland, 1981; Jackson, 1992). In these cases alternative methods of improvement have to be used. The next chapter considers systems thinking as an alternative and presents arguments to support its use in problematic cases such as this.

# CHAPTER THREE

## On Systems Thinking and Inquiry

### 3.1. The nature of inquiry

At the core of the traditional approach to inquiry is the assumption that a consistent set of needs can be identified and these needs can in turn be reduced to smaller and smaller sub-sections until each sub-section can be managed by the appropriate experts, who have in turn have been identified in similar manner. Most problems facing human endeavour do not conform to this simplistic model. It is argued in this chapter that it is impossible in this way to elicit from the environment described in Chapter 2 what the requirements actually are. Tourism both as an activity and as a discipline has been shown to be particularly slippery to define. Educators, learners, and consumers of tourism in many cases do not know what they want until they see it. More disconcerting is, so slow is the speed of implementation of change, that organisations and markets change or indeed more pressing priorities arise before implementation. Even if, optimistically, the new changes bring about desired improvement it is likely that this very improvement will invalidate the need for the improvement. (Demise, 1998) This chapter explains why soft systems thinking offers improved insight into the type of turbulent environment outlined in Chapter Two. With improved insight will flow improved problem structuring incorporating a characteristic identified by Singer (1936) who opined that any useful inquiring system will have no real terminating point on any issue and that not only will an inquiring system be able to convey what has been learned but also what still needs to be learned.

In contrast to soft systems, the hard systems approach to inquiry is exemplified, according to Jackson (1991 : 88) citing Ackoff, in the predict and prepare paradigm which rests upon the assumption that the world is an orderly place. Drawing on the methodologies of the natural sciences, proponents of hard systems seek to uncover the realities of the world through systematic and rational procedures. The knowledge so gained creates elites who have the power to not only implement its conclusions but also

validate its correctness (Lyotard, 1984). This leads to a vicious circle wherein power becomes the basis of legitimation and vice versa. With this knowledge they are able to identify hard, easily identifiable systems and within those systems, sub-systems which when reassembled, create a picture of the whole. Human beings are components within these systems and sub-systems and so must behave like any other component; rules are introduced to help them. The aim is enhanced "predict and control".

### **3.2 Distinguishing between traditional hard systems thinking and soft systems thinking**

Re-examination of Chapter Two would suggest that a model such as the classical 'hard' analysts seek might be desirable and indeed attractive to over stressed managers, but could be hardly declared realistic. This functional approach poorly represents the nature of the problem situation. It is not easy to discover what specific objectives should be pursued given the variety of different viewpoints and personal requirements that exist not only in the Province, but also in Technikon Natal. Should the analyst be able to establish the precise objectives of the activity and should these be accepted and agreed by all parties, whoever they may be, then a qualitative model could be drawn up and optimised. Jackson and Keys (1984) refer to these contexts as mechanical-unitary. Given the evidence of dissent contained in Chapter Two it is unlikely that an analyst could uncover an optimum model accepted and supported by all parties.

Checkland (1995) sees the essential difference between soft systems tradition and the hard tradition as that models that emerge from the hard approach attempt to *model the real world* whilst the soft approach develop models that lead to *debate about the real world*. Whether the models that the hard tradition develop are accurate or not really doesn't matter if the differences embodied in differing *weltanschauungen* are ignored. Likewise models that emerge from an SSM analysis may indeed accurately, as defined in the hard tradition, reflect reality or they may straddle physical boundaries within organisations creating a conceptual model of something intangible like conflict. The

SSM derived models are used to structure a debate between people having a concern for the problem situation. The purpose of this debate is to reach some sort of accommodation between the different *weltanschauungen* which allows feasible action to be taken that will improve the problem situation. The most notable feature of this is that what turns out to be feasible is itself changed as the debate proceeds. Checkland regards this as a learning system and it is this element of self-learning that is the most important and distinguishing feature of SSM when set beside traditional modes of inquiry. Models such as these were termed by Checkland (1995) as 'epistemological devices'.

In summarising the distinction between 'hard' and 'soft' analysis Checkland (1995) refines the notion that hard systems are suitable for structured problems devoid of human activity while soft systems deal with the more complex issues which include human activity. He stresses that the models developed in a soft approach such as SSM only have to be *internally* valid to the process of enquiry into the world.

### **3.3 Epistemology of soft systems thinking**

According to Jackson (1991:133) "soft systems thinking opens up a completely new perspective on the way systems ideas can and should be used to help with decision making and problem resolving". Soft systems thinking deals specifically with those problem situations which are not so regular. Unlike hard systems thinking which tends to ignore subjectivity soft systems thinking specifically embraces subjectivity and the varied perspectives that might be brought to a problem situation. Soft systems probes the world views, or *weltanschauungen* as termed by Churchman (1979), Checkland (1981). Arguing that not only may the *weltanschauungen* of the parties involved in a messy process be drawn into any definition of objectivity but it is indeed vital that they are drawn together in order to overcome the restricted nature of any single *weltanschauung*. In order to do this effectively Churchman (1971) 'challenged' systems designers to devise ways of exposing the limitations of any one *weltanschauung* and



drawing in others. The

process of 'dialectical debate' was proposed by Churchman (1971) although he actively encouraged others to devise their own methodology.

Vickers (1983) whilst developing the study of the "peculiarities of human systems" cultivated the notion of an "appreciative system". In this he argued that as humans are active individuals all of whom attribute meaning to their own situation it is impossible to study systems involving humans using the methods of the natural sciences. In order for any meaningful decisions to be made by groups of humans amongst this diversity, systems, termed "appreciative systems" by Vickers, are employed. In these "the interconnected set of largely tacit standards of judgement by which we both order and value our experience" (Vickers, 1973:122) it is suggested that people are prepared to shift and revalue their judgements and actions formed through their own experience in the light of others. Not only is this possible but essential if stability and effectiveness is to be achieved. Jackson (1991:135) summarises by saying that human systems depend upon shared understandings and shared cultures. Checkland (1981, 1989, 1990) took this notion and built upon the foundations of systems engineering to develop systems thinking as an alternative method of inquiry.

### **3.4 Some examples of soft systems approaches**

#### **3.4.1. Strategic Assumption Surfacing and Testing (SAST)**

Churchman's proposed methodology of dialectical debate although intellectually groundbreaking is not presented in a form that is very practical to implement. The work of Mason and Mitroff (1981) draws together the substance of Churchman's ideas and presents them in a form that can become operational.

Although grounded in the concept of counter debate between holders of differing *weltanschauungen* the methodology is at its most useful surfacing and challenging

assumptions. Linked, and indeed entrenched in *weltanschauungen*, are the assumptions that certain ways of doing things in an organisation are so established as to be unchallengeable. SAST is a deliberately adversarial methodology based on the belief that judgements about ill structured problems are best considered in the context of opposing views. Although attractive in that there is great potential in this to develop alternative strategies, there is also potential to create huge conflict. SAST deliberately surfaces these conflicts and endeavours to manage them in order to reach some form of accommodation about new strategies. This is delicate and skillful work. Documenting and reflecting on some consultancy work, undertaken in a company, Ho and Jackson (1987) discuss the seemingly contradictory idea that an intervention can at the same time be both adversarial and integrative. In their inquiry they discovered that whilst company members apparently agreed on a proposal each member had a different interpretation of what that proposal actually meant. Ho and Jackson (ibid) concluded that only through a process of adversarial debate could consensus be built on common understanding.

SAST, as advocated by Mason and Mitroff (1981), takes this notion a stage further by specifically introducing in their method a component whereby held assumptions are rated by the holders of those assumptions and tested by the unconvinced. The assumptions have to be defended. This distinguishes SAST from simple objective debate about proposals, and even from the 'devil's advocate' approach which Mason and Mitroff (1981) suggest can lead to 'nit picking'. A further distinction is the facility in SAST to develop alternative plans based on the *weltanschauung*, uncovered, tested and accommodated in the process.

Although Mason and Mitroff(1981) support the use of SAST in complex, ill-structured problem situations Flood and Jackson (1991:133) challenge this. Supporting the use of SAST in the context of problem situations that can be regarded as simple, such as the type referred to earlier in Ho and Jackson (1987), they are doubtful whether SAST is

able to deal with complexity by simple means of resolving the pluralism of multiple perspectives. Flood and Jackson (1991) go on to consider the use of SAST in coercive contexts. A central feature of SAST is the adversarial debate, and in contexts of power and domination it is considered to be impossible to achieve consensus by such means. Mason and Mitroff (1981) themselves concede that SAST does rely upon participants willingness to lay bare their assumptions. In coercive contexts neither the powerful nor the weak are likely to do this.

Given a problem context in which the participants agree on the nature of a problem, but disagree on how precisely that problem might be addressed then the use of SAST may be considered to be an appropriate intervention.

#### **3.4.2. Social systems sciences S<sup>3</sup> - interactive planning (IP)**

Rooted in post war operations research (OR) R L Ackoff became increasingly frustrated and disillusioned during the 1960s and 1970s with the inability of OR to deal with ill-structured strategic issues (Ackoff, 1979). Ackoff was concerned with redefining objectivity. He regarded the notion that objectivity in social systems could be constructed in a value free environment as absurd, as the very attempts to establish objectivity were themselves subject to subjectivity. He argued that it was necessary to not only acknowledge the existence of alternative values, but that holders of those values should actually participate in the planning and design sessions.

Dissatisfied with the traditional 'hard' search for the perfect future with an optimised response which was usually optimal only for the organisation itself or perhaps its shareholders, Ackoff argued that any organisation engaged in purposeful activity must accept that there will be three sets of purposeful activity each of which has its own goals, objectives, and ideals that should be taken into account. These were summarised as the organisation's responsibility to itself (control problem), to their parts (humanisation problem), and to the external environment of systems of which the

organisation is itself a part. Managing this interrelationship well, will ensure both internal and external stakeholders will continue to pursue their interests through the organisation, thus ensuring viability and effectiveness. Ackoff (1977) summarises his stance *viz a vis* hard and soft systems thinking thus: "To cling to optimisation in a world of multiple values and rapid change is to lose one's grip on reality". Problems should be dissolved by "designing a desirable future and inventing ways of bringing it about". By changing or re-designing the system in which the problem is embedded the problem ceases to exist. Stemming from the influences of philosopher E A Singer, Ackoff believes that in order to meet the changes that he sees taking place in the world, a changed conception of that world will lead to changes in the way planning is undertaken.

To help achieve these changes three principles underpin the methodology of Ackoff's interactive planning. These are the principle of participation, the principle of continuity, and the holistic principle. Underlying Ackoff's belief in the principle of participation is the belief that it is the actual process of planning that is probably more important than the outcome of the planning itself. This benefit is derived from the belief that the reconception of "objectivity" from that of being value free to that of value full. Without full participation this cannot be achieved.

Over time the values contained in the organisation will change, for whatever reason. This will necessitate ongoing planning to meet that change. The principle of continuity will ensure this.

The holistic principle requires that all components of a given system should at one and the same time plan independently and simultaneously. Although logistically this can be impractical the concept is sound as decisions taken at one level in a system will have an effect on other levels. Success in 'dissolving' a problem out of the system will have profound effects on another system sector that may not know the problem has been

dissolved were it not for this principle.

Perhaps the principal criticism of Ackoff's work is that although it is set to resolve problems in complex coercive situations there seem to be no mechanisms, either philosophical or methodological that are designed to address this. Without the assumption that stakeholders in a problem situation are intrinsically positively disposed to improvement and consensus, Flood and Jackson (1991:158) point out that IP is not equipped to deal with coercion. The fundamental principles of participation, continuity and holism are also easily manipulated by the powerful to make them even more powerful. Flood and Jackson (1991) report Ackoff's responses to these criticisms as operational ways of making his original ideas work in the field rather than pointing out the philosophical strength of his methodology designed to overcome these reservations.

Ackoff defends IP by pointing out that it works in the field (Flood and Jackson, 1991:161). This has led to criticism that IP may well be a well tuned method particularly well delivered by Ackoff himself, although Flood and Jackson (ibid) do support the theory that underlies his work. Nevertheless they recommend particular caution when matching a problem context with this methodology. This is a principle that is to be revisited later in the chapter.

### **3.4.3. Soft Systems Methodology (SSM)**

Based on action research undertaken by Peter Checkland (1981), SSM operates in the environment of the unstructured problem. Although derived from the work of systems engineers Checkland soon found their 'hard' approach to system design too limiting. Reflecting on several interventions that had taken place in organisations, it became apparent that none of them had *one* single problem that needed to be identified and solved. In these cases very often the clients themselves could not agree on what 'the problem' was although all were able to identify that the organisation was in a mess.

In the absence of agreed goals and objectives Checkland set out to design a methodology that would identify various system hierarchies and focus the participants on these various problem systems. After further reflection following subsequent interventions it became apparent to Checkland that the methodology not only needed to focus clients, but beforehand, in order avoid jumping to simplistic conclusions, also needed to assist them in building a full picture of the problem situation. Hard methodologies focus on identifying the objectives and developing an optimised path to achieve those objectives. This process tends to be driven by clear logic. SSM, especially in its later forms, on the other hand acknowledges that uncovering the logic of the situation is only part of what happens. What also happens is that the logic tends to be overcome by what occurs when the cultural, political and social elements interface, and the outcomes viewed from the perspective of multiple *weltanschauungen*.

Arguing against the classical viewpoint that problematic situations should be reduced to their component parts, Checkland held that it was cardinal that the complex whole must indeed be viewed as a whole, or risk losing many of the properties inherent in that complexity. In systems parlance this is known as *emergence*. Further to this concept is that of *hierarchy*, which has nothing to do with authoritarianism, but deals with the layers or groupings of emergent properties. Add to these the concepts of *survival* which proposes that the whole system has adaptive properties which should enable it to survive in turbulent times providing the cybernetic characteristics of *communication* and *control* are present. This will enable the system to adapt. Checkland (1990 : 22), acknowledging the origin of the term *holon* to Koestler, goes on to argue that this grouping of characteristics coupled with purposeful human activity could be termed *holonic* and it is this use of holons that distinguishes the 'hard' systems thinker from the 'soft' systems thinker. The fundamental difference between the hard systems thinker and a soft systems thinker is made by Checkland (1990:22). Hard systems thinking assumes that the perceived world contains holons, whilst soft systems thinking asserts that the methodology *the process of inquiry itself*, can be created as a holon. Checkland uses the

term Soft Systems Methodology (SSM) to describe one such holon.

The methodology behind SSM originated with the seven stage process of Mode 1 SSM (as it came to be known when Mode 2 SSM was developed). The methodology sets in

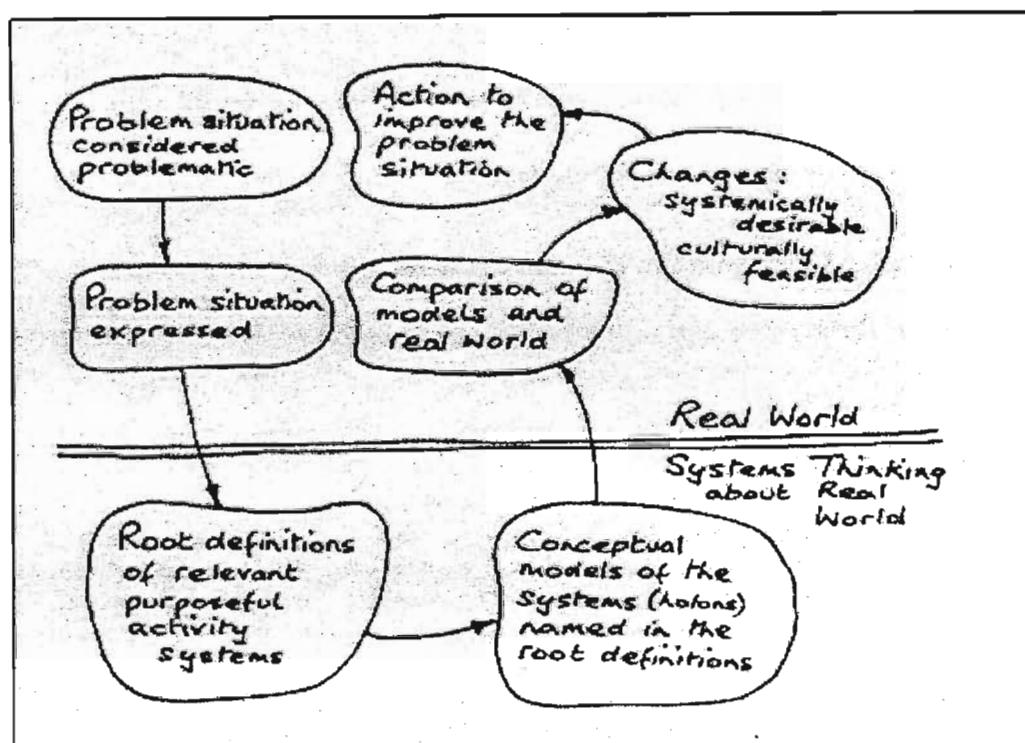


Fig 3.1 The conventional 'Mode 1' seven stage model of SSM (Checkland and Scholes, 1990:27)

motion a 'systemic process of learning in which different viewpoints are discussed and examined in a manner that should lead to purposeful action in pursuit of improvement.' (Jackson, 1991) or as Checkland (1989) himself puts it 'systemicity from the world to the process of inquiry into the world.' SSM is a subtle methodology that is often superficially represented as stage by stage recipe. 'Follow the steps and out pops a structured problem'. This is not at all what SSM is really supposed to do. Checkland and Scholes (1990) suggest that this distorted view derives from the way in which SSM has been taught in classrooms. The practice of presenting Mode 1 SSM as a stage by stage process has been defended by Jackson (1991:151) as necessary in order that it may be understood by newcomers, but he goes on to advise that this linear use of SSM runs contrary to the idea of SSM as a learning system. In reality practioners run quickly and iteratively between stages and around the whole methodological cycle. This works

better in practice than might be thought when reading accounts of SSM practice which Jackson (ibid) concedes are notoriously difficult to write. Other problems arise as many, once familiar with SSM, use it in different ways (Atkinson, 1986: Rose, 1997) not all of which, according to Jackson (1991), meet with Checkland's approval. In order to be sure that SSM is used correctly it is necessary to focus on the underlying philosophy and not on the correct implementation of the stages.

Building on the way in which Churchman understands subjectivity, and incorporating ideas from Vickers, both of whose work was discussed earlier in this chapter, Checkland has developed a way of dealing with this subjectivity in a way Flood and Jackson (1991:169) describe as sagacious. Adding to the SSM 'Mode 1' technical analysis, two further streams of analysis, Two and Three, social system analysis and political analysis, the result is a rigorous investigation of how problem situations are seen by participants which can lead to improved problem structuring, desirable and feasible change, reflective learning and improved insight, and even the testing of theory (Rose, 1997).

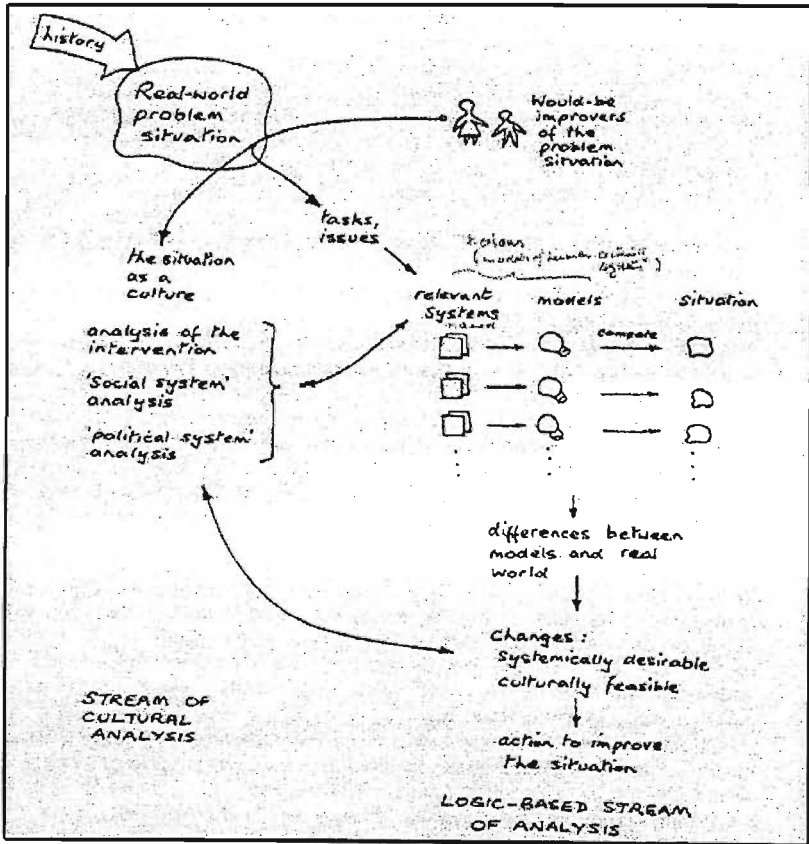


Fig 3.2 The process of SSM, now known as Mode 2 (Checkland and Scholes, 1990: 29)



Demonstrating how a philosophical review of SSM is able to confirm its place in the "broad church" (ibid) of social systems science, Rose goes on to warn that this is the very reason why potential users of SSM have to be particularly careful in choosing the context in which it is to be implemented, contexts in which there is epistemological and ontological harmony with the mode of SSM in use. Rose is more specific, distinguishing between the early action research predisposition of Mode 1 SSM and the highly reflective nature of the researchers own learning in Mode 2 SSM.

Flood and Jackson (1991), although generally impressed with the contribution of soft systems thinking, are able to highlight what they see as the restrictive nature of the actual interpretive theory upon which SSM is based. they challenge the assumption that alternative perspectives may well be the product of the harder elements which although uncovered by cybernetics remain hidden in SSM. Most critical, is the basic fact that SSM participators might genuinely have conflicting interests which Flood and Jackson (1991:187) refer to as a "common-sense notion that organisations are arenas of political in-fighting and conflict over status and resources". Analysis Three of Mode 2 SSM is dismissed by them as "impoverished".

Jayaratna (1994) also focuses on the fundamental notion of perception this time from the perspective of Checkland's handling of *weltanschauungen*. Although the role of *weltanschauungen* is clear SSM gives no guidance on what *weltanschauung* is precisely or indeed how it is formed. Jayaratna (1994:178) shows how the term *weltanschauung* is accorded in more than one meaning and that this varies according to context. It is indeed a circular problem as attempts to understand the *weltanschauung* of one context or perspective had to be filtered through the *weltanschauung* of the observer and reflector.

Perhaps the most serious criticism to be levelled at SSM is not a philosophical point, but one more utilitarian. SSM is hard to use. Although high levels of participation are necessary for success participants have to invest time and effort in honing clear thinking skills in order to achieve that success. Many authors, Jackson (1991), Flood and Jackson (1991), Jayaratna (1994) , Rose (1997) and even Checkland himself (Checkland and Scholes, 1990) comment that these thinking skills are often beyond many stakeholders for reasons that extend from being unprepared to invest time in learning the necessary skills through to lack of intellect. Nevertheless the chief achievement of SSM in all its evolutions is that it has developed at a deep theoretical level, as Checkland (1981) demonstrates, a complete break with the functionalism and positivism of earlier systems thinking.

#### **3.4.4 Validation of soft systems methodology (SSM)**

In a paper that presents the case for a methodology of validity Finlay and Wilson (1997) open by stating that there is agreement across disciplines that validity is a measure of the 'goodness of a final product or outcome' and that it involves judgement about the state of an experiment or system. More specifically, from the same paper (Finlay and Wilson, 1997 : 170) , various definitions from other authors are offered : the data must be unbiased and relevant to the characteristics being measured; a valid measure is one that accurately measures what it is supposed to measure (although how that helps the understanding of whether the measure is actually valid is not determined); and validity is the quality of fit between an observation and the basis on which it is made. All of these appear to involve some degree of subjectivity, and yet subjectivity is the one thing that 'hard' systems do not accommodate.

Checkland (1995) takes the question of validity in two parts. He asks if the models generated by SSM are relevant to the inquiry, or on a more technical level is the model developed by the SSM inquiry competently built?

The answer to the question of relevance is answered by the SSM learning process itself. The whole point of SSM is to find out for yourself whether the model that emerges is relevant or not. The learning process cycles until the participants acknowledge relevance has been reached.

On the question of technical competence Checkland (1995:53) cites Churchman's and Jenkin's work on formal systems. Simple users of SSM can draw upon a checklist of elements to see if the model has reached technical competence: purpose of the system, measures of performance, resources, decision making procedures, boundary and guarantee of continuity. However a more sophisticated check on competence has now emerged whereby a pairing is made between the root definition and the model thus derived. Each word, phrase, or concept in the root definition being carefully compared with particular activities in the model. This must be defensible for the model to be valid. In turn the root definition must in turn be seen to express the *weltanschauung* stated. Churchman's summary judgement on this validation is that providing those links can be shown then the model can be regarded as 'good enough to be used...' (Churchman, 1995 : 53), and that the whole thing is not that important. What is important though is the distinction between the concept of validation in SSM and the traditional hard methodologies.

### **3.5 Shared characteristics of the soft systems methodologies under consideration.**

Jackson (1991) offers some general conclusions about the significance of the similar nature of soft systems methodologies referred to in this research. All are concerned with ill-structured problems at a strategic level, all are opposed to the reductionist technique of tackling these problems and all prefer to work with peoples' perceptions of systems rather than try to uncover the real world, whatever that might be. Multiple perceptions of reality, and multiple values are explicitly included in the process. The aim in each case is to encourage learning amongst participants involved with the problem situation. Although all methodologies considered in this chapter have proved to be weak in

coercive situations the proponents of each methodology accord this to the user of the methodology. They all hold a belief that the participants in a problem situation share an underlying wish for improvement. Bryer (1979) singles out Ackoff when he states that "It is an axiom of Ackoff's systems view that a higher system can always be found..." Jackson (1991:162) notes that Checkland, and most of the other soft systems thinkers reviewed in this chapter are criticised in similar ways. They defend themselves in similar ways too (ibid). All argue that for whatever reason the methodologies tend to deliver what they are designed to deliver, and that this may well be down simply to the skill of the facilitator.

### **3.6 Shared characteristics of the problem context of tourism education as a system**

The very nature of the tourism activity suggests that it is a systemic activity. A tourist returning from a holiday carries a collection of memories and emotional experiences that, assuming the experience was a positive one, together promote an overall feeling of well being that transcends any one of the factors that contributed to the experience. A comfy bed, relaxing environment, wholesome fresh air are in themselves pleasant in many people's opinion, but individually do not amount to as much as they do when all present and complementary. This is a characteristic of a system.

The example just offered has focused on destination characteristics. The same complementary phenomenon could also be raised if the focus was on the transport arrangements or the food and drink. Although the characteristic of complementarism is always present in a tourism system what each component actually consists of will alter. The description offered earlier of fresh air and relaxation appeals to one sector of the market but might represent a teenagers idea of hell. They too seek the complementary experience, but would select other components to develop a system that collectively offers more than the individual fun of loud music, drink, and heaving bodies.

As there are clear differences in what actually constitutes a valued tourism experience so

too are there differences in how the education of the people charged to create such an experience should be arranged. Chapter Two details these differences. It also highlights the fact that there is no global solution available for use in the design of a tourism education system. The people involved in the activity of tourism design must themselves continually inquire, learn, design, implement and test a method of tourism education. This is not happening easily.

If it was a simple task of designing a tourism education system it would have been done. However it is not so simple. There is no consensus on what tourism actually is. There is no consensus on what the tourism product should actually be, and there is certainly no consensus on who should be involved in the design and delivery of tourism education. It is at this point that clashes of organisational culture and politics need to be considered and dealt with.

### **3.6.1 The prima facie characteristics of the tourism problem**

At this stage it is useful to examine some of the characteristics of the problem situation with the those features that characterise a problem situation that is likely to be suitable for analysis using soft systems thinking. Subsequent sections enlarge the discussion on how an analysis of greater depth would be conducted following the principles of Critical Systems Thinking. However here follows an estimation of whether the problem in focus displays the characteristics of a problem situation that would benefit from the soft systems approach. Adapted from Flood and Jackson (1991) evidence from Chapter Two is compared with a list of statements:

- *there are a large number of elements*
  - national government and its constituencies
  - provincial government and its constituencies
  - potential students of tourism
  - employers in the tourism industry

tourists

technikon members

definitions of tourism

perceptions of tourism

perceptions of tourism teaching

tertiary institutions

- *there are many interactions between the elements*

there must be many interactions between the large numbers of elements listed in the previous point if any purposeful activity is to take place at all

- *attributes of the elements are not predetermined*

although there is general agreement that tourism is an activity to be supported there is little agreement on how this should happen or what form this should take. There are multiple factors that influence change in tourism

- *interaction between the elements is loosely organised*

there is no overall body with prescriptive or supervisory influence. Tourism transcends even national governments. Associations tend to be restricted to sectors of tourism and are not holistic

- *they are probabilistic in their behaviour*

despite the fact that there is little common agreement on what exactly should be done when considered together most of the elements in this system exhibit probabilistic behaviour and are likely to continue

- *the 'system' evolves through time*

this is likely given the documented changes in destination patterns and

tourist behaviour that have occurred already. There is no evidence to suggest this will stop

- *the "sub-systems" of tourism are purposeful and generate their own goals*  
This characteristic is present in all the sub systems, and is at the heart of the problem situation. The provision of a successful tourism experience depends upon the successful interaction between elements that include motivational and human characteristics of the tourist, transport, accommodation, destination attraction, destination service,
- *tourism is an open system*  
this feature is covered extensively in Chapter Two through the work of Cooper et al. All parties who have anything to do with tourism feel they have an input to make.

The behavioural characteristics of the participants in the problem situation can be examined in like manner.

- *they have a basic compatibility of interest*  
all participants have expressed a documented interest in tourism education improvement. All have a contribution, when measured against the criteria of tourism education as presented by Cooper et al (1996)
- *their values and beliefs diverge to some extent*  
statements in departmental position papers demonstrate that there is disagreement over what the emphasis should be in KwaZulu-Natal tourism education. The Tourism Department favours rural and community tourism, whilst the Food and Nutrition Department prefers the more established activities of, for example, the International Conference Centre.

- *they do not necessarily agree upon ends and means, but compromise is possible*

Food and Nutrition would prefer to have the department based in Durban, the Tourism Department in Pietermaritzburg. Teaching philosophies are also different

- *they all participate in decision making*

in principle this is so. In practice much is said about pressure on available time. This might be a cover for distrust of the problem inquiry process.

- *they all act in accordance with agreed objectives*

this is very likely given the organisational culture of the technikon. The mechanistic nature of the organisational structure does have an advantage in that once agreement has been reached they tend to implement it.

It is clear from this analysis that the problem in focus is a complex one and therefore requires the application of soft systems thinking incorporating, as it does, the human element. Leiper (1995) goes on to argue that soft systems thinking is appropriate to tourism managers who need to not only understand their internal processes, but also need to change and adapt to external environmental factors. Carlsen (1999) supports this assertion by pointing out that the tourism experience is determined by perceptions of quality and so it is therefore appropriate to use a soft systems approach to understanding.

The problem of how best to approach the question of tourism education can be regarded as ill-structured and messy. There are multiple responses to the problem, not least with Technikon Natal itself. Superficially there seems to be a case for the use of soft systems thinking in the process of inquiring about tourism education in the province. To make a decision to use a type of methodology at an intuitive level is not a satisfactory way of proceeding when facing a complex problem such as the one at the centre of this research. A better meta-theoretical approach will be discussed further in the next section.



### **3.7 Critical Systems Thinking**

Chapter Two described the context surrounding the problem of tourism education in KwaZulu-Natal. It also outlined the relevant components of the organisational structure of Technikon Natal. Chapter Three has so far considered the philosophical underpinnings and characteristics of soft systems thinking and compared those characteristics with the problem context of tourism education. The remainder of this chapter seeks to add to that analysis by considering the systems ideas of Jackson (1991), Flood and Jackson (1991), Flood (1995), Jackson (1996) and Flood and Romm (1996) specifically in the areas of Critical Systems Thinking and Total Systems Intervention in its various formats. These sections consider the philosophical and theoretical background of these ideas and demonstrates the relevance of such thinking in the context of problem situations such as the one under consideration in this research. The overall purpose of the ideas is to bring rigour and clarity to a problem context that might degenerate into an unstructured mess of competing ideas without a framework of operation.

The development of Critical Systems Thinking has been described by Jackson (1996) as "the most theoretically sophisticated strand of the modern systems approach". Emerging from what Jackson (1996) went on to describe as a 'ferment of ideas' Critical Systems Thinking is beginning to settle into two significant versions. The first version is derived from the work of Churchman (1971) and developed by Ulrich (1983). Whereas Ulrich was primarily concerned with the notion of 'boundary judgements' as a critical device, a second version, named by Jackson (1996) as the UK version, was developed to deal specifically with systems thinking based upon complementarist foundations. This resulted in the operationalising of critical systems ideas in a meta-methodology known as Total Systems Intervention (Flood and Jackson, 1991).

To understand the evolution of this second version it is first necessary to examine early work on the concept known as Critical Systems Thinking (CST). Critical writings in 1970s and early 1980s directed towards perceived deficiencies in management science

(Hales,1974: Wood and Kelly, 1978: Rosenhead, 1982: Rosenhead and Thanhurst, 1982) were characterised by a call to recognise the need to integrate the technical aspects of management with social and human implications. Jackson (1991:184) acknowledges the importance of such calls but criticised them for being 'insightful but not clearly grounded'. It was to establish a well-theorised and critical alternative to traditional management science that writers such as Jackson (1991), Flood and Jackson (1991) turned to systems thinking. The result was the start of the movement known as Critical Systems Thinking which Jackson correctly predicted would form a foundation for continued development. As this strand evolved, CST embraced five main commitments; critical awareness, social awareness, human emancipation and the complementary and informed use of systems methodology. Jackson (1991:187) separates these five commitments into two groups; the first three are grouped as emancipatory systems thinking whilst the second group *combined* with the first form critical systems thinking. CST seeks to draw upon, and recognise, the strengths and weaknesses of systems approaches and put them in the service of emancipatory ideas originally articulated by Kant, latterly by Habermas (Flood and Jackson, 1991) and later developed by Ulrich (1983).

Midgley (1996:11) argues that the five commitments can be reduced to three when the two forms of complementarism are expressed as a single commitment to methodological pluralism. It is further argued that the commitment to social awareness is implicit in the commitment to emancipation which ensures that the research is focused on improvement. In summary according to Midgley the three commitments now become:

- *critical awareness* - examining and re-examining taken for granted assumptions along with the conditions that give rise to them
- *emancipation* - ensuring that research is focused on 'improvement', defined temporarily and locally, taking into account issues of power
- *methodological pluralism* - using a variety of research methods in a

theoretically, coherent manner, becoming aware of their strengths and weaknesses, to address a variety of issues.

At first sight the commitment to critical awareness seems straightforward. Flood and Jackson (1991), Jackson (1996) talk about "interrogating the various systems approaches old and new to see what they have to offer". Midgely (1996) asks how this might be done given the absence in Flood and Jackson's work of a methodology to do this. Midgely suggests that Ulrich (1983) in his work on critical systems heuristics proposes just such a methodology. However according to Flood and Jackson (1991) critical systems heuristics (CSH) is just one among many methodologies and one which they reserve for coercive issues. Jackson's later writing (1996) does accede that there may be merit in this idea, but reserves judgement until more thought on the integration of the two versions of critical systems has been undertaken. On a practical note Ellis (1994) considers CSH to be over theoretical and not useful in the real world.

As a part of its approach to human emancipation CST is weak (Ellis: 1994), as is system science in general, in integrating social and human elements with the technical operational elements. Jackson (1991) ascribes this to the fact that there have been as many approaches to human relations as there are human beings. Linking this to Habermas's theory of knowledge-constitutive interests Jackson (1991) expects the commitment to human emancipation to seek to achieve the maximum development of human potential by raising the quality of work and life in organisations in which humans participate. Midgely (1996) regards this as far too parochial reminding us all that maximum development for human beings may well be at the expense of other elements of the ecology in which humans are found. Jackson (1996) counters by arguing that human improvement is governed by ethical choice, and this is a problem that has occupied moral philosophers for thousands of years and is unlikely to be instantly solved by systems thinkers.

The original work of Jackson and Keys (1984) sought to devise a classification of systems methodologies that would serve the commitment of methodological pluralism. This was further developed by Flood and Jackson Fig 3.3 and has proved popular as a 'system of systems methodologies'.

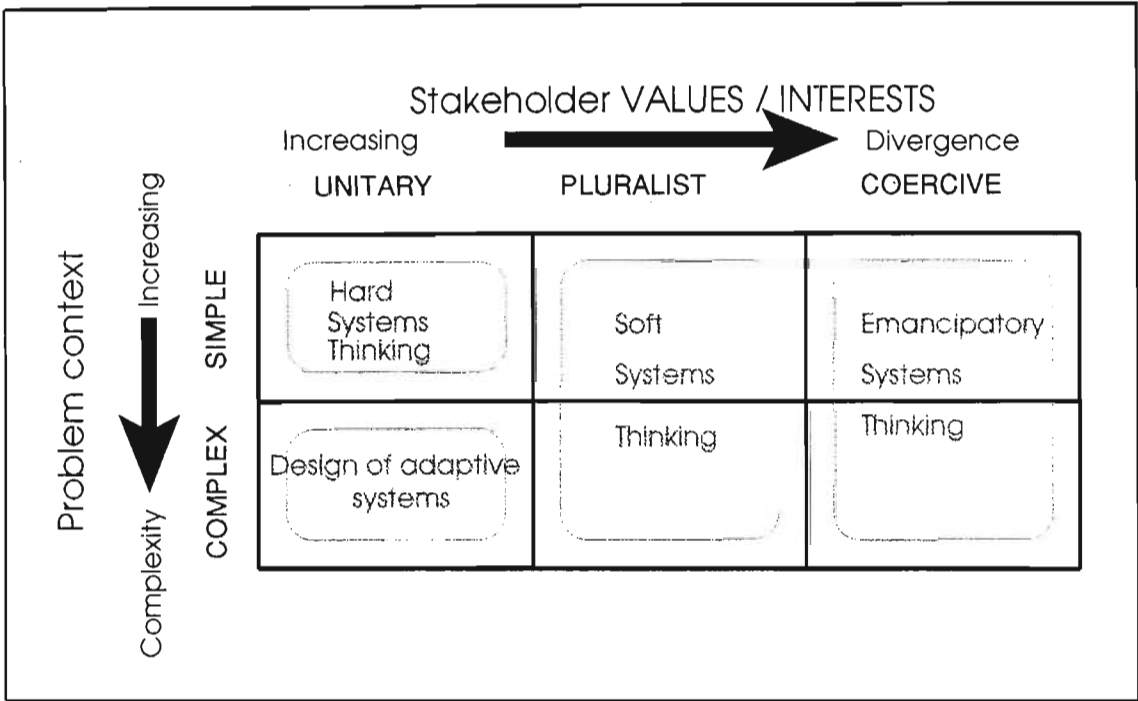


Fig 3.3 A grouping of systems methodologies based upon the assumptions made about problem contexts and the interests of the stakeholders (adapted from Flood and Jackson, 1991:42)

This two dimensional matrix is formed with two vertical elements and three horizontal elements. The characteristics of the system in focus are examined. This is determined according to factors such as the number of elements in the system, the rate and nature of the interactions between the elements, and the attributes of the elements themselves. All this is taken in the context of the environment in which the system operates and then the system can be deemed either simple or complex.

The participants in the problem context are analysed and are categorised as unitary, pluralist or coercive. Those participants who have shared values and interests can be

considered unitary, those who have divergent but reconcilable values and interests can be seen as pluralist whilst those who hold entirely incompatible or irreconcilable values and interests can be said to be coercive.

The grid has been criticised particularly by those who hold that systems thinking that draws on incommensurate epistemological and ontological assumptions is invalid. In this case the simultaneous appearance of hard systems, (column one of Fig 3.3) soft systems (column two of Fig 3.3) and emancipatory systems (column three of Fig 3.3) can suggest this clash. However drawing on the theory of knowledge constitutive interests at a meta level, developed by Habermas, Flood and Jackson (1991) were able to overcome these objections. Although Jackson (1996) and Midgley (1997) have since expressed reservations about the validity of this approach at the level of theory, it is seen as a useful foundation for debate on complementarity at the level of methodology. The idea of combining methodology is an attractive one at the operational level and was further developed in the various versions of TSI that were to unfold. Jackson (1996) has expressed unease with the concept of complementarity at the level of paradigm and is now less confident that Habermas does in fact offer support to ground complementarity at the level of theory. However this view has not prevented Flood (1995) from further developing TSI as an operational management tool. Overall it can be concluded that TSI is able to postulate a meta-methodology for using methodologies adhering to different paradigms in the same intervention in the same problem situation (Jackson, 1997), and so for the purposes of this research TSI version 1 and 2 will be considered for use in the problem situation under investigation.

### **3.8 Total Systems Intervention (TSI)**

Regarded as innovative when first introduced by Flood and Jackson (1991) TSI as it was then proposed is now judged to be limited. However the metamethodology is evolving (ibid) by employing its own principles on itself. Its purpose is to be a process of intervention where practitioners can learn about and manage complex interacting

organisational issues employing a system of problem solving issues. (Wilby, 1996:117) Originally this dimension was addressed through the use of metaphor based on the work of Morgan (1986). Later regarded as rather restrictive the methods by which practitioners focus on the organisation was de-restricted although Flood (1995, 1996) recommended, but did not prescribe, that any organisational analysis would consider the following four key dimensions:

- *organisational processes* - flows and controls over flows
- *organisational design* - functions, their organisation and co-ordination and control
- *organisational culture* - mediation of behaviour and the decision making process within social rules and practices
- *organisational politics* - power and potency to influence the tide of events.

Flood supports his recommendation (1996:99) by predicting that organisational interventions that focus on any single, reductionist or isolationist, dimension are likely to uncover unexpected and unwanted occurrences that tend to dominate practice at the expense of other key issues.

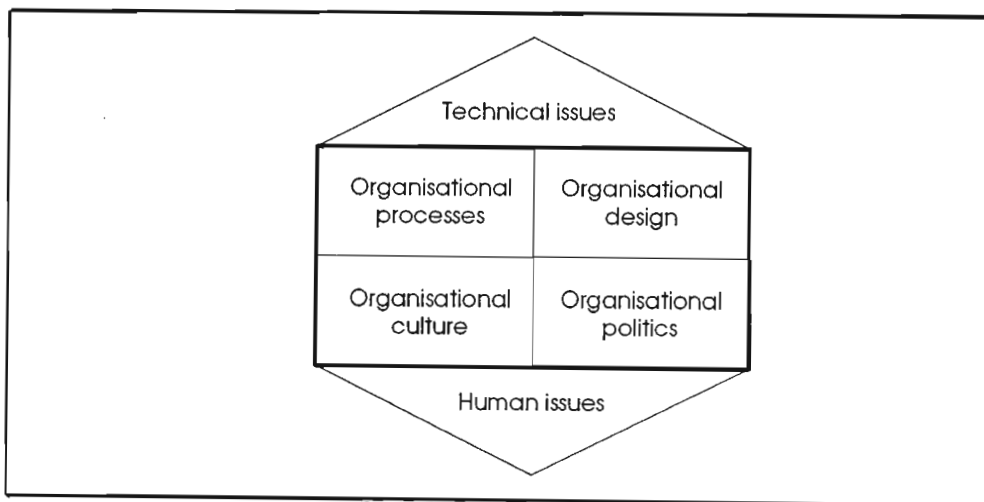


Fig 3.4 Four key dimensions of organisation (Brown, 1998)

This image of the organisation builds a framework on which an ideal whole system view can be constructed by employing TSI.

### 3.8.1 TSI Version One

In their original version of TSI, now known as Version One (Midgely, 1997: Wilby, 1997: Ragsdell, 1997), Flood and Jackson (1991) established the seven principles of TSI. Before embarking on an in depth analysis of the problem situation at Technikon Natal these principles can be compared with evidence provided in Chapter two :

- 1 the organisation is too complex to understand using one management model and the problems encountered are too complex to be quickly fixed
- 2 with the aid of document analysis the Technikon, its strategies and difficulties will be investigated using a range of systems metaphors (after Morgan 1986)
- 3 with the aid of the systems metaphors developed from the document analysis appropriate systems methodologies can be identified that will guide the intervention
- 4 it might be that different methodologies will be required in a complementary way in order to address different aspects of difficulty uncovered
- 5 TSI will assist with matching the concerns that emerge to suitable systems methodologies
- 6 using TSI a systemic cycle of inquiry between the three phases can be followed
- 7 the researcher, the 'clients' and others identified as necessary should be engaged at all stages.

On the basis of this comparison between the principles of TSI and the problem context it would seem that TSI is suitable for use with the problem situation under consideration.

The original Version 1 employed a three phase process which, although listed here in linear form, in practice formed a feedback loop. Output from the final phase was fed back into the first phase:

- *creativity phase* used various methods, but especially metaphor, to reveal unrecognised characteristics of the problem situation

- *choice phase* used the 'System of Systems Methodologies' (Fig 3.3) to analyse the strengths and weaknesses of various methodologies to deal with the characteristics revealed in the creativity phase. On the basis of this a whole methodology would be chosen
- *implementation phase* the chosen whole methodology implemented, and feedback passed to *creativity phase*.

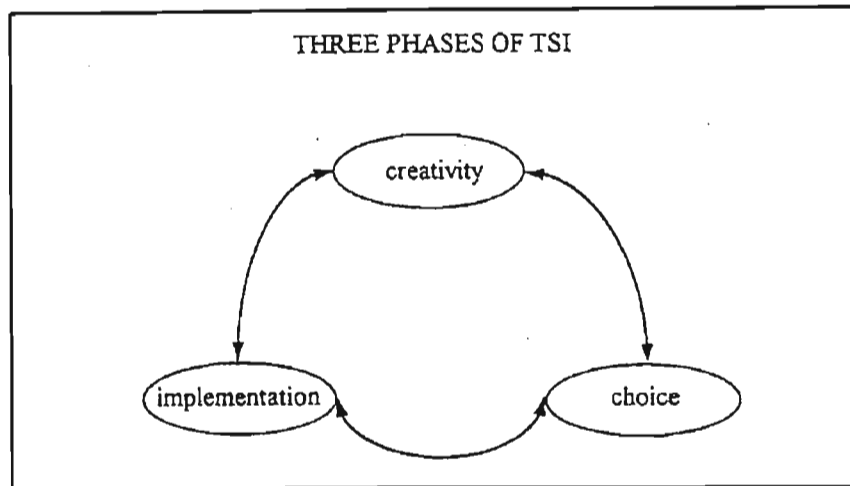


Fig 3.5 Three Phases of TSI (Brown, M., 1998) showing between them a cycle that is continuous, with no predetermined start or finish point.

Although a popular tool of consultants involved in management science this version of TSI was criticised by academics not least Jackson who questioned some of the underlying theory (1997) upon which TSI was based. Flood revised the concept of TSI (1995) with the specific purpose of operationalising still further the practice of TSI in the specific field of management practise and consultancy.

### 3.8.2 TSI version two

Although Flood himself prefers to call the revised version of TSI Local Systemic Intervention (LSI), this concept was heavily criticised by Jackson (1996) as being unsystemic. The revised version of TSI will be referred here as version two.

To the three phases of TSI Version One, three modes are added to the problem solving



process. Flood (1995) removes the 'System of Systems Methodologies', and with it the criticism of that particular concept. According to Flood (1995) the three modes are:

- *critical review mode* - in which the potential of relevant methods are evaluated for use in the problem situation
- *problem solving mode* - in which the three phases of TSI are present in recursive form
- *critical reflection mode* - in which the participants reflect upon the intervention and the effects of the methods on the intervention.

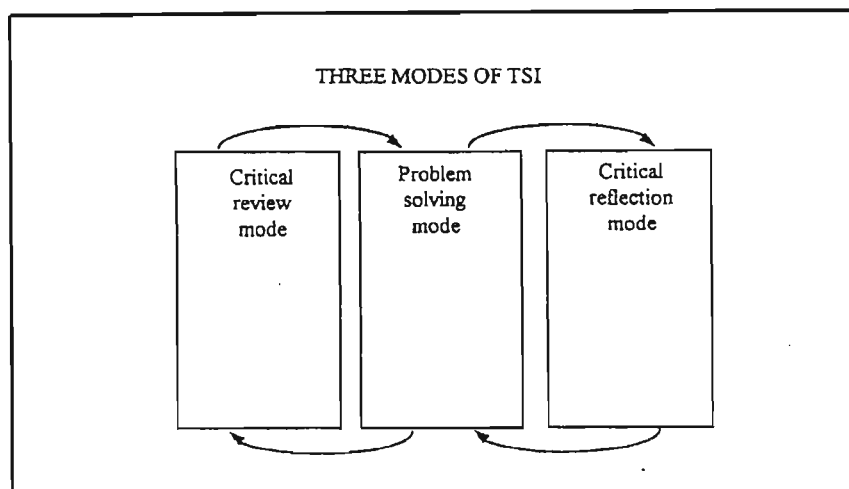


Fig 3.6 The three modes of TSI (Brown,1998) showing a cyclical relationship that has no predetermined start or finish.

### 3.9 Operationalising a TSI analysis

A written account of a TSI intervention is difficult to present without leaving the impression of linearity. This is a function of presenting a concise and coherent report of proceedings. In practice TSI is not a linear process, but allows practitioners to pass freely among modes and among phases within modes. TSI employs both recursion between and within modes as well as allowing iteration between phases and between modes. (Fig 3.7) TSI is not a list to be followed but a framework to help focus the thinking of an individual or group at any one point in an intervention.

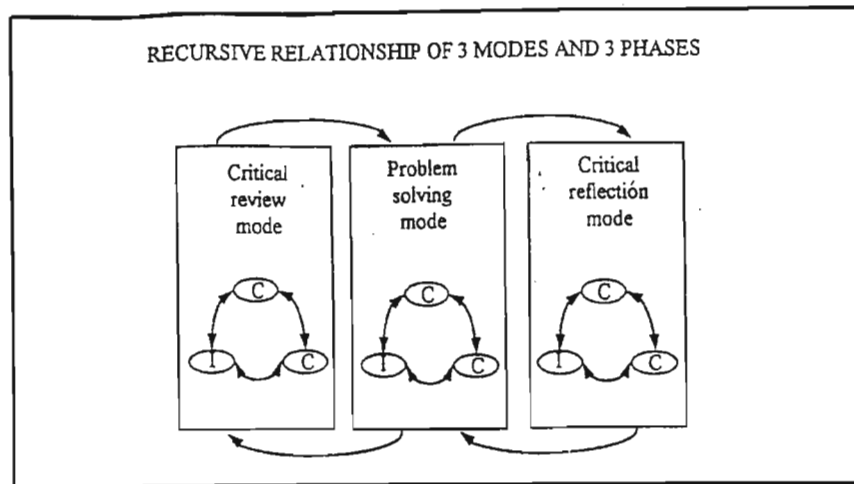


Fig 3.7 Recursive relationship of 3 modes and 3 phases (Brown, 1998)

### 3.9.1 An example use of TSI in the Critical Review Mode

Although noting that there is no set starting point, for the purposes of illustration this could mean that within the Critical Review Mode participants would consider the methodology, philosophy, principles, practice and process in both detail and critique. This would be considered to be the creativity phase. Moving on within the Critical Review Mode the participants would evaluate which of the three phases, creativity, choice, and/or implementation would best describe the how chosen methodology helps in the intervention. This is an example of recursion and requires careful thought process and facilitation. Participants would then ask how the chosen methodology would help tackle the four key elements of organisational design envisaged by TSI, namely efficient design, effective organisation, culture and politics. The way in which a chosen methodology can affect the ontological outcomes can also be examined. At any point in these deliberations it is possible or indeed necessary to return to one of the earlier phases depending on the findings of the subsequent phases. Assuming, in this example, it is possible to move on participants would consider, in the implementation stage, the accumulation of new knowledge about the chosen methodology. It would be necessary to reflect on the effectiveness of the methodology and to question whether it could work more effectively with or instead of other methodologies. Unless the methodology under review is regarded as satisfactory in these circumstances then it is discarded and the process recycles (Flood, 1995:85).

This account has been presented in detail to illustrate the recursive and iterative nature of TSI. It does not prescribe how an intervention is to proceed.

### **3.10 Conclusion**

Although the philosophical underpinnings of TSI have been debated widely, (see Omerod (1992,1996), Tsoukas (1993), Brocklesby (1994), Mingers and Brocklesby (1995) and Midgley (1995)) there has been relatively little acceptance of CST beyond the academic community despite TSI's attempts to operationalise it (see Ellis, 1995: Hutchinson, 1996).

Reflecting on the success of a practical intervention using TSI Warren and Adman (1999:358) note that TSI was not 'practitioner friendly', and was not apparently successful in operationalising CST. Warren and Adman (ibid) do accept that overall TSI intervention can be considered successful in that a deliverable and acceptable outcome emerged from the process they reported. They are not able to confirm that this desirable outcome might not have been achieved without TSI. There are many other documented examples of successful TSI interventions including Flood (1995) Ho, (1995), and Flood and Green (1996). Part of the purpose of this research was to reflect on the use of critical systems thinking in problem contexts such as these, and so it was finally decided that Flood's second, yet challenging, version of TSI, version two would be used in this context. A framework for the intervention, aimed at improving tourism education at Technikon Natal, and its outcomes are considered in Chapter Four.

## CHAPTER FOUR

### A framework for an intervention to improve tourism education using soft systems thinking

Churchman (1971:233) encapsulates the difference between the traditional method of reporting experimental findings and those that emerge from soft systems thinking alternatives.

*Traditional reports are designed like detective stories; one waits until the end to see what the story is all about. But in this case it's very hard to identify the hero and the villain, since the results of the experiment were as much about the designers as they were about the the subjects.*

To re-iterate what was said in Chapter Three, section 3.1, the purpose of this exercise is to bring improved insight into the type of turbulent environment outlined in Chapter Two. Evidence was presented in that chapter to support the need for improved tourism education. However it was not clear what form improved tourism education should take. Only from improved insight will flow improved problem structuring incorporating a characteristic identified by Singer (1936) who opined that any useful inquiring system will have no real terminating point on any issue and that not only will an inquiring system be able to convey what has been learned but also what still needs to be learned. There can be no 'Eureka' moment with soft systems thinking only a slow improvement in insight and perception.

Although there has been discussion of the philosophy and background to TSI it is not the purpose of this research to give a step by step explanation of the method itself. Further detail can be obtained from Flood and Jackson (1991) , Flood (1995), Flood (1996), Wilby (1996), Ragsdell (1996), Flood and Green (1996) and Warren and Adman (1999).

This research considers a TSI intervention at Technikon Natal and discusses how TSI assisted with the subsequent outcomes. Recursive systems interventions such as TSI are

notoriously difficult to report. Drawing upon the diagram Fig 3.7 which showed the recursive relationship between the three modes and three phases of TSI, Fig 4.1 shows how this relates to the approach taken in this research. The diagram is simplified in that it does not pedantically chart the recursive nature of the phases within the modes. The purpose of the diagram is to provide an overview of progress to provide orientation for those unfamiliar with TSI.

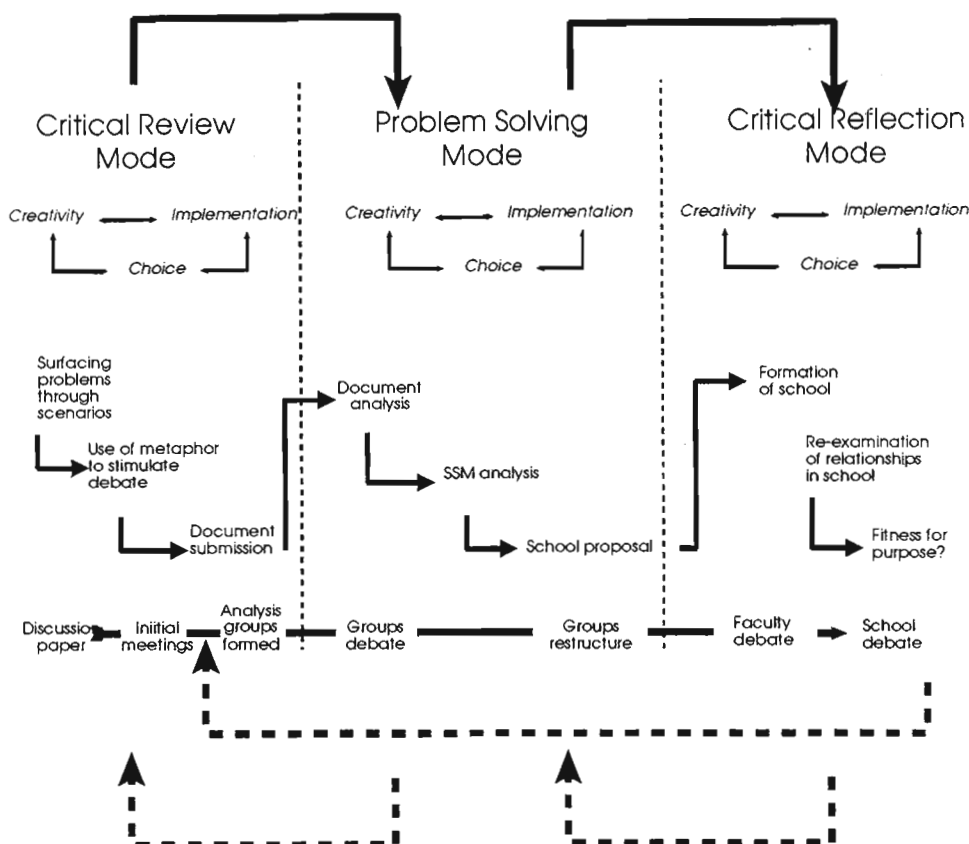


Fig 4.1 The relationship between the approach taken at Technikon Natal and TSI (after Flood, 1995:326 and Brown,1998)

It is at the meta level that TSI is driving the intervention. The broad stages, or modes, guide the overall thinking, whilst enabling the appropriate methodology to be selected. The thinking extends beyond complementarism and also considers the effect of the choice that using a particular methodology might have on the outcome of that particular context. At the operational level, in this particular problem context, SSM was to be the chosen methodology for this particular intervention.

#### 4.1 Setting boundaries to the TSI analysis of the problem

The context of the problem situation has been established in Chapter Two. It can be seen from this evidence that the whole problem context is not only complex but also involves so many stakeholders that they would be an unmanageable group even if it were physically possible to assemble them at one time. An early decision imposed by the Technikon senior management was to restrict direct participation to members of Technikon Natal in departments that might be considered to have a tourism connection, and those members' immediate contacts in industry via written documents. This decision immediately raises questions of the effects of boundary decisions on systems process (see Ulrich, 1983). Midgley (1997) summarises these boundary arguments by suggesting that they fall into two categories, namely *what* should be included in the analyses and *who* should participate in the discussion about what is to be included. Practical considerations left no alternative in at least the early stages of the analysis.

Although time consuming it was possible to conduct meetings with participants. However the pragmatic advice of Flood and Jackson (1991 : 56) was against simply interviewing the people involved in a problem situation. Direct questions such as "Do you think this technikon is managed well?" or "Would you compare the organisational culture of this technikon to a brain?" will elicit allsorts of powerplay, manipulation, fear and obscurification depending on who is interviewed by whom.

Drawing upon documents for analysis is more invisible, and yet reveals cultural and organisational technologies which are hard wired into the organisation. The documents are drawn from a variety of sources. All documents used in this analysis were live documents used by the stakeholders involved in the re-design of Technikon Natal's academic ambit. Appendix A contains a list of these documents. These stakeholders were both within and without the Technikon. The definition of a stakeholder is taken from Checkland (various) himself who constantly advises soft systems thinkers to 'sweep in as many *weltanschauungen* as possible' and that this usually leads to a very

liberal definition of a stakeholder. In addition to analysis of documents, analysis of notes taken by the researcher at meetings, both formal and informal, were included in the TSI. External sources of information were summarised in Chapter Two.

#### **4.2 The study of the problem context of tourism education at Technikon Natal**

The starting point of this analysis was a document published by the VP Academic of Technikon Natal, in April 1999 which proposed a general review of the academic ambit at Technikon Natal which subsequently took place throughout that year. Although couched in the language of profit and loss the underlying message was that the academic ambit of the Technikon must examine not only what it does, but how it does it. The most important message from the perspective of this analysis was unspoken but implicit. The message was that the academics themselves must re-group into new departments, schools and faculties so that the process of ongoing review and change would continue long after the re-structuring exercise was over.

This rather subtle theme was to be strengthened in later versions of the VP Academic's document. In the first version the point of ongoing self improvement through time was lost as readers focused on loud themes such as closure of departments, merger and retrenchment. This was not unexpected given the metaphor underlying of the nature of the Technikon which was highly mechanistic. Many of the staff at the Technikon had been with the organisation when it comprised a homogeneous, well ordered, and predictable if entirely artificial environment. In the debate that followed many yearned for a return to the days of predictability. Although there was no immediate consensus over whether there was even a problem affecting the institution, let alone the tourism ambit, the need to institute further debate on this issue was accepted.

#### **4.2.1 Surfacing problems through scenario analysis**

Working on its own the Department of Tourism had to consider several issues simultaneously:

- the hopes and aspirations of the Department in the overall ambit of tourism education in the province
- the stance of the Department in relation to the academic ambit review
- decide how to break the stubborn 'see no problem' attitude of some of the other departments as this was seen as delaying improvement for others.

A series of scenarios were developed that would use the case of the proposed response of the Tourism Department to meet provincial tourism education needs as an analogy to illustrate what would happen to other departments if they did not review their own positions. It was felt that this latter course would be more effective as the only people who had so far shown any concern for an improvement in provincial tourism education was the Tourism Department itself. It was thought that the proposed changes in tourism education would illustrate to all how important change was to the other sectors of the institution and that this would lead to the acceptance of change overall and perversely to the acceptance of change in the tourism ambit.

Although not possible to undertake a full scale scenario planning session as envisaged by van der Heijden (1997) it was possible to gather the Department of Tourism lecturers to undertake a clustering exercise and to develop an influence diagram (Fig 4.2) The purpose was to examine the driving forces and influences on tourism activity in the province and the group was given an invitation to open their minds and roam around this topic.





seen that many niggling concerns were shared by others in differing fields of the discipline of tourism.

Clustering of the issues was not only a useful technique in itself, showing how individuals grouped associated issues, but was also able to provoke debate as to why one person would propose a pattern that was not seen by another. Van der Heijden (1997) admits that this area is rather fuzzy and seems to be based on intuition, developed as the model takes shape. However the systemic implications of the model became apparent to all. Even the most ardent supporters of Durban focused teaching had to admit that unless the problem of urban migration was addressed then the tourism potential of Durban would be damaged. Improving employment prospects in rural areas might stem the urban migration. The sheer complexity of even the simplified diagram never fails to provoke comment and subsequent realisation that the context of tourism education design is rather more complex than first thought.

At this stage the group again faltered. By no means steeped in an organisational culture that embraced the scenario approach it was necessary to adopt the third way of developing scenarios proposed by van der Heijden (1997: 196): the "official future". It was possible to extract the issue of funding from the influence diagram Fig 4.2 as this would affect every department represented in the Senate, and compare it with the proposal that tourism education was best served by extending reach into the province. These two change issues were set against each other in the quadrant Fig 4.3.

In each quadrant a short scenario is listed. Although there has been an attempt to be logically consistent and plausible the speed at which this exercise was completed did not enable it to be refined. The scenarios are not very deep, nor did they need to be. The purpose of the exercise was to disturb the held idea that the known status quo was better than an unknown proposal for the future. The scenario quadrant was able to provoke discussion about the likelihood and desirability of being able to remain on the current

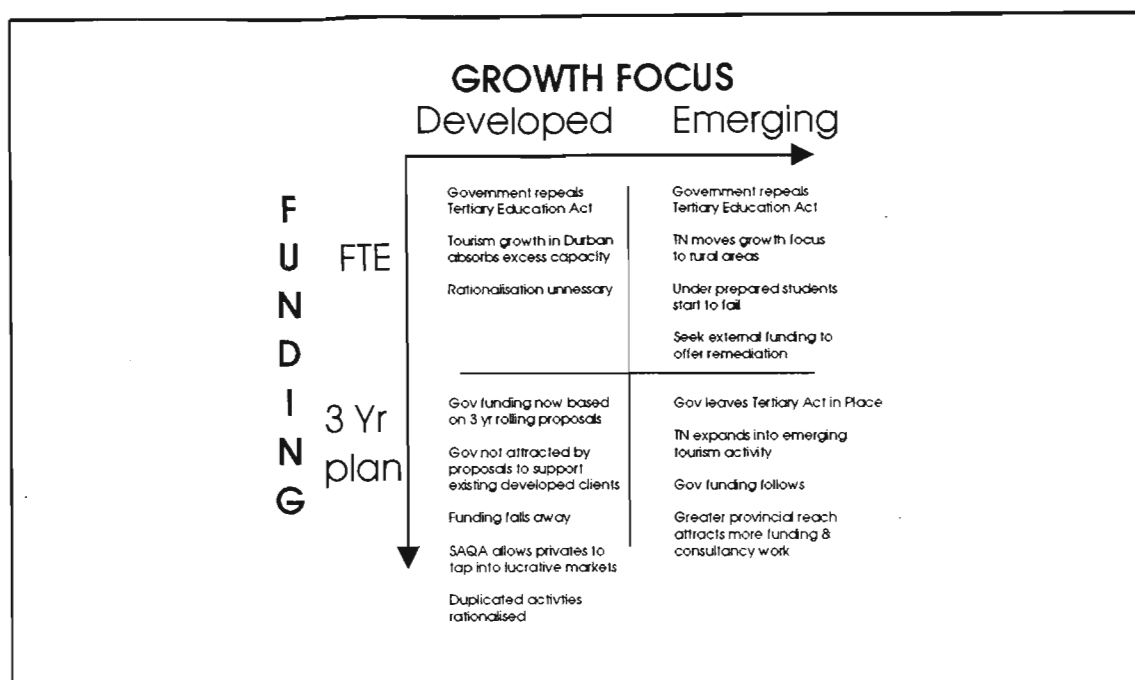


Fig 4.3 A scenario structure based on dominant influences in tourism education

course given the change in funding that had already been announced by the government. Although the use of a known and pre-determined driving force is not advocated by van der Heijden (1997) its use here is vindicated by the need to demonstrate to the doubtful that the exercise was not one of speculation but one of assessing impacts of the known. In this case, with this group, and at this time in the process it was necessary to use this technique.

At all levels, Department of Tourism and at Technikon Senate level, Fig 4.3 proved to be most influential, having a chilling effect on many people who now realised that whilst the status quo was indeed preferable to the proposed futures, the status quo had a pre-determined and limited life. Remaining in the FTE/Developed quadrant was impossible and attempts to do so would lead to deferred but certain disaster.

#### 4.2.2 The use of metaphor to provoke creative thought

That problems affected the academic ambit was now accepted among many, but not all, constituents of Senate, leading to a call for 'responses'. These would take the form of documents generated by individuals, departments and faculties. Given the ongoing nature of most of the Senate, still mechanistic with a preponderance of natural scientists,

accountants and engineers, it was likely that the responses would be logical, closely argued and would studiously ignore organisational culture and politics focussing on function and operations. On reflection, the decision to resort to the submission of logically derived reports was both hasty and superficial. In mitigation given the stage of development that the Technikon's collective organisational learning expertise had reached it was not surprising that this method should have been chosen.

For the purposes of this research, examination of the documents that were submitted to Senate was restricted to those from the Faculty of Commerce, from the Faculty of Applied Science and from the Departments within that Faculty that were affected by the proposals to improve tourism education in the province, contained in the VP Academic's original document that addressed the fit of the academic ambit of Technikon Natal. Each departmental and faculty response had addressed the proposal from their own perspective and each offered alternatives that substantiated their own activity and offered other activities, that did not affect them, for sacrifice.

Assumptions that were surfacing in these documents were firmly planted in the rich soil of organisational myth. References to the Pietermaritzburg Campus as "a pit into which Technikon resources are poured" were simply untrue, as physical inspection of the campus would show. The response documents assumed that the Pietermaritzburg campus was running at a loss, although no accounts were produced to support this. (The campus in fact breaks even).

There were suggestions that the Pietermaritzburg campus should be shut. No reasons, grounded in customer or client needs analysis, were given. Indeed in some of the responses no reason was given other than that to close Pietermaritzburg might satiate the VP Academic's perceived need to close things down. Confusion verging on panic was evident in some of the responses. This was not the climate to engage in cold logical debunking of myth. Another method had to be used.

Building on the work of Morgan and organisational metaphor, Flood and Jackson (1991) argue that it is fruitless to argue logically against such entrenched positions. So deep run are assumptions that the holders are often unable to distinguish between reality and held assumption. In such a case there is no possibility that such deeply held perceptions would be questioned in the conventional style of dialectical debate.

Three metaphors were developed by the Department of Tourism based on their analysis of the reaction documents. There were several motives for this work. The main intention was to generate images from material held in the response documents. Another intention was to stimulate debate to evaluate those images. A further intention was to consider the implications should the recommendations contained in the response documents be adopted, and finally the question of plausibility was raised. How likely was it that the conditions necessary would all fall in to line before the recommendations could be implemented?

The metaphors were designed to stimulate debate. The slight humour underlying each story was designed to be both disarming and to introduce a hint of ridicule. The metaphors were published on the Technikon Natal intranet and were also included in the Senate papers.

The metaphors, which have been reproduced in full here, are deliberately concise. Each one was given a snappy title and it was mention of the title alone that was able to neatly invoke associations of the metaphor in later debate amongst participants. The three metaphors are entitled:

- The Filter Feeder
- The Village Pond
- The Flight of the Fish Eagle

### **The Filter Feeder**

Set up the bridging courses and the pre-entry tests away from the main campus. Pietermaritzburg can be used to keep hopeful but under-prepared students away from the centres of excellence. These centres will remain uncontaminated in Durban. Once the students have proved themselves by passing their bridging courses then we will allow them, and their FTEs to come to the main campus.

#### *assumptions*

- \* that anyone other than academic departments based in Durban is attracted by this
- \* students will be fooled into thinking that this is their gateway to tertiary education
- \* that this version of academic ethnic cleansing will attract any external funding as the FTEs fade away

#### *implications*

- \* recruitment and retention of both good students and talented academic staff will be difficult
- \* as good students leave for Durban and poor students fail, the pool of failure gets bigger, until the entire campus is full of failed people....
- \* no substantial academic activity possible on this site

### **The Village Pond**

Close down Pietermaritzburg campus. Hasn't it been a disaster since its inception? All the money we could save could be used to bolster our own sagging incomes. There is no need to look beyond Durban for either students or growth. After all there can be little of importance taking place beyond this city. We might not be the best in Africa, but we are the best in Durban. Aren't we?

#### *assumptions*

- \* that there is any money being spent in Pietermaritzburg to save
- \* that Pietermaritzburg has been a disaster
- \* that staff cut backs in Pietermaritzburg will satisfy the need for retrenchment in Durban
- \* we can carry on as before and regain the successful formula that served us so well in the 1970s
- \* that TN will attract enough suitable students from a dwindling pool in Durban
- \* the root problems affecting the institution will be cured by the closure of Pietermaritzburg

### *implications*

- \* change the name of the technikon to Technikon Durban
- \* signals will be sent to provincial and national government that TN is unwilling to grow
- \* confirm that TN is not willing to respond to changing environmental demands
- \* proof that TN is incapable of running a satellite campus anywhere
- \* Technikon Durban ripe for turning into a satellite campus of another institution
- \* the root problems affecting the Technikon remain and so is eventually itself closed down as an economy measure

### **The Flight of the Fish Eagle**

Technikon Natal recognises that its obligations extend beyond Durban. The goal of becoming the foremost technological institution is not going to be achieved by contracting operations into Durban. It re-structures and accepts that geographic location and economic need, as expressed in government policy documents, will guide the location of programmes and departments. This will in turn attract funding from government and donors. A commitment to satellite campuses is followed by a thorough investigation of how to manage them. This enables TN to extend its reach throughout the province and eventually further afield. It becomes a premier technikon by recognising need, developing and implementing responses - fast.

### *assumptions*

- \* there is real desire for growth
- \* short term personal gain can be separated from long term understanding of environmental driving forces
- \* Council and senior management are prepared to take courageous decisions
- \* the danger of offering programmes duplicated by other institutions in Durban is recognised

### *implications*

- \* TN regains reputation for providing relevant programmes of quality
- \* funding from government increases as new formula replaces old FTE system
- \* happy rich staff
- \* happy educated students

WHICH DO YOU THINK HOLDS THE MOST CHANCE OF SUCCESS?

The metaphors proved to have novelty value. They were short and easy to read, differing from the usual dry response to issues of debate at Senate. More significant was the effect that the metaphors were to have on the overall learning of the organisation.

#### **4.2.3 The effects of the metaphor on participants' thinking**

The effect of the metaphor was noticeable. There were no further references, with one exception, in any document or debate that reached Senate level to the demise of Pietermaritzburg as a fully fledged campus offering a full range of programmes. The one exception to this, a protest document produced by a Deputy Dean whilst the Dean was elsewhere, was greeted with a mixture of derision and incredulity that anyone could still be promoting such opinion. It was received with reluctance at Senate and dubbed "bubbles from the sea bed". The practice of metaphor was catching on and the submission received no further attention.

Given that there were no further recommendations to close Pietermaritzburg and given that the debate over academic improvement continued it can be assumed that participants had broken out of the long held mythical assumptions. Newly prepared documents started to discuss other issues, such as the perceived improvements, or otherwise, of re-grouping of departments into schools. The question of research collaborations also started to appear in Faculty discussion papers. One of the key outcomes of the Creativity Phase in Mode 2 TSI, as identified by Flood (1995:88) is that it helps people break out of preconceived assumptions that they hold about problems.

A second benefit of creative thinking that can be promoted by use of metaphor is that it 'recommends people to be active in the creation of new ideas and images that help surface the problem...' (Flood, 1995:90). However it is one thing for people to realise that they are free to think creatively and quite another for them to actually do it. The cracks had begun to appear in the certainty held by many that there was only one way to



approach teaching and learning at the Technikon. The question that had now surfaced was what to do next?

#### **4.3 Further insights into the four key dimensions of organisation**

Although it might seem likely that there could be no longer any debate over the question of whether circumstances in South Africa are changing, at the outset of the intervention many participants expressed that it was unnecessary to provide a changing response to changing needs. It was often held that what had been proved and tested to work in the past may be relied upon to work in the future. It was argued that it was the environment that must change to suit a successful organisational system. The argument was, that the service offered had been successful in the past, but the current environment has yet to prove itself to be successful.

In addition to a refusal to accept that external environmental changes would lead to organisational change views were expressed at Senate that there may well be no need for internal change of any kind. "Student intake is healthy, my budget requirements are met, and the students who leave qualified obtain satisfactory positions in their chosen careers. How do I convince my department that there is need for change?" (an HoD from Faculty of Art and Design, 12 May 1999). If the students do not perform, then find some that will, as they used to. These are views held and espoused (see document listing) at Dean and Head of Department (HoD) level, and in view of the Technikon's devolved management structure, and the perceived strength of the labour laws of the country the Deans and HoDs are able to block any change that may not be deemed appropriate by them. Middle managers who had earlier expressed a wish to return to a time of perceived background of structure, discipline and predictability were now in conflict with senior management, a seeming contradiction. To answer why the problem of intransigence in this group of middle managers had now surfaced it is first necessary to look at some of the changes that have recently affected the very nature of the organisation.

#### 4.3.1 Observed characteristics of organisational design

Although not immediately apparent as a contributory factor that has changed the nature of management, the creeping advent of Information Technology (IT), and devolved decision making that has accompanied this change, has fundamentally shifted the role of an HoD at Technikon Natal. Not previously privy to the information now available on a desktop through computer links, it was not necessary in the past to involve this tier of management in strategic decision making. Not only does this group now have better access to information, but the very decision to supply them with it tacitly invited them to use it. This has fundamentally affected the decision making process. To strengthen support for this hypothesis it is useful to turn to writings primarily concerned with the effects of the introduction of Information Technology (IT). Zuboff (1988:11) suggests that IT will lead to the *rendering visible* of events, objects and processes and that this will inevitably set in motion dynamics that "will ultimately reconfigure the nature of work and social relationships that organise productive activity". This has had important consequences for organisations and for the process of managing them. Many organisations have had over 15 years to be affected by IT in the way suggested by Zuboff. It is argued in this paper that there have been considerable changes in both the nature of work and social relationships and that this has affected all aspects of organisational behaviour and not just those immediately close to IT. Zuboff goes on to say that the domains of managerial activity need to be rethought along the following four lines : intellectual skills; information technology; strategy ; the social system of the organisation. Specifically the managing process ought to concern itself with organisational learning and the way in which people in organisations continually construct meanings which for them make sense. In order to effect change in an organisation therefore it is necessary to monitor and manage those processes by which meaning is constructed. It is therefore necessary to examine the way meaning is constructed if change is to be readily and beneficially received.

From the analysis a tension could be detected between the desire to return to a perceived period of stability that was rooted in times when the organisation was regulated in a more mechanical fashion, and the behavioural practice of the managers who in adopting a counter stance to the senior management proposals for change are in fact perpetuating the very instability they seek to avoid. In being unsure of how to mediate behaviour under new circumstances the response was to delay or disrupt decision making. The organisation had yet to debate, redefine, and accept a new organisational culture.

Groups who were dissatisfied with the pace of change also included those who wanted change to increase. The widening of creative vision that was evident in documents that were written after the metaphor exercise also contained suggestions that political opportunism might be surfacing. Take over bids for smaller departments and mergers between faculties were mooted, often with little supportive analysis. It was difficult at this stage to distinguish the opportunist department seeking more FTE grants through enlargement from those who desired genuine synergy through co-operation and even possible merger. It was noteworthy that few submissions were focused on external driving forces, most were concerned with internal relationships and possible connexions between academic disciplines.

Although it was now agreed that there was a need for change there was still difficulty in establishing what form that change should take. It was also unlikely that the actual change necessary would, or indeed should, be uniform across the organisation. However all groups needed further inquiry into two areas of concern namely organisational politics and organisational culture before moving into areas of organisational design and process.

#### **4.4 From the TSI analysis - SSM as the chosen methodology for the intervention**

In Chapter Three the purpose of SSM was defined by Checkland as a methodology that would identify various system hierarchies and enable participants to build a full picture

of the problem situation. SSM then moves from the 'unstructured' problem and towards purposeful action to improve the problem situation and this journey is underpinned by a desire to produce an ongoing cycle of learning and improvement. This is the methodology of choice given current circumstances. The analysis of methodologies presented in Chapter Three and that emerging from the analysis of the problem context point towards the need for a methodology that will support organisational learning, that is interpretivist by nature, and can accommodate multiple stakeholders who, whilst they are willing to co-operate with others, hold rather different views on what action is necessary for improvement. It is clear that the problem is not well defined but unstructured. SSM is a methodology that is suitable for this type of problem context. An alternative suitable methodology would have been Ackoff's Idealised Planning as it too is theoretically grounded to address problems of this nature. In the words of von Bulow (1989):

*SSM is a methodology that aims to bring about improvements in areas of concern by activating in the people involved in the situation a learning cycle which is actually never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world, and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models. These are conceived as holistic ideal types of certain aspects of the problem situation rather than as accounts of it. It is taken as given that no objective and complete account of a problem situation can be provided*

This extended quotation both summarises the reasons for the choice of SSM in this context and introduces the next mode of TSI the study of an SSM intervention and an analysis of the process itself.

#### **4.4.1 Choosing which version of SSM is to be employed**

SSM has been in use in one form or another for over twenty years. Given that one of its key principles is that of examining systemic process that leads to learning, it would be strange indeed if the method behind the methodology did not itself respond to these principles. Indeed it has and in his various writings on SSM interventions Checkland (1990) is at pains to note at what point the SSM in use was, as the methodology reformed itself as a result of learning that took place by observers of the practitioners.

In the case of this research it was hoped that SSM would lead to ongoing self learning derived from the process of inquiry into the world. This could be considered as 'postmodern' SSM as defined by Cooper and Burrell (1988).

Ideally the participants would gather in some congenial location and workshop the SSM iteration after iteration until it was recognised by the group that purposive activity and processual learning were occurring. In practice this is not possible. It is not possible for a variety of reasons which include the logistical operational problems that occur when trying to group 50 busy people operating on sites 80km apart. However there can be a more sinister undercurrent. Logistical expedience might be used as an excuse to avoid workshops such as these, as their track record of change is seen as counter to the aims of those who wished to entrench the status quo. This is a sensitive area as few people would make public such an admission. The Analysis Three stage of SSM returns to this area of politics and the admission of power.

Although meetings between the departments did take place they were not comprehensive workshops in which the method of SSM could be meticulously followed. Later writings by Checkland (1998) accept that there may well be more than one way to undertake an SSM intervention and providing that the epistemological framework of inquiry is declared in advance this adaptation is not only acceptable but

indeed essential. For the purposes of this research SSM was to be a structuring device, a way of making sense of the mix of memo, position paper and meeting.

The methodology itself was not declared to the participants. This decision was taken as previous experience with SSM in workshops in which the participants were unfamiliar with the subtle nuances tended to warp activity and discourse away from the problem situation and towards the methodology itself. The risk of such an approach is that it can lead to suspicion that manipulation might be underway (Checkland and Scholes, 1990:242). However amongst the insecure there are always these worries, and amongst those anxious to improve there will be acceptance that manipulation and persuasion are close activities.

#### **4.4.2 The interpretivist analysis of documents relevant to the problem.**

Once again the most reliable source of data were documents. These tended to be written in a less pressured environment, that is to say free from the cut and thrust of the debating chamber (Senate). However it must be said that a document is a permanent record, and subject to close scrutiny and analysis, as here, the comments contained therein are likely to have been chosen as statements that are safe to say and not what should be said. With this proviso it was possible to gather from some of the affected departments a group within which a discussion occurred in place of the development of rich pictures as recommended by Checkland and Scholes (1990). The Technikon group are highly articulate and thought themselves well able to uncover the relationships and issues from a problem situation by dialogue. Given time constraints, which combined with the more plausible factor that no-one could / would draw, it was suggested that rich pictures were not necessary. There is precedence for this approach in SSM. Checkland and Scholes (1990:235ff) offer a case study conducted amongst a large number of participants, many of whom were geographically scattered. Much of the analysis was undertaken from written documents. In the case of this research dialogue was combined with material drawn from the documents and the summary in Fig 4.4 was possible.

However one Rich Picture is available in Appendix B together with an interpretation.

Issue of concern	Analysis	Source	Example
Achieving academic success	1	APS	
support DET non tertiary programmes	1	FN	
current academic response diffused	1	T	
develop kzn flavoured tourism	1	T	
follow gov policy makers	1	T	
identify new growth areas	1	T	
integrate for synergy	1	T	
pre-empt new market demands	1	T	local people ... re-gaining cultural and environmental heritage
closure of departments	1	VP	
finance	1	VP	
programme fit with need	1	VP	
survival plan	1	VP	
talk shop	1	VP	
assessment of academic performance	2	APS	
role of graduate schools	2	APS	
role of tourism in kzn	2	APS	
viability of departments	2	APS	programmes should be financially and academically viable
contact with industry will be lost in PMB	2	FN	contact with industry is vital - links could be lost
DBN is the hub of tourism	2	FN	DBN is the tourist hub where all large conferences are held
defend unviable programmes	2	FN	
denial that lab equip is obsolete	2	FN	
library resources will goto PMB	2	FN	
most enrolled students are in DBN	2	FN	
parochial vision	2	FN	why turn away from events on your doorstep
PMB has no tourism of note	2	FN	
relocation to another Faculty	2	FN	Food & Nutrition will cease to exist in F o Health
seek external viability advice	2	FN	an independant study by ... experts on PMB viability for tourism
stay with known suppliers / sponsors	2	FN	the majority of food suppliers are DBN based ...
too much travel between campus	2	FN	
who will function / cater on Berea camp	2	FN	
few growth prospects in DBN	2	T	
many growth prospects in PMB	2	T	
what are driving forces of note?	2	T	
allocation of resources	2	VP	
programme fit	2	VP	
quality of programme	2	VP	... is TN best at anything?
closure of departments	3	APS	These next three issues are seen as linked
creation of new departments	3	APS	
Internal politics	3	APS	... the climate for change in TN is shrouded the mists of hidden agendas
Motivation for change	3	APS	The Faculty ... is still trying to fathom the motivation for change
programme association	3	APS	
Rationalisation	3	APS	... the administration ambit ... financial laxity
representation on TN structures	3	APS	
admin not facing similar review	3	FN	
if department is split - loose influence	3	FN	
only PMB will benefit from review	3	FN	Besides creating an entity at PMB who is benefitting?
move from DBN a signal shift	3	T	the move will signal to provincial gov. that the move to support emerging tourism is underway
re-org not seen as threat	3	T	
central government take over	3	VP	
loss of autonomy	3	VP	... plan or be planned for

Fig 4.4 The issues extracted from the documents are grouped according to the technical, cultural and political analysis of a Mode 2 SSM.

<i>Key to abbreviations used in fig 4.4</i>		
<i>Analysis</i>		
1	Analysis One	Technical
2	Analysis Two	Cultural
3	Analysis Three	Political
<i>Source</i>		
APS	Faculty of Applied Science	
FN	Department of Food and Nutrition	
T	Department of Tourism	
VP	Vice Principal Academic	

It is tempting at this point to compile a series of pie charts in order to examine the analysis distribution amongst the participants. This would of course not be in the spirit of an SSM intervention. However from the perspective of the other participants summary analysis does give an indication of the early stance adopted by members of the group under study.

Issues of concern are evenly distributed between the streams of Analysis Two and Three. There are almost twice as many issues raised for Analysis Two. However looking at the source of issues raised there are patterns. For Analysis One the responses are divided almost equally between the VP and the Department of Tourism. Indeed it is these issues which concern the Department of Tourism most of all. This department shows relatively little concern with Analysis Two and Analysis Three and suggests that the participants here had focused entirely on the technical merits of the suggested changes ignoring the human and political concerns that might result from such proposals. On reflection a re-reading of Chapter Two demonstrates this also. Although a thorough investigation into the technical aspects of the factors affecting tourism education at tertiary level there is no reference to the unspoken political turmoils and human concerns that must be associated with a holon of this scale. The Department of Food and Nutrition on the other hand is primarily concerned with issues from the cultural stream of analysis. They are



concerned with the possible disruption of the well established links and current practices. The Faculty of Applied Science is by far the most concerned with the political stream of Analysis Three in that it raises more issues than the rest of the participants taken together in this category. It was presumed by other participants that this was due to the recommendation that had been made by senior management that this faculty should close and its components be merged with other faculties. It was now necessary to move from a document analysis to a meeting of participants to see how the entire group responded to the document breakdown.

#### **4.4.3 Root definitions developed at the City Campus meeting July 1999**

This was the first time that the groups from the affected faculty, the departments and the VP, represented by the Dean of Academic Planning had met together as a group concerned with examining the Technikon response to tourism, and tourism related education. The atmosphere was one of shared wariness, strained bonhomie, not one of convivial co-operation, but no outright hostility either.

After considering the issues summarised here in Fig 4.2, 4.3 and 4.4 which were presented on OHP, the group was invited to write down a "core purpose" statement on the advice of Checkland and Scholes (1990:241). This was not strictly a root definition, but the jargon of SSM, with the exception of CATWOE, was avoided whenever possible (see Appendix C for mnemonic). Two core purpose statements were developed initially, and these were sharpened up later into root definitions as the concept of CATWOE was better understood by the participants.

The first core purpose statement was as follows:

(RD1) *Technikon Natal should shift the focus of teaching tourism, and related disciplines from that which supports existing activity to teaching which supports developing activity in the wider province.*

This did not lead to consensus. It was considered to be too vague, and certainly did not

address many of the Analysis Two issues, and got nowhere near the Analysis Three issues.

As the second core purpose / root definition was presented a scurrilous sub group were passing around an 'underground' root definition.

A system enabling Technikon Natal to move lecturers' pre-occupations with preserving comfort zones to that of addressing teaching challenges

Although regarded as humorous and rather naughty there was more than a little truth in this statement as scrutiny of issues raised in Fig 4.4 would confirm. This 'unauthorised' statement is presented here as it illustrates the lack of confidence that the group had in each others presence to raise concerns that might be felt to upset one of the other participants. The use of humour to introduce often unspoken or unspeakable issues, such as this, is recognised and supported by Flood (1995).

Participants from another faction developed a second root definition (RD) that was more specific than the first one.

(RD 2) An institute of food and leisure to be staffed by the affected departments which would centrally manage and co-ordinate from Durban tourism related education for the province

This statement was closer to reaching accommodation except for the word Durban. It was suggested that Pietermaritzburg might be substituted for Durban and this too met resistance. In the discussion that followed there was no consensus over what the major driving forces behind the need for tourism education actually were. One faction declared, and this was also apparent from the document analysis, that established large scale tourism should receive dominant attention, whilst another faction declared that growth lay in the support of rural community tourism and the emerging community initiatives.

It was becoming clear that the issue causing the impedance was not one from Analysis One or Two, but from Analysis Three - politics. The concept of a combined synergistic response to tourism education in KwaZulu-Natal was foundering on the question of where the centre of gravity of the enterprise should be. However it should be added that further inquiry into issues identified in Analysis One and Two might resolve the politics of location.

The final root definition and CATWOE to emerge from the workshop follows. It must be noted that this definition is rather more vague than RD 2. It leaves the question of what exactly a 'Technikon Natal owned system' could turn out to be until later. However the key issue of agreement that the participants should work together in a more formal association, whatever that might turn out to be was linked with the combined intention of shifting support to emerging tourism BUT without losing the established links.

This CATWOE was acceptable to most parties and so a root definition was developed to be sure that all were viewing this definition with a shared *weltanschauung* and a common understanding of what the intended transformation should be.

## CATWOE

- C unserviced potential students of tourism and hospitality
- A all Departments involved, including Food, Tourism, Environment, PR
- T change the **growth focus** of 'tourism' education and research from existing developed activity to that of emerging initiatives
- W meeting future challenges secures long term comfort zones
- O members of reluctant departments
- E that the province (KZN) wants/needs tourism education and research to develop new tourism product

The CATWOE was developed to show the role of Technikon Natal and the relevant constituent departments. It makes clear that this transformation will be driven from within the Technikon and will not depend on external directives. There is an assumption contained in the 'E' section, and this is that the province of KwaZulu-Natal does in fact want new tourism products to emerge from education and research. Although there is evidence (Chapter Two) contained in government policy documents to this effect this assumption has not been thoroughly tested. From this CATWOE the following Root Definition was developed.

### **Root Definition 3 (RD3)**

a Technikon Natal owned system that will enable a synergistic group of departments to deliver 'tourism' education and research that will combine support for developing/emerging tourism initiatives across the province with that of existing DBN focused education

#### **4.4.4 Developing a conceptual model from the Root Definition**

The conceptual model (Fig 4.5) that emerged from this exercise was rather weak in that it does not closely follow what was expressed in RD 3. However it served the purpose given that it was developed by a group not only new to SSM but also unaware that SSM was the structuring methodology. It served its purpose in that it was possible to see a model that proposed a way forward, did not commit the participants to abrogate their Analysis Two and Three stances but would lead to further inquiry.

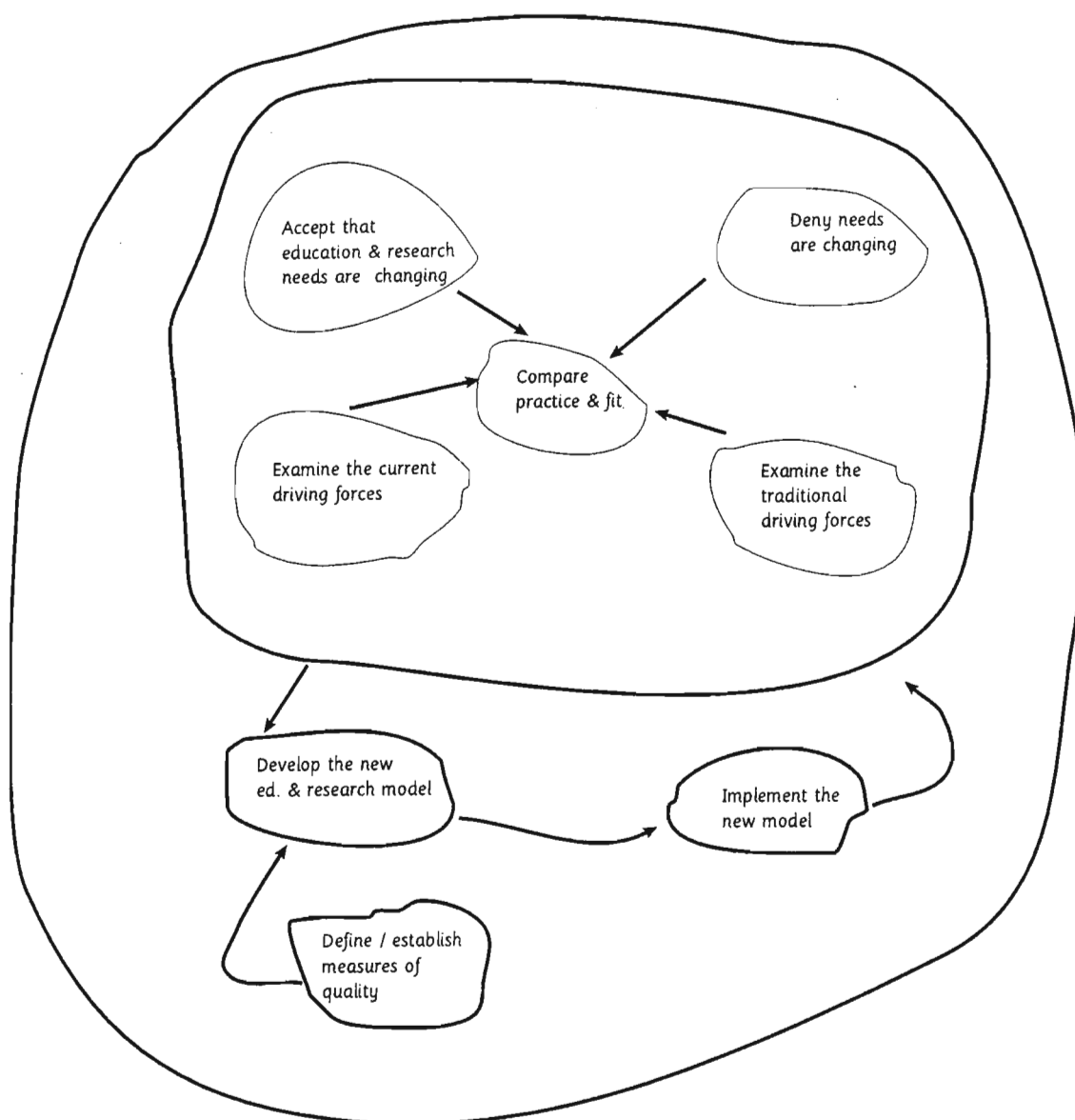


Fig 4.5 A conceptual model derived from root definition (RD 3)

This conceptual model could well have been presented in the next set of Senate papers and then forgotten. What was necessary now was a comparison between the model that encapsulated what was currently agreed as possible, and what was currently not agreed as known. Here follows a summary chart that compares the model with what was actually happening in the real world.

Activity in model	Exists	How?	Who?	Good or Bad	Alternatives
Mechanism to assess needs	N			B	set up work group
Survey of new driving forces	Y	Needs analysis by some Dept	Individual Dept	B	co-ordinate
Good fit needs / practice	N			B	more workshop like this
Agreed measures of quality?	N			B	workshop
Mechanism to develop new tourism teaching model	N			B	set up work group

Fig 4.6 A comparison between purposeful activity proposed and what is actually happening now

It is clear from Fig 4.6 that there is very little actually in place to implement at the Technikon the activity in the model. This caused the participants to re-consider the validity of their current practice and the viability of working as individual units. This re-consideration could lead to learning. In the case of the Department of Tourism there were several learning points. The scale of current activity in the leisure and hospitality industry around Durban was established. It was clearly too important to turn away from. Even given this commitment from the Department of Food and Nutrition it was surprising to uncover the hostility to the established notion that hospitality was a sub-set of tourism (Cooper et al, 1996). There was the unspoken, but apparent, possibility that factors such as family commitments and spouse employment might be rather more significant than initially envisaged and these began to emerge during the group deliberations. This was detected not so much by what was said, but by what was not said in circumstances in which these issues might normally be raised.

The most significant outcome was that the proposed notion of a School of Tourism and Hospitality might address the inadequacies revealed in Fig 4.6 became acceptable. It was also apparent that there was much work to be done on clarifying the vagueness encapsulated in RD 3. That the word tourism appeared in inverted commas signified that there was no understanding between participants over the relationship between tourism

and other related disciplines. Also from RD 3, the loose term "a synergistic group of departments" was a very vague way to describe the philosophy, ethos, composition, and function of a School. This too had to be developed. The exercise in SSM had helped with the process of enquiry so far. However the overall intervention still had far to go. Although some of the political and cultural concerns of participants had been revealed there was still much work to be done on resolving those concerns. There was also a need to develop a more complementary approach to the technical issues in order to determine what was the purpose of a School of Tourism and Hospitality. The recursive nature of TSI would suggest that participants should engage Critical Review Mode and consider the questions and issues that emerge from the formation of a School of Tourism and Hospitality.

#### **4.5 Some reflections on the the use of SSM and TSI in this case**

A fundamental underlying tenet of TSI is that matching the problematic situation to the technique is not easy. It was to address this that TSI was adopted. However Jackson (1991) notes that in the absence of agreed goals and aims using systems ideas too early can lead to distortion of the problem situation and premature conclusions. This indeed seems to be the problem encountered here. Both Checkland(1990) and Jackson(1991) advocate in the strongest possible terms that the analysis stage should consist of building up the richest possible picture of the problem situation. It was clear that in this particular intervention this stage was badly covered. The pressures of time and other activity were acknowledged and short cuts were taken. Reflecting on this fact one recalls that SSM is not so much a set of techniques but a learning system for all involved and therefore demands participation and time to be effective.

##### **4.5.1 Participation and its effect on outcome**

The issue of participation, or lack of it, is now proving itself to have been a critical factor in the shortcoming of this particular intervention. Given that the aim is to encourage learning amongst participants in a problem situation, the next question must

be who needs to be included in this process? The practicalities of gathering together large groups of people to undertake an exercise that is still regarded by many as esoteric and vague are considerable. Certainly at the back of my mind was the hope that a carefully documented process might act as a substitute for actual attendance. It would seem that this is not tenable. Without the presence of at least some of the Customers, the victims or beneficiaries of the proposed system, it would seem that the remaining participants had difficulty according credibility to arguments that held little currency from their held perspective.

Consider the people who were included in the SSM exercise. These groups had not traditionally been consulted in the past on issues of importance. In the same way Zuboff has shown that IT has revealed events and procedures not normally accorded to managers at this level and that this drastically affected relationships, structured meaning and management. It would seem possible that the unveiling aspects of SSM has also had a similar effect to participants. It is an accepted systemic phenomena that the very act of inquiry changes the problem being inquired about. Not only were these people unused to being consulted on questions of this magnitude, but in attempting to make sense of this they have confused the issue of being asked with that of being listened to and heeded.

#### **4.5.2 The goal of improvement as pursued at this institution**

A common criticism of SSM is that the goal of seeking 'improvement' is too vague. 'An assumption made in this exercise was that the lecturers would be primarily interested in improving the professional service they offered. This has proved not to be the case. Given the assertions in the previous paragraph many participants took the opportunity to promote their own personal improvement agendas, some thinly disguised as improvement for the community served by the Technikon. Warfield (1995) has described this, rather politely, as 'spreadthink'. Jackson (1991) takes the question of the conflict of interest and attempts to reach consensus and places it at the heart of his criticism of soft systems thinking. Human emancipation is placed at the heart of Critical



Systems Thinking as envisaged by Jackson. As improvement is very much a question of perception Midgley (1996) argues that human emancipation of powerful participants may well be at the expense of other stakeholders. As revealed by this inquiry there was relatively little concern with the issues of technical improvement but much more concern with political concerns in Analysis Three.

#### **4.5.3 Power issues and the weakness of SSM**

In summary Jackson (1991:162ff) criticises SSM for playing down issues of power and self interest. He points out that the methodology can neatly circumspect conflicts of real interest by structuring debate around root definitions and conceptual models. The question of participation, crucial to the validity of any SSM exercise, is also problematic. By simply refusing to attend, or by preventing others from attending, any one stakeholder group is able to damage an SSM exercise. Even when attending, participants must be able to establish a shared transformation supported by a common *weltanschauung*. Although possible, attempts to reach consensus at this stage can lead to drift as the group moves away from addressing the 'mess' and focuses on finding common ground. This in itself is only desirable providing that the consensus reached is still strong enough to deliver purposeful action in the context of the original mess. The final criticism rests with the notion that although the social world may well be constructed by people, these perceptions are so entrenched that the people concerned are unaware of what they are doing. This is particularly poignant and significant in South Africa in the late nineties where the almost complete isolation of social groups from one another makes difficult the task of even conceiving that other *weltanschauungen* exist let alone have validity.

#### **4.5.4 The possibility of Spreadthink as a cause of slow progress**

However though the intervention so far had been useful in identifying in the minds of the participants the need for a plan there had been no further progress on the question of agreement on what that plan might be or even what the characteristics of that plan might

be. Confronted with this problem Warfield (1995:5 ) has the following comment:

*"'Spreadthink' refers to the demonstrated fact that when a group of individuals is working on a complex issue ... the views of the individual members of the group, the relative importance of issue-related ideas ... and proposed action maps, will be literally 'spread all over the map'".*

Examination of the departmental document dated 4 May 1999, and the Faculty produced document submitted to Senate as late as November 1999 this indeed was the position within one of the affected departments. Warfield (1995) regards these circumstances as immobilizing and shows how this can lead to inactivity as consensus is not possible. Without careful management of the process, attempts to bring the group to even a majority view can lead to 'groupthink' or 'clanthink'. Any decision made under these circumstances will lack individual support and also substance. Certainly initial empirical observation of the behaviour of this group bears out Warfield's proposition.

A solution is offered in a later paper (Warfield, 1996) in which he recommends the rigorous application of what is termed 'interactive management'. There was no time to test this proposition in this particular investigation. However attention should be drawn to sections of his paper that seem to have specific significance in this context. Warfield argues that analysis of the structure of a complex problem should not result in a model comprised entirely of prose. It was noted earlier in this paper that the group undertaking the SSM exercise did exactly this. He goes on to recommend the use of structural thinking to guide the intellectual mode of the participants. It is this hint of power broking offered by Warfield that should be noted. Until this point the process of developing a more effective response to tourism teaching in the province has been guided by the affirmed systemic principle of emergence. It was assumed that given careful consideration of the issues surrounding the teaching of tourism in the province, guided by appropriate methodologies, an agreed and improved design would emerge.

This did not happen. Proposals to redesign the academic ambit did emerge, thick and fast, but none were driven by the need to improve the teaching and research service for the province. The documents show that they were driven by the need to entrench the parlous position of participants worried about talk of rationalisation, merger and closure.

However the process has merely begun. The existence of RD 3 and the associated CATWOE and conceptual model are evidence that not only has the process of inquiry started but that it is gathering momentum. It might be that the agreement of all affected departments in this intervention to form a School of Tourism and Hospitality was assisted somehow by SSM. But as Checkland (var) himself maintains the desired outcome may have happened with another methodology. To use the words of Churchman (1971) which, although originally used to conclude a disappointing experiment in inquiry which was not SSM, are nevertheless apposite:

*"It is a technique which is very promising, terribly difficult, almost impossible to evaluate. In fact, it's just like any other plausible technique of education".*

#### **4.6 On the usefulness of TSI at meta level and SSM at operational level**

##### **4.6.1 The usefulness of TSI as a metamethodology**

The recursive framework of TSI enables core issues to be surfaced at every step. Not only are these issues concerned with the problem context but with the candidate methodology, its philosophy, principles and processes (Wilbey, 1996). Creativity, as discussed by Flood (1995) or by Ragsdell (1996) can be used at all steps to surface necessary information. The Choice phase forces participants to make decisions about core issues generated in the Creativity phase. In addition decisions are also required about how the information surfaced is used and interpreted. Wilby (1996) warns that it is vital that participants are able to develop the ability to be critically reflective about the biases, values, aims and philosophies of both methodologies chosen and of practitioners who implement them. It must also be recognised that the output from an intervention

will vary from one researcher or group to another as each occasion will be influenced by the process undertaken. This phenomenon must be recognised and acknowledged. Without TSI as a guiding influence it is very easy to ramble off track and lose the rigour necessary for successful research.

#### **4.6.2 The usefulness of SSM at operational level**

In the case of the intervention documented here SSM was the chosen methodology at operational level. To be able to undertake an interpretive document analysis was useful in this context, given the distances and the large groups involved. Although it proved possible to subsequently deliver the results of the analysis to all the stakeholders the TSI principle of participation was not upheld as it might have been. Joint analysis of the documents might have been rather cumbersome, but then the "rich picture" technique is able to meet the needs of this stream of cultural analysis with large groups. An example of a "rich picture" from this enquiry is to be found in Appendix B.

SSM exemplifies the characteristic of emergence and group learning. It is a vital and dynamic technique that has to be experienced first hand and not read about for the learning to take place. Individual participants are able to uncover how others make sense of the world as, interactively, they reveal how they make their own sense.

Although a revealing and creative technique SSM is also able to draw disparate threads together in that it forces people to review their own declared stance and compare it with the reality of current practice in the world. It is often at this stage that participants make concessions to accommodate the other groups. However it would be foolish to assume that unless there is a genuine desire to develop some sort of improvement SSM will neutralise hard core coercion or intransigence. SSM is at its best when, as in this case, there is commitment to improvement, just no agreement on the best way to proceed.

#### **4.7 Conclusion**

Building on the underpinning philosophy and grounded in theory outlined in Chapter Three a framework for the intervention was presented. The relationships between the metamethodology of TSI, the operational methodology of SSM, and the intervention itself were presented. It was shown how, in the Critical Review Mode tightly held assumptions could be dislodged and minds opened. The reasons why SSM Mode Two became the candidate methodology were reviewed and the implications and limitations of this decision stated.

Reflecting on the findings of the participants it was possible to follow the way in which group learning was emerging as a root definition was sharpened up from early purpose statements.

The chapter closed with a series of reflections on the success of the intervention at both meta and operational level.

## CHAPTER FIVE

### Conclusion

The focus of this study has been an intervention guided by Critical Systems Thinking to review the response of Technikon Natal, a prominent tertiary institution in KwaZulu-Natal, South Africa, to the needs of tourism education. It was acknowledged at the outset of the intervention that it was not expected that an agreed optimised solution to the problem of tourism education would emerge from this process. Indeed this did not happen. There has been organisational change at operational level, in the formation of a School of Tourism and Hospitality, but of more importance has been the change that has occurred at the epistemological level. Departments, and individuals within those departments, have been able to question entrenched views that isolated their work from other associated and possibly synergistic disciplines. Furthermore individuals have been tested teleologically. Pre-determined, long held assumptions about tourism and the component elements of that activity have been questioned and found wanting. Although perhaps not conscious of the fact, participants in this study are behaving as a result of the intervention in a more synergistic fashion and this is likely to stem from the systemicity of TSI Version Two.

Soft systems thinking, and Critical Systems Thinking, were themselves reviewed in the practical 'real life' context of a messy problem situation located in a busy tertiary institution with all the attendant pressures of time, power play, suspicion, fear and ambition. Although the overall conclusion must be that the goal of improved insight into a complex problem was achieved, not all of what was revealed was expected and nor was it always favourable.

#### **5.1 A review of the findings of the study compared with the goals of the research**

The primary purpose of the research was to inquire into the context, process and outcomes of an exercise to design a response to the needs of tourism education at tertiary level in KwaZulu-Natal. As background to this inquiry the research undertook a

classical review of literature that had discussed, defined and modelled tourism as an industry, a human activity and as an emerging discipline. Although the writing goes back over 30 years there is little agreement on the boundary limitations of tourism as a discipline. The discipline is seen to trespass onto the academic territory of others such as geographers, anthropologists, economists, business scientists, environmentalists and providers of service such as hospitality, accommodation and transport. Each of these activities undertaken on its own is exactly that, an activity on its own. Taken together, systemically, they become tourism - the worlds biggest industry. The evidence provided in the literature review, and in the early stages of the TSI intervention, suggest that people do not take a systemic stance, but operate in isolationist mode.

### **5.1.1 The review of the problem context**

The lack of agreement on a tourism definition and the uneasy suspicion that tourism as a discipline might be encroaching on traditional more established disciplines was reflected in the way in which tourism teaching at tertiary level is being organised in KwaZulu-Natal. The Burger et al (1999) survey revealed an uncritical but eclectic selection of courses offered by a variety of departments located in diverse faculties. This reinforced the opinion that tourism education was in demand, but there was little agreement how that demand might be met.

A review of national and provincial government policy and legislation confirmed the belief that the tourism industry was seen as a potential catalyst to expand the economy of the country. There was no specific guidance on how tertiary education might assist this to happen. At provincial level, policy documents, demographic studies and economic statistics were examined and also found to provide evidence to support the perception that an enlarged tourism industry would lead to an improved provincial economy. It was also admitted in one document that tourism education and training had not received the support that it was due.

As Technikon Natal is a tertiary education institution with a dedicated tourism department which currently does offer a variety of tourism programmes the study was able to focus on that one institution as it underwent a process of review in the academic ambit. The Department of Tourism submitted documents that closely argued the case for increased commitment to tourism education. Although acceptable to the senior academic manager the plan found little favour with other members of the academic management body, Senate. It was at this point that the traditional approach to uncover the optimum design for tourism education began to falter. Despite the accumulation of evidence, the consultation with local tourism stakeholders and the presentation of a well planned proposal, there was little concrete support from within the Technikon for the proposals to offer an improved tourism response. Examination of the Burger et al (1999) review made it clear that other institutions were facing similar problems and traditional 'hard' methods of research were failing to uncover the reason.

#### **5.1.2 The congruence between soft systems thinking and the problem context**

The study next turned to a review of soft systems thinking. Specifically designed not only to address complex and ill structured problem contexts such as tourism itself, soft systems thinkers deliberately reject the assumption that the world is an orderly place and actively seek out the subjective "value-full" views held by people involved in problem contexts. This stance is exemplified by Checkland who holds that a model developed from a Soft Systems Methodology analysis may not be an accurate representation of the real world, but it will certainly model how participants view that world. These perceived views form the basis of debate from which a clearer picture of what is actually culturally feasible, as well as desirable, begins to emerge.

There are many strands of soft systems thinking and this study presented a critical review of their philosophical underpinnings and theory which grounds their various methodologies. A discussion on rigour and validity in soft systems thinking preceded an analysis of the problem context of tourism education from a systems perspective. There



was support from other authors that the problem in focus was demonstrating systems characteristics and would benefit from further inquiry guided by the principles of Critical Systems Thinking.

### **5.1.3 The framework for intervention**

A framework of inquiry was devised based on TSI Version Two. This was to guide the intervention. Then SSM was chosen for the operational level of the intervention. One criticism of soft systems thinking, from those grounded in hard systems, has been that of rigour and validity. This issue was discussed with reference to the work of Churchman (various), Checkland (1995, 1998), Finlay and Watson (1998) *inter alia*. It was concluded that although the concept of validation was different in the soft systems genre rigour and validity were possible. The use of a methodological framework, declared in advance, grounded in theory, was one essential constituent for rigour.

### **5.1.4 The intervention**

A decision had been made, by the researcher, based on the advice of earlier practitioners such as Checkland and Scholes (1990) and Warren and Adman (1999) to restrict the amount of jargon used in the presence of participants. It was also decided to proceed with the workshops and meetings studied without declaring in advance that there was any particular methodology in place. It was clear to the participants that some form of method was being employed. Nevertheless the warnings in the literature about participants fears of manipulation, and the emergence of power play proved to be accurate. The creative techniques used when the intervention was in Critical Review Mode, metaphor and scenario, proved to be very powerful in that they challenged the entrenched assumptions of many participants to the point of generating alarm. Responses to this varied from inspiring some participants whilst others stopped attending meetings.

The TSI Version Two derived framework proved to be invaluable in providing the focus necessary to guide the process. An integral feature of this version of TSI is the recursivity which, whilst sophisticated can lead to confusion and incoherence. The secondary purpose of this research was to reflect on the operational attributes of soft systems thinking. The findings were in line with those of Warren and Adman (1999) in that TSI in particular was very user unfriendly, to the point that it cannot be used in the usual workshop context facing the practitioner, that of three hours reluctantly snatched from participants who have pressure to be elsewhere. At the risk of seeming elitist the recommendation is that TSI has proved to be invaluable as a guiding framework for experienced facilitators grounded in the philosophy of Critical Systems Thinking. Providing the four guiding principles of TSI are adhered to (Flood, 1996:100), that of systemicity, participation, reflection, and choice, it really need not matter that the participants are not fully versed in the roots of TSI.

The overriding purpose of the Mode 2 SSM analysis was to extend inquiry beyond the technical. The Department of Tourism had supplied a technically sound proposal and it had proved to be inadequate. Incorporating the social and political analysis streams of SSM helped achieve a clearer picture *not* of the real world *but* of how the real world was perceived. This proved to be the turning point. The perceptions of the needs of tourism education when viewed from the perspective of the Pietermaritzburg based participants were very different to that of the Durban based participants. More significant was the emergent realisation that decisions affecting the design of a tourism education system were being driven by factors other than those to be found in the immediate context of tourism as presented in Chapter Two. Power play, status, family commitments, fear, ambition, ignorance and in some cases a wish to re-create the past all proved to be strong driving forces. It remains to be seen how future use of soft systems thinking will cope with these potentially coercive elements.

Whether the commitment to the emancipatory component of Critical Systems Thinking will overcome these influences will largely depend on the participants view of emancipation. Some might view emancipation in these very terms.

Also of practical significance was the realisation, as the meetings and workshops proceeded, that the isolationist position of many departments was untenable in the long term. As it became more clear how participants were each viewing the problem context so too it became possible to accommodate those perceptions in ones own world view. A process of learning was taking place. Documents that record vehement opposition to inter departmental co-operation early in the process can be compared to the current situation of a School of Tourism and Hospitality comprising of just those departments.

## **5.2 A summary of outcomes from the research**

A summary of outcomes from this research follows:

- a classical review of the problem context of tourism education is necessary but does not provide enough insight to design an ideal plan
- tourism as a human activity, a discipline and an industry exhibits the characteristics of a system
- in order to have greater insight tourism in all forms must be viewed systemically
- the inquiry into tourism education is enhanced by the principles embodied in soft systems thinking
- intervention frameworks based on the principles underlying TSI provide sound guidance
- TSI as a methodology is difficult and almost incomprehensible to newcomers under workshop conditions often encountered in the field
- the use of metaphor and scenario during Critical Review Modes of TSI proved powerful and effective techniques to challenge assumption and provoke creative thought

- SSM was successful in uncovering alternative perspectives and in the development of an agreed outcome (the School of Tourism and Hospitality)
- SSM has also uncovered many issues that might be regarded as coercive, these have been accommodated but not accepted
- soft systems thinking leads to organisational learning and this is not synonymous with manipulating organisational learning
- organisational learning has enabled problems to be managed but not solved - there is still no optimised plan for tourism education
- there cannot be an optimised plan for tourism education
- there is no need for an optimised plan for tourism education
- the principles of systemicity, participation, reflection, and choice embodied in TSI will lead to adaptive planning.

The overriding practical outcome of this research is that it has helped reveal to participants the relationships that exist between elements in the tourism education system. It has helped them locate their own position in, or out, of that system and it has helped reveal previously unknown perspectives upon what were once taken as unchallengeable assumptions.

There remains the framework of intervention and this may well be employed to address future problem contexts as they emerge. As Churchman (1971:201) states, "the inquiring system has no real terminating point on any issue".

### **5.3 Areas for future research**

Some areas for possible future research in this field include:

- further inquiry into the issue of boundary as considered by Ulrich (1983) and its relationship with such a far reaching area as tourism
- examination of the work of Brown (1996), who presents a framework to assist with the assessment of participation in soft systems thinking, in relation to tourism

- application of other soft systems methodologies to other areas of tourism, including but not limited to, development, management, and impact of tourism
- whether there is long lasting commitment to systemicity within the new School of Tourism and Hospitality.

This research has aimed to draw together the complexities that exist in tourism planning, and here specifically planning for tourism education. It has introduced the notion that soft systems thinking is able to assist with the inquiry into the 'messy' problem area that is tourism. Although primarily focused on the specific area of tourism education at tertiary level it is apparent from the findings that soft systems thinking has the potential to assist with inquiry in this environment in ways not possible with traditional hard techniques.

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