

THE STRING MODEL: A GESTALT APPROACH TO CONSULTING PSYCHOLOGY

by

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Whatever our achievements, they are unquestioningly the product of affectionate people who nurtured our aspirations. Those who hold us in high esteem, who encourage us in moments of confusion and despair, who support our self-confidence by sharing our dreams and who urge us into the future by their expressed faith in our capacities, are surely the agents of our unfolding.

(Harry Levinson, Dedication. 1972)

SUMMARY

This exploratory research addressed the challenge of improving consulting psychologists' ability to add value to their clients in a complex world, in which it is increasingly difficult to differentiate and understand domain phenomena and to promote healthy growth and development in individuals, groups and organisations. To solve this problem, a Gestalt Approach, comprising the String Model and a congruent methodological framework, was developed using analogies and metaphors from the physical sciences.

The Gestalt Approach was applied at the individual, group and organisational levels. The String Model promoted excitement and interest in the client systems and desedimented preconceptions and patterns of thinking, facilitating the destruction of existing figures, and the differentiation and exploration of new figures from background phenomena. The methodological framework promoted experimentation and dialogue in an environment conducive to exploration and promoted contact with foreground phenomena.

At the individual level, awareness was heightened of the role and development of a historically disadvantaged South African. The individual and the position for which he was being developed were described in terms of the String Model, creating insights which were not in the client system before. A clear, holistic picture of the individual's developmental areas emerged. The approach facilitated contact between the individual and key roleplayers who must create an enabling environment and provide resources conducive to individual development.

At the group level, the String Model proved useful in assisting a Board of Directors to clearly differentiate the Board from other groups in the client system. Discussion amongst the participants, who had diverse perspectives, promoted a common understanding of the Board's structure and functioning. Participants were able to differentiate the current dysfunctional status of the Board from the ideal in String Model terms and develop a joint plan to make the Board a healthier entity.

At the organisational level, the model according to which a gold mine was structured and managed, was changed due to insights engendered by the Gestalt Approach. The String Model proved to be useful in conceptualising the mine as a whole, with the various sub-systems thereof inextricably related. Changes were made that promote interaction, communication, integration and performance.

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Note. Tables and figures are reported according to APA Style Guidelines (APA, 2006).

CHAPTER 1 SCIENTIFIC FOUNDATION

1.1 INTRODUCTION

This chapter describes the scientific foundation of this research. In the research, a tool is created that can be used by consulting psychologists to assist their clients to optimise their ability to develop and to become, in their own experience, the best that they can be. The research is contextualised against the background of the complex and rapidly evolving work environment and the challenges that it poses to clients and thus also to consulting psychologists. According to the Society of Consulting Psychology (American Psychological Association [APA], 2005), an onus is placed on those practicing in the field of consulting psychology to be *catalysts* for growth and development.

Consulting psychologists operate within a very competitive environment, where there is significant competition to provide consultation services. Specific attention is therefore paid to the need for consulting psychologists to develop both the field of consulting psychology as a science *and* the value that they add to their clients in practice. It is only by differentiating their services from those of other consultants in terms of the value that they are able to add, that consulting psychologists can realise their contributions to their clients, to the field and to themselves.

The research problem originates from the need to, as Gibson (1997, p.10) states, “rethink the future” in order to be more competitive and to further establish the field of consulting psychology. *A priori* specifications for a solution to the research problem are provided to guide the formulation of a general and several specific research questions. Aims are formulated to guide the process of answering the research questions. The Integrated Model of Social Sciences Research (Mouton & Marais, 1990) is used to conceptualise and operationalise the research.

Relevant meta-theoretical and theoretical concepts are defined, as are the researcher's theoretical and methodological convictions. The research goal and research strategy are defined and described, as are the units of analysis and a detailed research procedure is presented, highlighting the flow of the research through the various chapters. Elements of the reliability and validity of the research are discussed. A breakdown of the chapter divisions is provided. The scientific foundation of the research is concluded with a summary.

1.2 CHALLENGES IN THE CONSULTING ENVIRONMENT

The consulting industry is one of the fastest growing (and most competitive) in the world (Carnegie Mellon University, 2005). However, this growth brings with it serious challenges. In a study of the global consulting market, published by Kennedy Information Incorporated (2003), various factors, including increasing uncertainty in terms of global peace and increased outsourcing, are leading to declining spend on consultants. The market is increasingly favourable for the buyer of consulting services. This trend is augmented by a strong focus on demonstrable results – organisations and people spending money on consultants to see real, visible results, rather than only on processes and effort.

According to a study published by Texas A&M University (2006), consultants may be employed by management consulting firms that address a wide range of problems and industries; consulting firms that focus on company strategy; functionally specialised firms that target a specific function, such as information technology, employee benefits or market research; industry specialised firms, focusing on a specific industry, such as financial services or healthcare; local firms that define their work on the basis of geographic scope or tailored around local business; and solo practitioners who are experienced individuals, hired for their specific knowledge. Consultants from virtually every walk of life and educational background are to be found in the world of consulting. Additionally, it should be borne in mind that clients may themselves be at the cutting edge of technology and have substantial experience of managing individuals, groups or organisations successfully. They are also, in a sense, in competition with consultants.

There is an increasing focus on consulting projects that are oriented toward profit generation, rather than toward continuous investment in initiatives that yield so-called *soft* results. Revenue per professional consultant is down and utilisation rates have dropped generally, although the researchers mention some notable exceptions (Kennedy Information Incorporated, 2003).

There is an increasing consolidation of the professional services industry (Kennedy Information Incorporated, 2003). Whilst this can bring about economies of scale, decrease relative overhead costs and pool intellectual capital, it can make such consolidated entities difficult for individual or smaller groupings of consulting psychologists to compete with (Sheth, 2003).

Furthermore, as Marjatta and Poulfelt (2000) point out, consultants operate in an industry that has a globalised knowledge base. Their competitiveness depends on the improvement of their competencies, knowledge base and learning skills. In this environment, consulting psychologists' knowledge easily becomes mundane, outdated or commoditised.

The trend towards commoditisation of services that has been so prevalent in the retail sector is expanding into the professional services sector (Sheth, 2003). Developments in computer software programming and the internet further drive the commoditisation of general consulting products and services, as well as psychological consultation. Psychological assessment services are already packaged for online use and are pervasive on the internet. A search of the World Wide Web for the term *online personality test* using the Yahoo search engine (Yahoo, 2006) yielded approximately 48,000 websites that claim to offer this service (the search took 0.13 seconds to complete). Clients can buy (allegedly) good quality psychological services or products at very little cost and with instantaneous feedback.

According to Sheth (2003), clients will increasingly expect a standard product from consultants. In the rapidly changing world of work, clients expect rapid and personalised service, not necessarily a personal relationship with the professionals providing these services. It will become more difficult for consultants to differentiate themselves and the value that they can add, so that they are able to thrive in healthy career and field.

Sheth (2003) states that professionals who wish to remain competitive in this environment need to leverage their intellectual capital and differentiate the services that they offer clients and the value that they add to their clients' work. They will need to demonstrate both depth and breadth of knowledge, have good listening skills and ask excellent questions. They will need to synthesise phenomena in the consulting environment and provide insights to for their clients in a collaborative relationship of personal and professional trust.

The Education and Training Committee of the Society for Consulting Psychology of the American Psychological Association (APA, 1999) describes consulting psychologists as professionals who are able to apply and extend the special knowledge of psychologists, through the process of consultation, to problems involving human behaviour in various areas. Consulting psychologists may be in independent practice or may be employed by companies in various industries. Their clients may be individuals, groups or organisations.

In addition to the challenges presented above, the nature of the field of consulting psychology itself provides many challenges. The American Psychological Association (APA, 1999), describes the competency domains of the consulting psychologist as including the individual, group and organisational levels of consulting. These domains constitute an enormous universe of potential knowledge and skill that must be holistically integrated before they can be used with optimal effectiveness in consulting assignments.

Pidd (2003) cautions that whether considering individual, group or organisational perspectives, the world is becoming increasingly complex and is always changing. The scope and complexity of individual, group and organisational phenomena places a burden on consulting psychologists in terms of the volume of potential variables that impact on conducting an effective consulting project. Clients (and consulting psychologists) can feel overawed and invaded by variables and pressures in their interactive fields. They have to respond to these in terms of their existing biological and psychological frameworks. This often leads to ineffective adapting behaviours and perceptions, such as that of the environment being against them.

It is becoming increasingly difficult to understand what is important from what is unimportant, i.e. to clearly differentiate issues that are central and should occupy attention from that which is not. Everything that exists is interrelated. Individuals, groups and organisations are not independent, but “together constitute a functional, mutually influencing, total system (Perls, Hefferline & Goodman, 1951, p.73). In the global environment, the constant advances in technology and the availability thereof, it is not surprising that many people feel that they cannot cope with the demands of their working environments. Naturally, groups and organisations are affected by the impact of these 21st century phenomena on their employees.

People often work together in what Perls, Hefferline and Goodman (1951) refer to as a state of *confluence*. Often, they work in situations where they work with one another, but do not really make meaningful contact, either with one another or with phenomena in the interactive field. They develop patterns of resistance in order to avoid authentic contact. This can manifest in many ways, from avoiding responsibility, to anxiety, the inability to make decisions, endless meetings or withdrawal.

Schein (1992) regards one of the main indicators of value adding to clients to be that clients request services at the individual, group and organisational levels. According to JJN de Coning, a consulting psychologist with more than 20 years of experience (personal communication, 23 May 2006), adding value is a function of creating a desired improvement in the level of one or more aspects of quality, quantity, speed, cost or sustainability. Adding value to clients against the backdrop of all the phenomena in the client system is the most important contribution of consulting psychologists.

It is important to remember, as Sperling in (Solso, 1997) states, that although there are powerful approaches in psychology, these approaches account for only part of the explanation of phenomena. Two of the reasons for this are, firstly that evolution has provided organisms (such as humans) with complex, interacting, innate mechanisms and secondly, the ability to learn makes humans incredibly complex functions of their history. These characteristics apply equally to groups and organisations. Accordingly, the behaviour of individuals, groups and organisations is viewed as complex and only partially explained by means of any particular psychological approach.

In his article entitled *People Whose Ideas Influence Organisational Culture*, Schein (1992, p.88) states that consultants require "new levels of perception and insight into the realities (of phenomena), extraordinary levels of motivation to go through the inevitable learning and change, new skills in analysing and changing assumptions and the ability to learn the assumptions of a whole new model". When consulting psychologists fail to recognise or take heed of the elements, dynamics and development of phenomena in the consulting domain, or fail to deal with them, they are unable to optimise the contribution that they can make (Williams & Woodward, 1994).

From an education and training perspective, at masters and doctoral level, consulting psychologists have to begin forming a Gestalt of the field for themselves, integrating the wealth of information into their personal knowledge bases (Eraut, 2005; Harrison, 1995; Levinson, 1991) and utilising this to diagnose, explain, predict and intervene at the individual, group and organisational levels. They must also be able to integrate this with the interactive field in which they are working – the industry and business of their clients - in order to be able to add value to their clients. They must be able to form Gestalts of the client systems in which they are working and be able to break their Gestalts and those of their clients, when required, leading to excitement, change, growth and development.

1.3 THE ONUS OF BEING A CATALYST

If individuals, groups and organisations are to thrive (not merely to survive) and grow, they will have to, as Handy (1997, P.8) says “stay ahead of the change curve, constantly redefining their industries, creating new markets, blazing new trails, reinventing the competitive rules, challenging the status quo. They will invent the world, not respond to it”.

The Society for Consulting Psychology of the American Psychological Association (APA) describes the Division of Consulting Psychology as the catalyst division (APA, 2005). This statement demands that they do stay ahead of the change curve. In order to inject a catalytic presence into the consulting domain, it is important for consulting psychologists to create new insights, knowledge and approaches that work in the world of work that enables them to stay ahead of the competition. Consulting psychologists must become more effective at what Eraut (2005) describes as integrating their knowledge of psychological approaches, theories, models, methods and techniques, with their personal knowledge and be able to translate this knowledge into effective consulting solutions that add value to their clients. This demands utilising Gestalt psychological principles to challenge existing Gestalts and the creation of new, more suitable Gestalts to replace them.

In their discussion of the challenges of increasing professional effectiveness, Argyris and Schön (1974) state that effective action (in the sense of consulting action) requires the generation of knowledge that crosses the boundaries of traditional disciplines with as much competence and rigour as each discipline usually demands. Kaku (2004) emphasises the potential for generating new knowledge across the boundaries of disciplines, specifically, in the disciplines of physics, biology and psychology.

Handy (1997, p.9) states that people “can’t look at the future as a continuation of the past...because the future is going to be different. And we really have to unlearn the way we deal with the past in order to deal with the future”. Toffler (1990, p.7) describes the “landscape of tomorrow” as “*terra incognita*” and Gibson (1997, p.7) refers to the journey into this unfamiliar terrain as “requiring a new kind of vehicle, different driving skills and a new sense of direction.” These are particularly important prescriptions for scientists and practitioners in a field that positions itself as the *Catalyst Division*, if the field means to deliver on the promise that it makes to itself, its members, its clients and the community.

Gibson (1997, p.10) describes one of the most important elements of rethinking the future as “rethinking the principles by which we will deal with the future – those principles upon which people base their views of organisations, societies and people”. In Gestalt terms, this requires crystallising the client’s need into a figure in the foreground, which provides the basis for organising the client’s behaviour, leading to growth and development (Perls, Hefferline & Goodman, 1951).

From the perspective of leveraging clients into a position ahead of the change curve, Mezirow (1997, p.1) states that engendering learning in a client system involves effecting a change in the client’s frame of reference (the Gestalt), in terms of experiences, associations, concepts, values, feelings, habits of mind and points of view and making these more accessible to consciousness than the habitual ways of thinking, feeling and acting.

Schein (1999) states that truly effective consultants are able to provide clients with more than an off-the-shelf solution or a set of standardised tools and techniques. Thus, an innovative, holistic, integrated approach that can accommodate the complexity of the world of work in the 21st century and assist consulting psychologists and their clients to break down their traditional or habitual ways of perceiving and working with domain phenomena and replacing them with more powerful ways is required. Such an approach would that assists consulting psychologists and their clients to contact with, and become aware of, connections among phenomena in the environment in an authentic and holistic manner will offer a great opportunity for consulting psychologists to compete successfully in the consulting environment, by adding unique value to their clients.

According to Senge (1990), working with mental models offers the highest leverage for change in a discipline, although it may seem to be predominantly an intellectual exercise with little relevance to the outside world. However, if the mental model generated is linked with action, it can lead to practical results, that are valued by clients. A mental model can facilitate understanding, prompt investigation and innovation – looking at problems in the domain of consulting psychology in a different way.

Ideally, a new approach would comprise a mental model, accompanied by a congruent methodological framework. Rather than being prescriptive, inflexible or restrictive, this approach should facilitate the ability of consulting psychologists and their clients to perceive the consulting domain differently.

It should enable clients to think and make connections between phenomena that are not apparent (or remain undifferentiated) without the unified mental model and methodological framework (Harrison, 1995). This implies an understanding of, and insight into, the principles, structures, dynamics and developmental issues of Gestalt psychological consultation as well as those phenomena in the client system and the consulting situation.

A new approach must provoke an awareness and understanding of domain phenomena in a new way by promoting new connections and insights. It must enable participants in the client system to perceive phenomena in vivid and meaningful detail. It must be a conceptual and a practical tool that makes consulting psychologists more confident and competent in performing consulting services. Consulting psychologists must be able to use the approach to assist clients to develop a deeper understanding of phenomena in the client system. Such an approach would empower consulting psychologists to add additional value to their clients and by using such an approach effectively, strengthen the position of the profession of consulting psychology.

1.4 RESEARCH PROBLEM

The problem is that there is no holistic, integrated approach (comprising a suitable mental model and a congruent methodological framework for its deployment in practice) that has been developed within the field of consulting psychology, which is based on sound psychological principles, which may be used simultaneously at the individual, group and organisational levels of psychological consultation and which assists consulting psychologists and their clients to develop a more unified and healthy perspective of the interactive field.

Many approaches address psychological aspects in the world of work, but few can be applied in the manner of the Gestalt approach, with its roots in existentialism, phenomenology, holism, field theory and systems theory. For example, the psychoanalytic approaches emphasise the unconscious (not holistic) or they use terminologies and concepts with which clients are unfamiliar. More Rogerian approaches also require the roles of doctor and patient, which may not be appropriate in the business world. Many approaches also imply that there is something wrong or dysfunctional in the client system, whereas in many cases, the clients may be very successful and may be functioning well. They thus require (and deserve) assistance to further grow and develop without the implication that there is anything *wrong*.

A Gestalt mental model, such as the String Model, together with a Gestalt oriented methodological framework (both developed in this research), can provide a *tool* or *substrate* which can be used as the object of attention representing an individual, group or organisation. The mental model would encourage participants in the client system to become aware of the object of attention as a progressively more unified, bright and sharp *figure* against an increasingly clean or empty *ground*, that is, as what Yontef (1993, p.261) refers to as a “good Gestalt”. This will enable participants in the client system to relegate that which is not important for understanding the figure in the *here and now*, to the *ground*, simplifying the inherent complexity of the client system. As Perls, Hefferline & Goodman (1951) state, the background then becomes unattractive and clients lose interest in it, whilst becoming excited and attention are directed at the important issues of the *figure*.

A Gestalt approach must be developed that will assist consulting psychologists and their clients to make significant and meaningful contact with phenomena in the interactive field and to develop greater awareness of, and insight into these phenomena. Such an approach would use psychology theory to organise and render more meaningful, what Ogden (1999) refers to as the immediate interpersonal and intrapsychic experience of participants. In this way, individuals, groups and organisations can become more able to achieve greater levels of performance, success, meaning and health.

1.5 PRESCRIPTIONS FOR THE PROPOSED SOLUTION

In terms of research problem and, given the scientific and applied nature of the field of consulting psychology, a number of *a priori* prescriptions for the proposed solution are stated.

The Gestalt approach, to be developed in the research, should:

- Originate within the field of consulting psychology and thus be applicable to the world of work, marrying work and psychological concepts into a unified, complete approach;
- Be suitable for use at the individual, group and organisational levels of consultation;

- Operate at a level that makes it independent of the nature of the business or industry of the client, where the client is located or the nature of the specific psychological consultation project;
- Be flexible enough to accommodate as great a range of psychological methods, tools and techniques as possible, depending on the preferences of consulting psychologists and their clients;
- Promote attention and excitement in the client system, as well as the progressive formation of a unified figure which is well differentiated from the ground – the basis of a good Gestalt, enabling consulting psychologists and their clients to effectively structure (or restructure) their interactive fields;
- Provide a significantly different way of perceiving and experiencing domain phenomena and expose new perspectives of the nature of these phenomena and the connections between them, allowing for growth and development and breaking down traditional, functional or silo perspectives of domain phenomena;
- Be, according to Professor Frans Cilliers, of the University of South Africa, both complete and relatively simple, so as to improve the user-friendliness thereof (FvN Cilliers, personal communication, 5 February 2005). This will assist consulting psychologists and their clients to use the approach in the consulting situation.

These prescriptions are stated *a priori*, and are used to assist the researcher to explore the interactive field of the entire research domain and to conceptualise and operationalise the research in terms of appropriate and relevant elements. Accordingly, these prescriptions inform the research questions that flow from the research problem.

1.6 RESEARCH QUESTIONS

In the process of conceptualising and planning the research, the following questions are posed to structure and guide the formulation of aims for research activity. A general research question is provided and this is elaborated upon in terms of specific research questions, each related to specific aspects of the research domain.

1.6.1 General research question

How may a Gestalt approach to consulting psychology, comprising a mental model and congruent methodological framework be derived and developed, that promotes unique insight into domain phenomena and assists consulting psychologists and their clients to break down their sedimented perspectives of phenomena in the client system, to contact with other participants and issues in the interactive field, to experiment and to create different perspectives, based upon increased awareness and insights?

1.6.2 Specific research questions

The following specific questions are posed in order to interpret and deploy the general research question in the context of this research.

- Question regarding consulting psychology

What is consulting psychology, what is the state of the field, what are its theoretical and practical underpinnings, what services do consulting psychologists render, what competencies should they have and how may Gestalt psychological principles be applied to the theory and practice of consulting psychology?

- Question regarding the intrapsychic aspects of consulting

What is the nature of the intrapsychic processes that govern the manner in which consulting psychologists and their clients become aware of, interpret and experience domain phenomena and what guidelines may be formulated and borne in mind when attempting to derive a mental model and congruent methodological framework, so as to optimise their value in the context of consulting psychology?

- Question regarding the derivation of a mental model

How may a mental model be derived that is unique, congruent with the theoretical and practical underpinnings of the field of consulting psychology, Gestalt consulting principles and that is optimised in terms of the intrapsychic processes that govern awareness, interpretation and experience of domain phenomena?

- Question regarding the development of a methodological framework

How may a methodological framework be developed that is congruent with the theoretical and practical underpinnings of consulting psychology, Gestalt consulting principles and that facilitates the application of the mental model, derived in the research?

- Question regarding the application of the Gestalt approach

How may the Gestalt approach to consulting psychology, derived in the research, be applied to consulting projects at the individual, group and organisational levels of consulting?

- Question regarding resolving the research problem

What conclusions may be drawn, regarding the extent to which the Gestalt approach that was derived and applied in the research, has resolved the research problem, what are the limitations of the research and what recommendations may be made for further, related research?

1.7 AIMS

A general aim for the research is stated below and expresses how the general research question will be answered. This is followed by a statement of specific aims, directed at guiding the process of answering the specific research questions.

1.7.1 General aim

To develop a Gestalt approach to consulting psychology, deriving a mental model and developing a congruent methodological framework that promotes unique insight into domain phenomena and assists consulting psychologists and their clients to break down their sedimented perspectives of phenomena in the client system, to contact with other participants and issues in the interactive field, to experiment and to create different perspectives, based upon increased awareness and insights.

1.7.2 Specific aims

The following specific aims correspond to the research questions posed in section 1.6 and to guide the research process that follows.

- Aim regarding consulting psychology

To conceptualise the field of consulting psychology, the theoretical and practical underpinnings of the field, the services consulting psychologists render and what competencies should they have and to apply Gestalt psychological principles to the theory and practice of consulting psychology.

- Aim regarding the intrapsychic aspects of consulting

To investigate the nature of the intrapsychic processes that govern the manner in which consulting psychologists and their clients become aware of, interpret and experience domain phenomena and to formulate guidelines to be borne in mind when attempting to derive a mental model and congruent methodological framework, so as to optimise their value in the context of consulting psychology.

- Aim regarding the derivation of a mental model

To derive a mental model that is unique, congruent with the theoretical and practical underpinnings of the field of consulting psychology, Gestalt consulting principles and that is optimised in terms of the intrapsychic processes that govern awareness, interpretation and experience of domain phenomena and to test the effect that this has on improving clients' Gestalts.

- Aim regarding the development of a methodological framework

To develop a methodological framework that is congruent with the theoretical and practical underpinnings of consulting psychology, Gestalt consulting principles and that facilitates the application of the mental model, derived in the research.

- Aim regarding the application of the Gestalt approach

To apply the Gestalt approach to consulting psychology, derived in the research, to consulting projects at the individual, group and organisational levels of consulting in order to test the effect that the approach has on improving clients' Gestalts.

- Aim regarding resolving the research problem

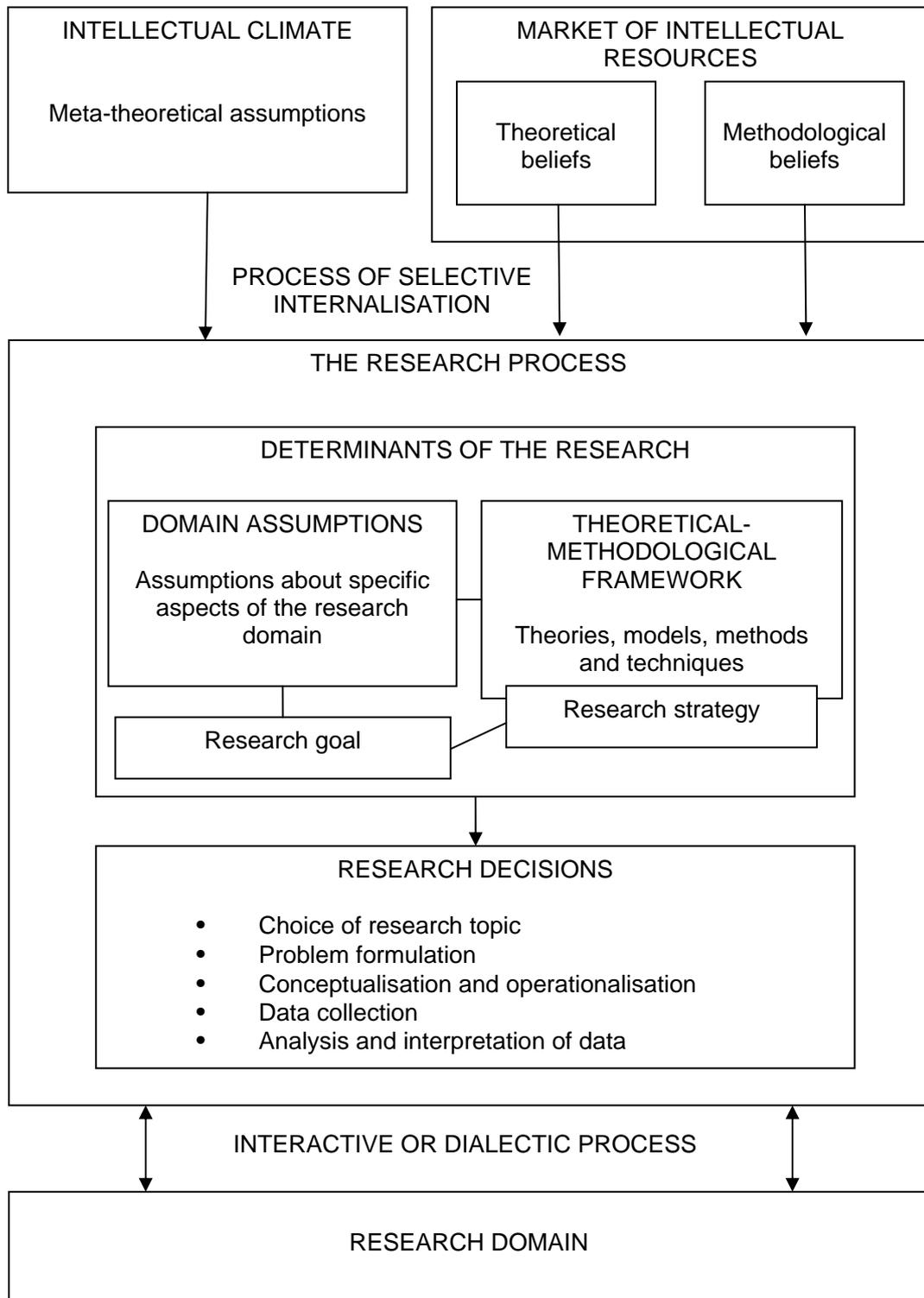
To draw conclusions regarding the extent to which the Gestalt approach that was derived and applied in the research, has resolved the research problem, to explore the limitations of the research and to make recommendations for further, related research.

1.8 RESEARCH MODEL

The research is guided by the Integrated Model of Social Sciences Research (Mouton & Marais, 1990). The following discussion is based on Figure 1.1 below and outlines the research domain and the process of selectively internalising meta-theoretical concepts and assumptions about the nature of man as well as theoretical and methodological beliefs, to the research. It also describes the research process *per se*. The research process reflects the determinants of the research, the decisions made and the interaction between these and the research domain. This research model effectively promotes the development of figure (this research) from the ground (the interactive field) with its emphasis on selective internalisation of metaparadigmatic concepts and research decisions.

According to Mouton and Marais (1990), the researcher should consider various sociological, ontological, teleological, epistemological and methodological aspects that, together, constitute the prevailing intellectual climate, from within the research domain. The researcher must also consider the available market of intellectual resources available within these meta-theoretical perspectives. These theories, models, methods and techniques must then be selectively internalised to the research in a congruent manner.

Figure 1.1
Integrated Model of Social Sciences Research

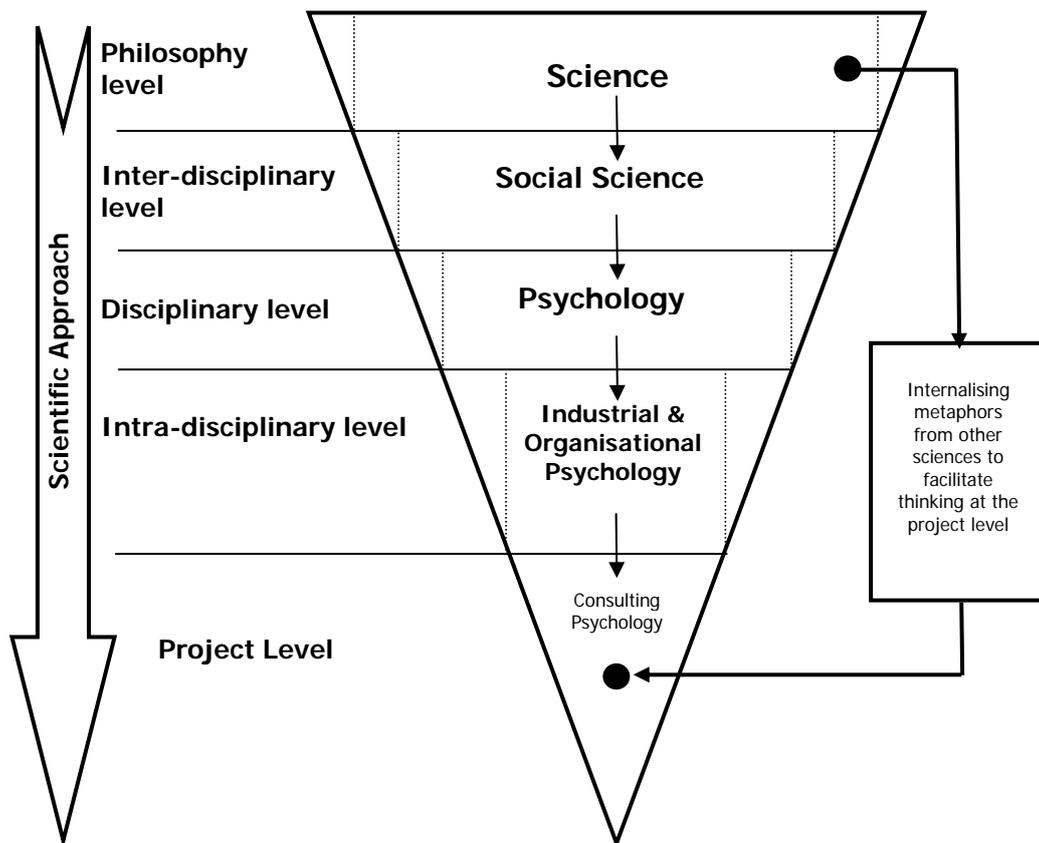


Note. From Mouton & Marais (1990).

1.8.1 Disciplinary relationship

Figure 1.2, constructed by the researcher, illustrates the disciplinary relationship of this research in terms of various meta-theoretical and theoretical levels and is described below:

Figure 1.2
Disciplinary Relationship of the Research



1.8.1.1 Philosophy level

At the philosophical level, the research adopts a scientific approach. Kerrod (1983) describes science as a broad field of human knowledge, acquired by systematic observation and experiment and explained by means of rules, laws, principles, theories, models and hypotheses. The researcher views reality as what Bergson in Wulf (1996, p.126) terms, "a process of becoming" and that life is "becoming, acting and action (*élan vital*)".

The research relies strongly on the phenomenological proposition that consciousness, which is seen as containing and comprising the entire horizon of the world and the meaning of all known objects, must be understood *from the inside*, through the use of the intrapsychic processes (Wulf, 1996). It also draws on existentialist perspectives of individual human existence and issues related to the meaning of human existence, freedom and destiny (Wulf, 1996). There is a strong focus on understanding *what is* and on considering human beings in their life situations, connected to the world and to other human beings.

1.8.1.2 Interdisciplinary level

Wulf (1996) describes the beginning of the 20th century as having been characterised by the explosive development of science. The scientific disciplines of physics, biology, chemistry and medicine were making rapid progress. According to Kaku (2004), a theoretical physicist, the three main challenges of the 21st century, are the study of matter, biology and the mind. He views that task of science as being to cross-pollinate the advances in these three areas. This point of view is critical in terms of the interdisciplinary perspective of this research, which is open to the cross-pollination of ideas, concepts, analogies and metaphors from the study of matter (physics), living organisms (biology) and the mind (psychology).

The social sciences aim at describing, explaining, predicting or intervening in the development and behaviour of social systems (Kerrod, 1983). Bornstein and Lamb (1999) regard the social sciences (anthropology, economics, education, environmental disciplines, history, political science and sociology) as the closest allied disciplines to psychology. However, there is tension between the disciplines, for example, over the issue of resolving whether individual behaviour aggregates to social and cultural behaviour (for example, psychology) or whether aggregate level social and cultural behaviour help to explain individual conduct (for example, sociology).

This research does not challenge the various physical and biological science rules, laws, principles, theories and hypotheses but accepts them at the meta-level. The reason for exploring what may be gained from these allied disciplines is an attempt to cross-pollinate the researcher's thinking at the project level with metaphors and analogies based on selected elements from these sciences.

1.8.1.3 Disciplinary level

At the disciplinary level, the research is conducted from within the discipline of psychology. As a science, psychology evolved from primordial currents in philosophy and the natural sciences (Boeree, 2000a). He adds that psychology should not have any boundaries imposed on it by scientists or practitioners. Once again, this supports the notion of attempting to create new knowledge and insights using concepts from other sciences.

McCormick and Ilgen (1985) describe psychology as the scientific study of behaviour. This includes the behaviour of any organism, human and non-human. Psychologists seek to do this through four basic goals: description, explanation, prediction and intervention. Given the vastness of this field, the subject has evolved into many independent sub-disciplines with their own history and approaches. The discipline is described by Bornstein and Lamb (1999) as having a unique status among what they term *domains of knowledge*. These domains (or disciplines), the humanities, the social sciences and the physical sciences are simultaneously autonomous and interrelated.

Psychology contributes to and benefits from a great variety of disciplines. The humanities (art, linguistics, literature, music, philosophy and religion) have yielded interfaces with psychology from the emotional, intuitive, aesthetic and idiographic perspectives, drawing on historical analyses, biographical accounts, experiential or self-reports and empirical study methods (Lundin, 1996). Many psychologists work at the interface of psychology with another discipline – or at least touch another discipline on a regular basis. This is especially true in the world of work, where individual, group and organisational performance are almost always related to a particular business.

The research draws on streams of theories, concepts, models and constructs from the discipline of psychology, especially those of Gestalt psychology. The research also draws from narrative psychology, in terms of the thought experiment (Chapter 4), which deals with the researcher's phenomenological experience by creating a story which is analysed and explored for meaning and Gestalt. In the development of a methodological framework for the application of the mental model (Chapter 5), provision is also made for encouraging participants to tell their story of the individual, group or organisation so that they, other participants and the researcher may listen to it, reflect on it and develop heightened awareness of domain phenomena.

1.8.1.4 Intradisciplinary level

At the intradisciplinary level, the research is conducted within the sub-discipline of industrial and organisational psychology. Industrial and organisational psychology has both a scientific and a professional focus (McCormick & Ilgen, 1985). Its scientific aspect is founded in research that is a pre-requisite for practical application. Many industrial psychologists are professionally active in the field of consulting to organisations, groups and individuals and are always seeking new ways of viewing business organisations so that they may assist the organisations to achieve their goals (APA, 1999).

This level serves as a lens to focus the research project on problems, issues, theories, concepts and constructs that are relevant to the study of individual, group and organisational behaviour in the context of work. It is important that the definition of the interactive field of consulting psychology be understood to contain these three levels of behaviour in an integrated and holistic manner.

1.8.1.5 Research project level

This research project is conducted in the specific context of the field of consulting psychology. According to Lowman (2002b), consulting psychology represents an integrating movement away from the fragmentation of knowledge in the domain of psychology with its various schools of thought and approaches. Maintaining disciplinary, paradigmatic and theoretical rigidity can place consulting psychologists at a disadvantage. An appropriate balance must be maintained between the rigours of science and the pragmatic approach of practice.

According to the California School of Organisational Studies (Alliant International University, 2003) fully trained consulting psychologists must be able to understand, diagnose and make appropriate interventions at the individual, group and organisational levels. This research investigates the reality of consulting at the individual, group and organisational levels in the work and organisational context. Even the issues facing consulting psychologists at the individual and group levels occur within an organisational context. The juxtaposition of these various levels seems naturally to lend itself to a broad range of paradigms and theoretical and practical approaches, although it is accepted (as Lundin, 1996) points out, that disagreements will arise over basic facts and methods in psychology.

Consulting psychology may, paradoxically, be viewed as both broader and narrower than the discipline of psychology. It may, at the same time, be viewed as being broader than the sub-discipline of industrial and organisational psychology, or it may be narrower than this, depending on individual orientations in toward the potential market of intellectual resources (Mouton & Marais, 1990). The field of consulting psychology is comprehensively discussed elsewhere in this chapter and in Chapter 2 and is consequently not elaborated on here.

This research was initiated by the researcher as a quest for answers to various elusive personal and vocational issues and the lack of integration of theory with practice. The case studies were conducted with the researcher's own paying clients. The drive to conduct the research is perhaps best encapsulated by Harrison (1995, p.12), who describes his professional and personal odyssey over a lifetime of consulting as a "crisis in the positive sense, reflecting a continuous search for relevance – some way to give meaning to a personal life and a vocation".

1.8.2 Paradigmatic perspective

The researcher considers the Gestalt paradigmatic perspective to be particularly useful to consulting psychology and adopts a Gestalt perspective of the research. Gestalt psychological theory, not to be confused with the Gestalt therapy of Fritz Perls, provides a framework for a wide variety of psychological phenomena, processes and applications (Thompson, Gentner & Loewenstein, 2003). Although Fritz Perls and his colleagues published their seminal work on Gestalt therapy more than fifty years ago (Perls, Hefferline & Goodman, 1951), it is still arguably *the* most influential and insightful application of Gestalt psychological theory. This work has been reprinted seven times since 1990. The latest reprint, in 2006, is a key source of awareness in this research.

According to Sherrill (1986), early Gestalt theorists considered Gestalt principles to be an approach to science that has contributed to many diverse fields of study and not as a specialised school of study. The roots of Gestalt psychology are described in the literature as originating as a reaction to the behaviourism of Watson and the introspectionism of Titchener (Benjafield, 1996) and to the molecularism or reductionism of Wundt (Boeree, 2002b). The term *Gestalt* was originally used by Graf Christian von Ehrenfels, who viewed a *Gestalt* as a psychical whole formed by the structuring of the perceptual field. Human consciousness was considered to form units of wholes (Wulf, 1996).

Gestalt theory is steeped in phenomenology, existentialism, holism, field theory and systems theory (Stevenson, 2003). These underpinnings are explored below.

- Phenomenological underpinnings

Phenomenology arose from multidisciplinary philosophical roots in the early 1900's (Embree, 1997). From a psychological perspective, phenomenology affords people the opportunity to stand aside from their usual way of thinking so that they can tell the difference between what is actually being perceived in the current situation and what is residue from the past (Czander, 1993; Idhe, 1991). They can thus form a clear Gestalt.

The goal of phenomenological exploration is awareness and insight (Heidbreder, in Yontef, 1993). According to Yontef (2005), awareness without systematic exploration is not ordinarily sufficient to develop insight. Gestalt theory thus uses focused awareness and experimentation to achieve insight. From the phenomenological perspective, awareness is studied, as is the awareness process. The relationship between consulting psychologists and their clients is regarded as being of central concern. According to Embree (1997), phenomenology continues to grow and extend its influence across the world in the 21st century.

Specifically, in this research, the ability of the researcher to imagine, think about and manipulate mental images is important (as will be discussed in Chapter 3 specifically). Mental imagery is a phenomenological experience that can be used to develop awareness and insight (Cornoldi & McDaniel, 1991). Gestalt principles relating to organising the interactive field into phenomena in the foreground against a clear background are important. This means that many parts of the research are essentially subjective experience in the sense that the mental images and the various intrapsychic processes surrounding it are not all visible, but must be considered.

The researcher recognises that achieving the real truth of the structure and dynamics of the individual, group and organisation cannot be achieved. Multiple perspectives of reality exist and must be accommodated in the resolution of the research problem. Following Rescher (1997), the research attempts to create and make do with a plausible model of the real truth that is adequate to the needs of practice.

- Existential underpinnings

Yontef (2005) states that existentialists focus on peoples' existence, relations with each other, problems, challenges and work, as directly experienced by them. Most people operate in an unstated context of conventional thought that obscures or avoids acknowledging how the world is. The Gestalt approach emphasises being authentic and meaningfully responsible for life and work choices and holds that people are endlessly remaking or discovering themselves.

Two main precepts form the paradigmatic perspective of Gestalt psychology. These are described by Latner (1992) as the conviction that the proper focus of psychology is the experiential present moment – *here and now awareness* and the conviction that it is only possible to know ourselves as we exist in relation to other things – the *interactive field*. Human beings are inextricably caught up in a web of relationships with all things. This means that the consulting psychologist is also a part of what is observed, described or measured.

According to Yontef (2005), full awareness is the process of being vigilant with the most important events in the foreground and background of the entity, with full sensorimotor, emotional, cognitive and energetic support. Effective awareness is grounded in and driven by the present need of the entity. It involves self-knowledge and a direct knowing of the current situation and how the entity is in that situation. Furthermore, phenomenologically-based methodology has the potential to provide very rich, experientially based awareness and insight into domain phenomena. This is particularly beneficial for people in the work environment.

- Holistic underpinnings

Holism refers to the theory that the parts of any whole cannot exist and cannot be understood except in relation to the whole. This implies that phenomena cannot be explained in isolation. One of the central tenets of holistic theory is that the whole is greater than the sum of its parts. According to Wulf (1996), Jan Christiaan Smuts considered a holistic organism to be self-regulating and to contain its past and much of its future in the present. Once again, this is a very attractive principle in the context of consulting psychology.

- Field-theoretical underpinnings

According to Yontef (2005), field theory is the scientific world view that underlies the Gestalt perspective. He describes field theory as a method of exploring the whole interactive field of which the event is currently a part rather than analysing the event in terms of the class to which it belongs. The interactive field is a whole in which the parts are in immediate relationship and responsiveness to each other. No part is uninfluenced by what goes on elsewhere in the field. An individual, a group or an organisation in its life space, constitutes a field.

In a phenomenological sense, the interactive field is defined by the observer and is meaningful only when one knows the frame of reference of the observer, and when and how the observer looks. Yontef (2005) regards field theory as descriptive, rather than interpretive, with the emphasis on observing, describing and explicating that which is being studied, through phenomenological focusing, experimenting, participant reports and dialogue. The researcher views the field of consulting psychology as a whole, with no part thereof uninfluenced by what goes on elsewhere and attempts to describe that which occurs in the consulting domain.

- Systems-theoretical underpinnings

The systems perspective provides a unique way to view and mentally frame what we see in the world. This perspective originated from General Systems Theory, a rigorous scientific discipline developed in the 1920's (Haines, 2000). The study of systems has become an interdisciplinary pursuit, extending to engineering, mathematics, computer science, biology and economics (Levine & Fitzgerald, 1992). According to Haines (2000), the major premise of systems theory is that the common laws governing systems provide a conceptual framework for understanding the relationships within a given system and thus for handling any problems or changes encompassed by that system.

This highlights the value of viewing a system (individual, group or organisation) as a whole, and of gaining a perspective of the whole and how the parts of a system play their role in the light of the purpose for which the entity exists. The systems perspective is particularly useful in the current research because of its potential, not only for understanding, but also for exploring the interactions among domain phenomena.

This research is confined to the systems occurring at the levels (described by Sundberg, Taplin and Tyler, 1983) as the organism (individual human), the group (teams and departments) and the organisation (companies and firms), irrespective of the nature of the industry within which they function.

In summary, from the paradigmatic perspective, Gestalt psychological principles are particularly useful in this research because:

- They provide a psychology and method that is very relevant for everyday life and which has the capacity to remediate problems and to explore potential (Latner, 1992). Since work takes up a significant part of most people's lives, it is also very relevant to world of work, which renders it particularly useful.
- Gestalt principles take both positive and negative aspects and issues into account (Wulf, 1986). This is appealing to the researcher, as many clients are performing well, but still regard themselves as in the process of becoming and many consulting projects are initiated in order to provide impetus or catalyse, rather than only to resolve problems. Perls, Hefferline and Goodman (1951) describe the Gestalt approach as one concerned with excitement and growth. In terms of the role that consulting psychologists play in the client system, they can inject and inspire a sense of excitement and stimulate growth.
- Gestalt theoretical concepts, such as holism and inter-related systems are familiar concepts to many people in the work context. These concepts are widely used in other disciplines, such as Management, Engineering, Project Management, Medicine and Education. Therefore many clients will recognise and work with them relatively easily.
- According to Latner (1992, p.26), "contacting is the way we change and grow. It is how we come to grips with our lives, organising the field to make possible the best achievements and solutions it will support. It is the way in which the environment, the rest of the field, adjusts us to it. We call this interplay, all of it, creative adjustment, because the result is assimilation and growth and because the process of adjustment is mutual. Our achievements and solutions are made by us and given to us both in the give and take of our creative partnership with the rest of the field."

- No specific methods are insisted upon for diagnosis, explanation, prediction, intervention or evaluation (Thompson, Gentner & Loewenstein, 2003; Yontef, 2005). According to Latner (1992), adjustment cannot follow a formula, but must be accomplished uniquely, according to each opportunity. Achievements and solutions must be novel if they are to be the best each situation can produce. This implies that the approach to each consulting project, incorporating all the various steps from initiation to evaluation should be dealt with according to the needs and experiences of the participants in the client system.
- Individuals, groups and organisations are seen as *wholes*, instead of focusing only on a particular attribute to the exclusion of all others (Benjafield, 1996). The focus is on integration, wholeness and balance, which are central to Gestalt psychology (Latner, 1992). Given the breadth of potential variables in the consulting domain, these are important aspects to be used to diagnose, explain, intervene and evaluate in such a manner that the well-being of the entity is improved. According to Perls, Hefferline & Goodman (1951), all individuals are born whole and then develop holes in their personalities as a result of the inadequate formation of figures.

Harnessing these principles assisted the researcher to interact with the interactive field of the research domain, to ensure that the research is grounded in scientific theory and to translating theory into practically useful models, concepts, methods and instruments.

1.8.3 Meta-theoretical concepts

The following concepts are accepted at the meta-theoretical level and form part of the research.

- Individual

The term *individual* means a single human being, in direct or indirect contrast with members of a larger group or with society at large (Babbie, 2005). Individual human beings are studied by social scientists in terms of various characteristics. A number of individual descriptions may be aggregated to provide a description of the population that the individuals comprise. In this research, individual human beings, in the occupational context, are regarded as holons.

- Group

Babbie (2005) describe a *group* as two or more individuals. In this research, the term refers to two or more people working together (in a team, in common action, working to fulfil specific functions).

- Organisation

The term *organisation* describes any organised body or system (Senge, 2002). Organisations are made up of individuals, groups or of more than one organisation. Hopkins (1996) describes an organisation as having a legal framework, an organisational structure, operating systems, staff and resources constituted to fulfil a set of related functions valued by a client or constituent group.

- Entity

In this research, the term *entity* is used in the generic sense to refer to an individual, a group or an organisation, in the sense that these are the units of analysis that must be amenable to description in terms of the mental model to be created, explored and developed.

- Gestalt

According to Sherrill (1986), a *Gestalt* may be a visual percept, a temporal pattern such as a melody, an organised memory, or a concept such as an organisation. People perceive a Gestalt by organising it intrapsychically and interpreting it so that it has meaning. Perls, Hefferline & Goodman (1951, p.viii) believe that Gestalt formation is the condition for mental health and growth and that an incomplete Gestalt represents "an unfinished situation that clamours for attention" and can lead to stagnation and regression.

- Health

Gestalt theorists regard the ability to form and destroy good figures as being paramount to health. Good figures are lively, well-formed, clearly defined figures which make the most adequate use of the resources of the interactive field.

Free functioning occurs when people range anywhere in the interactive field, through all of their abilities, knowledge and experience, as well as everything that is present in the environment, to find those things which will make the most apt contributions to emerging figures (Latner, in Nevis, 1987).

According to Gestaltists, health is characterised by free-functioning - the freedom to seek out anything which will contribute to what is emerging, freedom to contribute whatever the figure requires and freedom to follow the figure wherever is required. Ill health is functioning which is not free, where good figures become impossible, or where there is figure formation in a promising field but an individual cannot partake freely, because they must avoid or are ignorant of elements in it. Instead of being whole, they are cut off from essential elements and become split in two. This often leads to reinforcing this fragmentation so as to maintain it by ignoring what does not fit their conception of things or fabricating intricate deceptions which support it (Perls, Hefferline & Goodman, 1951; Yontef, 2005).

- Interactive field

According to Latner (1992) the *interactive field* is experientially organised into a centre and a periphery. At the centre is the foreground, the figure or Gestalt, that contains what is central, important, focal or meaningful to the present moment. The periphery is the background, or the ground, which contains what is irrelevant, unimportant or immaterial to the present moment. The background is a dynamic and organised unification of the parts of a figure (such as a person) and the parts of the environment within which the figure exists, but which are not within the awareness of the figure.

- Awareness

According to Edgerton (1994), having *awareness* means to have conscious knowledge of something. This implies an alertness in drawing inferences from what one experiences, such as being aware of phenomena or relationships between phenomena in the client system. According to Perls, Hefferline & Goodman (1951), awareness is characterised by contact, sensing, excitement and Gestalt formation.

Mezirow (1997) states that awareness that has the power to transform people's perceptions of the interactive field results from the internalisation of a new perspective that is more differentiated, unified, reflective and complex – a new Gestalt.

- Contact

According to Latner (1992), *contact* is a quality of awareness which involves the meeting of differences. For contact to occur, the interactive field must be broken up into separate, meaningful elements of figure and ground. Contact ranges from physical contact to emotional or intellectual contact with ideas, concepts and, especially, with other people. According to Yontef (2005), contact is accompanied by excitement, which implies feeling and concern, energetic response or action, perhaps pleasure, curiosity, and mobilisation. Since contact requires the differentiation of figure and ground, there can be no contact when the interactive field is not differentiated.

- Experience

The concept *experience* is defined as the conscious events that make up an individual's life or the direct observation of or participation in events as a basis of knowledge or the state of having gained knowledge through direct observation or participation (Edgerton, 1994). In this research, the term *experience* refers to an individual's conscious, direct observation of or participation in events by and through which the individual (and thereby the group and organisation) gain knowledge of phenomena in the client system.

- Insight

According to Edgerton (1994), the term *insight* refers to a sudden grasp of the relationships in a problem or the sudden solution of a problem. In this research, one of the main goals is to stimulate the grasp of relationships between phenomena in the client system that participants were not previously aware of, using the Gestalt approach that is to be developed.

- Mental model

Pidd (2003) describes a *mental model* as an external, explicit representation of reality. Senge (1990) considers mental models as images and assumptions, carried in the minds of individuals, teams and organisations about every aspect of the world (figure and ground). People create mental models to simplify and guide them through the complexities and challenges posed by the environment.

- Methodological framework

Throughout the research, the concept of a *methodological framework* that comprises a process, (described by Babbie [2005] as a series of actions directed towards a particular aim, usually that of producing change or development) and a procedure, (described by Babbie (2005) as an established method of doing something), is accepted at the meta-theoretical level.

1.8.4 Theoretical-methodological convictions

The theoretical-methodological convictions of the researcher are aligned with the research goals and the research strategy. According to Yontef (2005), Gestaltists may use any techniques or methods as long as these are aimed toward increasing awareness.

- The reviews of literature on consulting psychology, the intrapsychic aspects of consulting, the derivation of a mental model and a congruent methodological framework for deploying the mental model, are qualitative and descriptive in nature. To the extent that the researcher has analysed, integrated and synthesised information in these areas, the research is also phenomenological.
- In the application of the mental model in the consulting situation, the research is also phenomenological and descriptive, relying on the researcher and other participants in the process to experience and reflect upon domain phenomena. In some instances in this process of applying the mental model, quantitative instruments were developed to assist in the process of improving the understanding of domain phenomena by participants.

- Whilst the research is clearly directed at meeting the stated aims and answering the research questions, substantial use is made of different thinking methodologies. The reviews of literature and the analysis thereof are mostly the product of directed thinking (Pidd, 2003). Chapter 4, dealing with a thought experiment, makes substantial use of non-directed thinking (Pidd, 2003), within the confines of the imagination only. This methodology is specifically employed as an experiment, allowing the researcher to explore the interactive field and to see what insights and Gestalts may emerge, that have potential in the context of this research.
- The research is intended to develop an explicit mental model, operating at the conscious level, where it can be applied. This requires two main skills – reflection (slowing down the thinking process to become aware of how we form our mental models – what FvN Cilliers [personal communication, 5 February 2005] describes as *thinking about thinking* and *inquiry* (asking critical questions to develop knowledge).
- Case study methodology is used to explore the applicability of the mental model. Following the reasoning of Hokangas (2000), the case studies are aimed at contributing to the understanding of the phenomena developed and not to validate or confirm pre-defined ideas or ideologies. According to Hokangas (2000) the rationale for using case study methodology is that this research represents the process of inductively developing the mental model and methodological framework, and given its complexity, it is initially framed in terms of qualitatively testing the resulting approach in the practical consulting situations at the individual, group and organisational levels.
- An attempt is made in the reporting of the case studies to provide a rich description of the consulting project in context (APA, 2002c). Multiple processes and data sources are employed to build the richness of the case studies. In order to operationalise the developed model in the practical consulting situation, various techniques are employed, ranging from interviews to structured questionnaires based on the model, to rating scales employed during group discussions.

1.9 RESEARCH DESIGN

In alignment with the research model proposed by Mouton and Marais (1990), the research design is explained below in terms of the research goal, the research strategy, the units of analysis and considerations in respect of ensuring validity and reliability.

1.9.1 Research goal

This research is exploratory and it is preliminary research. The research goal is to develop a Gestalt approach to consulting psychology that comprises a mental model and a congruent methodological framework (two units), each of which must conform to Gestalt theoretical principles in their own right. More importantly, they must fit and function together as a complete, unified and elegant approach to the subject matter of consulting psychology – a Gestalt approach. This approach is then to be tested in practice.

The research is thus, in effect, preliminary research that may (or may not) precede more structured study of domain phenomena, the nature of which is not currently apparent to the researcher. Accordingly, exploratory methods such as literature reviews, interviews, case studies and personal experience are employed in the quest for increased awareness of, and insight into, domain phenomena. These methods are aligned with the phenomenological, existential, holistic, field-theoretical and systems-theoretical underpinnings of the Gestalt perspective.

1.9.2 Research strategy

In the first instance, the strategy is to experiment with the creation and application of a new mental model and accompanying methodological framework to the field of consulting psychology. This is of general interest. Secondly, the application of the mental model and methodological framework to a consulting project at each of the individual, group and organisation levels of consulting is relatively contextual, in that it represents the application of the approach to only three specific types of consulting project, within three specific sets of circumstances. Despite the relatively idiographic nature of the three case studies described, the research strategy remains directed at developing an approach that will be useful for consulting psychologists, both from the scientific and practical perspectives.

1.9.3 Units of analysis

In the review of literature in Chapters 2 and 3, the units of analysis are the field of consulting psychology and consulting psychologists, as well as intrapsychic aspects that impact on the consulting process. A thought experiment (Rusbult, 2000), conducted to create, explore and develop a mental model is described in Chapter 4.

In the first part of the thought experiment, the units of analysis are various theories, principles and approaches in the physical and biological sciences, as well as in the field of psychology, specifically industrial and organisational psychology and consulting psychology.

In the second part of the thought experiment, the unit of analysis is the mental model itself in terms of its characteristics and dimensions. The units of analysis in each of the three case studies presented in Chapter 6, are described in the table below:

Table 1.1
Units of Analysis in Each Case Study

Case Study	Consulting Level	Unit of Analysis
1	Individual	An individual employee , working as a Senior Project Manager in the Aerospace industry
2	Group	The Board of Directors (12 group members) of a company in the Healthcare industry
3	Organisation	A publicly listed gold mining company , composed of eight functional departments and five thousand individuals

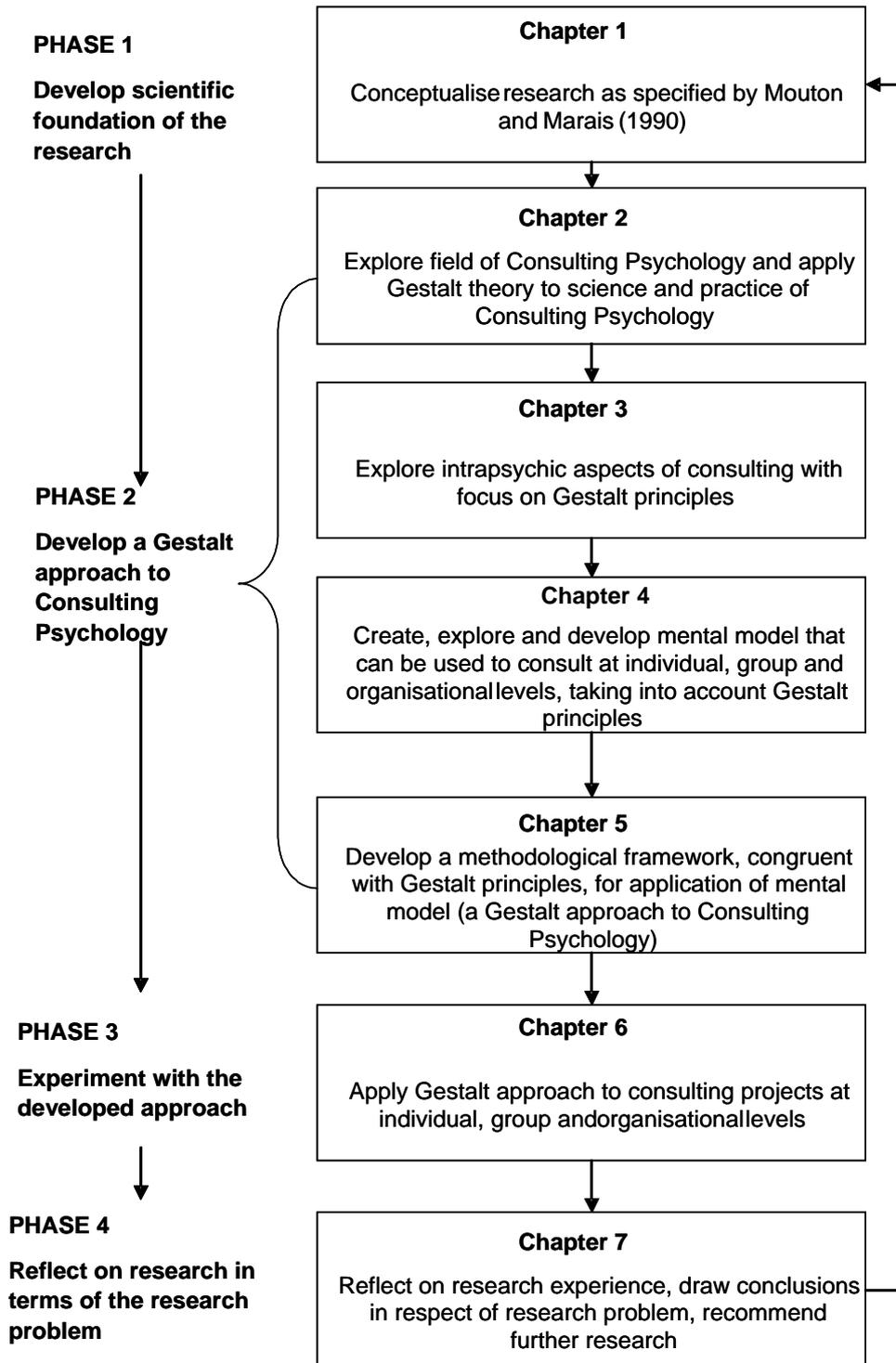
1.9.4 Research procedure

The research procedure reflects the determinants of the research, the decisions made and the interaction between these and the research domain (Mouton & Marais, 1990). As indicated in Figure 1.3, the research procedure comprises four interrelated phases, one building upon the awareness, insight and understanding gained in the other.

- Phase 1 begins with the development of a sound scientific, theoretical foundation for the research in terms of the Integrated Model of Social Sciences Research (Mouton & Marais, 1990).
- Phase 2 is concerned with the development of a Gestalt approach to consulting psychology. This is accomplished as follows:
 - A pre-inventive image that forms the basis for a mental model is created;
 - The pre-inventive image is explored and the basic mental model is developed; and,
 - A methodological framework for applying the mental model is developed.
- In Phase 3 of the procedure, the newly developed approach is experimented with by applying it to three consulting projects, one each at the individual, group and organisational levels of consulting.
- The nature of the three consulting projects is presented briefly below.
 - The individual level case study concerned the development of a comprehensive Individual Development Programme for a high potential individual in the Aerospace Industry, an area of much importance to the sponsor of the project and to the individual himself;
 - The group level case study concerns the Board of Directors of a medium-sized company in the Healthcare Industry and addresses various issues of the functioning of one of the most influential groups in the company; and,
 - The organisational level case study summarises a consulting project that took place in the Mining Industry. It concerns the development of a management model for a large gold mine.

Figure 1.3

Flow Diagram of the Research Procedure



- Finally, in Phase 4, the researcher reflects on the research, draws conclusions in respect of the research problem, considers limitations to the research and makes recommendations for further research.

1.9.5 Reliability and validity

Solso (1997) states that, in exploratory research, a balance must be maintained between theorising in increasing detail until perfect mastery is achieved of something that means nothing in the applied sense and working on practical application that lack theoretical underpinnings. This research represents an attempt to maintain such a balance, whilst building upon elements of the knowledge base of consulting psychology and applying the mental model derived in practice.

In the Gestalt paradigm, adjustment is creative because it cannot follow a formula (Perls, Hefferline & Goodman, 1951; Yontef, 2005). Clients and consulting psychologists must adjust uniquely, according to each opportunity. This means that achievements and solutions must be novel and fit for the specific circumstances in which they are brought to awareness, if they are to be the best each situation can produce. This requires flexibility and the freedom to explore and contact with the interactive field at any particular point in time. It also has implications for the evaluation of the consulting projects conducted in Chapter 6, where use is made of discussion of participants' experience in the consulting environment to evaluate the success of the consulting projects.

According to Haines (2000, p.18), the process of constructing theories and models in social sciences research is "disciplined imagination". He argues that "if the process is to be kept manageable, representations such as metaphors are inevitable given the complexity of the subject matter" and that "interest is a substitute for validation during theory construction".

The argument made above may have an element to it of the researcher either consciously or subconsciously directing how the model is generated and applied. The researcher is an integral and inseparable part of both the research and the consulting situation. Kelleher (2002, p.121) states that "in reality, any piece of social research is always already pre-conceptualised at the outset – even if the researchers are unaware of their own tacit frames. The challenge is not to avoid pre-conceptions but to be aware of, and explicit, about them".

Often, a major challenge to consulting psychologists, when conducting a consulting project, is maintaining a balance between the strict application of scientific method and the requirements of pragmatism (balancing the requirements of the consulting psychologist and those of the client).

Although the researcher, grounded in scientific methodology, may prefer to conduct a consulting project according to laboratory-type, scientifically correct method, this is not always either practical, or suitable in terms of what the client requires. The application of the Gestalt approach, described in the second part of the research must, of necessity, be conducted in the client domain. The research is thus conducted within the realm of professional practice and so demands what Jerry (2005, p.21) terms a “boundaried playing field and a limited discourse”.

Finally, Sperling (in Solso, 1997, p.17) sees a scientific contribution as “placing a stone in the Great Wall of China” (signifying science itself). The best “stones” or contributions are those which “find the correct balance between accuracy and generality at a given level of complexity”.

1.10 CHAPTER DIVISION

The research is presented in the following chapters:

Chapter 2: Consulting psychology

Chapter 3: Intrapsychic aspects of consulting psychology

Chapter 4: Creation of the mental model

Chapter 5: Development of a methodological framework

Chapter 6: Results

Chapter 7: Conclusions, limitations and recommendations

1.11 CHAPTER SUMMARY

This chapter outlined the scientific foundation of this exploratory research project. A short, general introduction to the field of consulting psychology was provided. The many challenges posed by the trend of decreasing spend on consultants, increasing competition and demands for greater value adding from consultants were considered.

The Society for Consulting Psychology in the United States has adopted the slogan the *Catalyst Division* to describe the role of consulting psychologists and the nature of the services that they provide (APA, 2005). The onus placed on consulting psychologists to be catalysts was discussed inasmuch as this demands that consulting psychologists themselves are able to continuously, as Gibson (1997, p.11) puts it, "re-invent the future".

The requirement for consulting psychologists to think differently in order to mitigate the effects of these challenges and to re-invent the future was discussed. The researcher's position was that one of the ways to do this is to develop a Gestalt approach to consulting psychology. A Gestalt approach should comprise a mental model, and a congruent methodological framework which enables the mental model to be deployed in the practical consulting situation. Against this background, the problem statement was formulated. The problem statement basically stated that there is no Gestalt approach, originating from within the field of consulting psychology, that is based on sound psychological principles and that can be used in psychological consultation at the individual, group and organisational levels of consulting.

The general research question thus concerned how to derive and develop a Gestalt approach to consulting psychology, comprising a mental model and congruent methodological framework that satisfied the stated prescriptions and enabled consulting psychologists and their clients to perceive domain phenomena in a unique manner and enables consulting psychologists to facilitate increased awareness in the client system and thus improves their ability to add value to their clients. The general research question was expanded upon in a number of specific questions, where after the aims, directed at answering the research questions, were stated. Various prescriptions for the tool to be developed were stated in order to guide the process of formulating the research questions.

Mouton and Marais' (1990) Integrated Model of Social Sciences Research was selected as the model for the research. The research is conducted from within the discipline of psychology and use is made of analogies and metaphors from the physical, biological and social sciences to stimulate thinking and to desediment the researcher's usual way of thinking. The research adopted a meta-paradigmatic perspective of the research domain.

Gestalt Theory provides a valuable meta-theoretical perspective for the research and the principles of Gestalt psychology provide valuable but flexible guidelines for contact with the interactive field. Various important meta-theoretical theoretical concepts were defined and the researcher's theoretical and methodological convictions were discussed.

The goal of this preliminary research was to explore the research domain in a descriptive manner, using qualitative reviews of literature, a phenomenological thought experiment, qualitative interviews and descriptive case studies. The research strategy was two-fold. Firstly, it involved creating a Gestalt approach to consulting psychology that would be of general interest to consulting psychologists and secondly, to apply this Gestalt approach in terms of a case study at the individual, group and organisational levels of consulting, which is of more contextual relevance.

The research procedure was presented in the form of a flow diagram, summarising the four phases of the research. Phase 1 concerned developing the scientific foundation of the research (presented in this chapter). Phase 2 addressed the steps involved in developing a Gestalt approach to consulting psychology – understanding the field of consulting psychology and the various intrapsychic aspects of consulting and then creating a mental model and congruent methodological framework, based on the knowledge gained in the preceding phases.

Phase 3 involved the application of the Gestalt approach developed in the research to consulting projects at the individual, group and organisational levels of consulting. Finally, in Phase 4, the researcher reflected on the research to draw conclusions in respect of the research problem, to describe various limitation of the research and to make recommendations for further research in this area.

In the next chapter, the field of consulting psychology is explored in order to provide the contextual background in terms of which the Gestalt approach to consulting psychology that is to be developed later chapters can be done. A clear understanding of the field and the requirements for operating successfully in this field is required for the researcher to derive the mental model and the methodological framework for its implementation.

CHAPTER 2 CONSULTING PSYCHOLOGY

2.1 INTRODUCTION

This chapter provides an overview of literature in respect of the field of consulting psychology in order to provide the context within which consulting psychologists operate. This is important as relevant contextual factors must be taken into consideration in developing a Gestalt approach comprising a mental model and congruent methodological framework that consulting psychologists can use to diagnose, explain, predict and intervene at the individual, group and organisational levels in a manner that is relevant scientifically, professionally and practically and which adds value.

The chapter begins with a definition of consulting psychology and the levels at which consulting psychology is practiced. A definition is provided in respect of who consulting psychologists are in terms of their background and training. The formal organisation of consulting psychology is summarised and the current stage of development of the field is proposed, based on relevant theory. Future developments, considered essential to the development of the field are considered briefly. An overview is provided of how current movements in psychology are impacting on the field of consulting psychology.

This contextual background is expanded with an exploration of the types and levels of service that consulting psychologists offer and the settings in which they are provided. Generic, applied competencies, core technical competencies and practice-related competencies required to render these services are investigated. Important personal characteristics that define a successful consulting psychologist are also presented.

The Gestalt approach to psychology is a very important paradigm in this research. The Gestalt approach is investigated inasmuch as it can be related to and operationalised in the field of consulting psychology. Basic Gestalt consulting activities are described and various aspects such as the centrality of the client-consultant relationship are explored. Aspects of creating awareness in the client system from the Gestalt perspective are also related to the consulting psychology situation. Roles that may be adopted by consulting psychologists in the consulting situation are reviewed, as is a typology of the consulting process. The chapter is concluded with a discussion of consulting psychology as both a science and an art and a chapter summary.

2.2 TWO BASIC DEFINITIONS

The literature reveals many definitions for consulting psychology in terms of what it is and what distinguishes this field from other approaches to consulting. A basic definition of the field is provided below. Thereafter, a definition is provided in terms of *who* consulting psychologists are.

2.2.1 Definition of consulting psychology

The APA defines consulting psychology as the function of applying and extending the special knowledge of a psychologist, through the process of consultation, to problems involving human behaviour in various areas (APA, 1999). The Society for Consulting Psychology (SCP) of the APA elaborates on this definition (APA, 2002b, p.4) as follows:

Psychologically based consultation methods help individuals, groups and organisations become more efficient and effective as well as healthier, more satisfying places to work. In specific, both intrapersonal and interpersonal functioning have impact on the person themselves, their work teams, their organisation and/or industry and relevant social communities. Consultation is a helping relationship that assists people, groups or organisation in meeting their mission, goals or objectives. Consultation is typically multi-dimensional, often with multiple concurrent clients and interrelated factors.

Boyce (2004, p.26) describes this definition as "an intimidating mouthful" and not sufficient to identify consulting psychology as a distinct field. In an attempt to define consulting psychology more clearly, Boyce (2004, p.26) states that the field may be viewed as applied psychology to organisations and individuals within organisations, and that it is directed at psychological issues at work within the organisation or person.

Boyce (2004, p.8) regards one difference between consulting psychology and its clinical and counselling counterparts as an emphasis on bolstering the positive as opposed to remedying the negative and states that "while not without dysfunctional situations, the consulting psychologist will be amidst very high functioning people in exciting environments". The goal is seen as being "to enhance human performance, which ultimately increases productivity and revenue".

Boyce (2004) also states that, although consulting psychology has been described as human resources consulting, it should be differentiated from this because consulting psychology typically involves enhancing human performance and optimising talent and does not typically involve activities such as the assembly of compensation, retirement, and benefit packages.

Based on the discussion above, the researcher defines consulting psychology as an applied field, where psychologists with backgrounds in various disciplines and sub-disciplines of psychology add value to their clients by assisting them to define and meet their objectives. This involves the development and application of psychological approaches, theories, methods, techniques and instruments within the client system, to enhance individual, group and organisational performance.

2.2.2 Definition of a consulting psychologist

The definition of consulting psychologists in the literature is fairly clear. A consulting psychologist is defined as a psychologist who provides specialised technical assistance to individuals, groups or organisations with regard to psychological aspects of their work. Such assistance is advisory in nature and the consultant has no direct responsibility for its acceptance (APA, 1999; 2002a).

Relative to other consultants, SCP Education and Training Chairperson, John Fennig connotes that consulting psychologists are distinct by virtue of three factors: 1) being psychologists, 2) the use of psychological testing, and 3) the holding of a license which holds psychologists to a higher ethical standard. While other consultants may perform similar work, the expertise in human dynamics clearly sets consulting psychologists apart (APA, 2002a).

Irrespective of how consulting psychology is defined, however, it is clear that there are many other players on the field. This includes many consultants and professionals from many different educational backgrounds. Consulting psychologists have to strive to become trusted advisors to their clients (Sheth, 2003) and to leverage their specialised knowledge to provide a differential advantage over the competition. This is what will ensure their positive contribution to their clients and to the positive development of the field of consulting psychology in the future.

2.3 DEVELOPMENT OF THE FIELD

The field of consulting psychology has developed through various phases since the formal establishment of Division 13 of the American Psychological Association was founded in 1938 as a home for psychologists who serve as consultants to businesses, the military and mental health and non-profit organisations and schools (APA, 2005). Although its formal origins are more than sixty years old, consulting psychology is still very much a developing field (Lowman, 2002a).

2.3.1 Historical development

According to McCarthy (2002) the following developments represent some of the key post-World War Two events in the application of psychological theories and approaches in the workplace. These events have defined the knowledge base of the industrial and organisational psychology and, consequently, provide some of the background to the historical development of the field of consulting psychology.

- In the late 1940's and early 1950's, Rogers and Maslow proposed their respective theories of motivation, aligned to the humanist movement, which were largely applied in the industrial setting and which flourished through the 1960's, alongside McGregor's Theory X and Theory Y (late 1950's), Fiedler's Contingency Model of Leadership and Vroom's Valency, Instrumentality, Expectancy theory (early 1960's). McClelland proposed his Need for Achievement theory in the mid 1960's, whilst Herzberg proposed his Two-Factor theory and Locke outlined his goal setting approach to motivation in the late 1960's.
- In 1966, Katz and Kahn outlined the theory and research of organisational behaviour in the context of open, sociotechnical systems.
- The mid 1960's and early 1970's saw advances in job analysis techniques, such as the task inventory approach developed from research with the US Air Force. The Dictionary of Occupational Titles was published in 1965 (third edition), whilst Purdue Occupational Research Center published the Position Analysis Questionnaire in 1972.

- Skinner began to introduce and apply the concepts of behaviourism in organisations during the 1950's and 1960's. In 1971, he advocated behaviour modification strategies to motivate people in organisations.
- The 1980's saw the rigidity of classical theories of management resulting in troubled times for many of the traditional industrial Western businesses and the prospering of Japanese businesses with methods (such as continuous improvement) first proposed by Deming, Juran and Crosby. This gave rise to much attention to participatory techniques being introduced in Western organisations. In the mid 1980's, quality circles were topical, whilst there was renewed interest in organisational climate and workgroups in the late 1980's, coupled to participatory management techniques such as TQM (Total Quality Management).
- In the 1990's, the statistical technique of meta-analysis enabled the combining and analysing of data from many different previously published studies and the analysis of patterns across all studies. The 1990's also the rapid rise of attention to issues of employment law and psychology.
- In the late 1980's and 1990's, work stress received increasing attention in industrial and organisational psychology research and practice, as did the notion of balancing work and family lives. In the mid and late 1990's, the concept of workplace aggression and workplace violence emerged as a topic of study (these terms did not exist in the literature before the 1980's).

In 1993, the idea of a conference for organisational consulting psychologists emerged at the annual conference of the APA (APA, 2002b). Some participants thought that this event “was not adequately meeting the needs of organisational consulting psychologists” (APA, 2002b, p.14). This led to the formal establishment, within Division 13 of the APA of the Society of Consulting Psychology (SCP), which describes itself as a platform for members who share an interest in the consultative process, including applied activities, research, evaluation, education and training. It also serves as a forum for consultation skill, theory and knowledge development and dissemination and provides a “professional home for those who have an identity as consulting psychologists” (APA, 2002b, p.16).

The most common areas of study of consulting psychologists in the United States are clinical psychology, community psychology, counselling psychology, school psychology, educational psychology, and industrial and organisational psychology (APA, 2002b). South African psychologists are currently permitted to register to practice in the clinical, counselling, industrial, educational or research psychology categories only (HPCSA, 2006).

The SCP issued guidelines for training at the doctoral and post-doctoral levels in consulting psychology in 1999 (APA, 1999). These guidelines address training in individual, group and organisational level competencies and are referred to later in this chapter. However, Atella and Figgatt, in Koortzen (2003) believe that there is insufficient consulting psychology training in the USA, although various universities now offer doctoral level programmes in consulting psychology, including the California School of Organisational Studies (Alliant International University, 2003).

Koortzen (2003) proposes that consulting psychology, by nature, requires its practitioners to be trained in theories, models, methods and techniques that have developed over many years in the discipline of psychology and has proposed a model for training at the doctoral level in consulting psychology. Koortzen and Cilliers (personal communication, 17 January 2005) have recently commenced with the first doctoral programme in consulting psychology in South Africa. Students, formally studying consulting psychology at doctoral level in South Africa, study, inter alia, the following themes (Koortzen, 2003):

- Individual assessment
- Individual wellness and work adjustment
- Coaching and counselling
- Developing assessment technologies
- Developing self-directed work groups
- Group dynamic consultation
- Assessing work teams and groups
- Diversity management
- Organisational development
- Organisational performance
- Assessing organisational interventions
- Programme evaluation
- Facilitating change in the organisation.

The first graduates of the programme are expected at the end of 2006 (Koortzen, 2003). However, these doctoral students still study consulting psychology under the banner of industrial, counselling or clinical psychology.

2.3.2 Current state of development

The Society of Consulting Psychology has grown steadily since its reincarnation in 1946. This division has 1,092 members with 150 fellows whose expertise are shared not only with clients, but with the division of consulting psychology and the APA. Recent surveys of its membership reveal that 55% are engaged in solo private practice, with 25% associated with consulting firms, and 10% affiliated with group private practice (APA, 2005).

As an emerging field, Lowman (2002b), views consulting psychology as having, for too long, lived off the efforts of other sub-disciplines within psychology, applying what has been developed by them. There are indications in the literature of the types of tension associated with adolescents wanting to establish their independence from the older parents. Lowman (2002b, p.21), for example, contends that consulting psychology needs to “chart its own course” and build a “house of its own”.

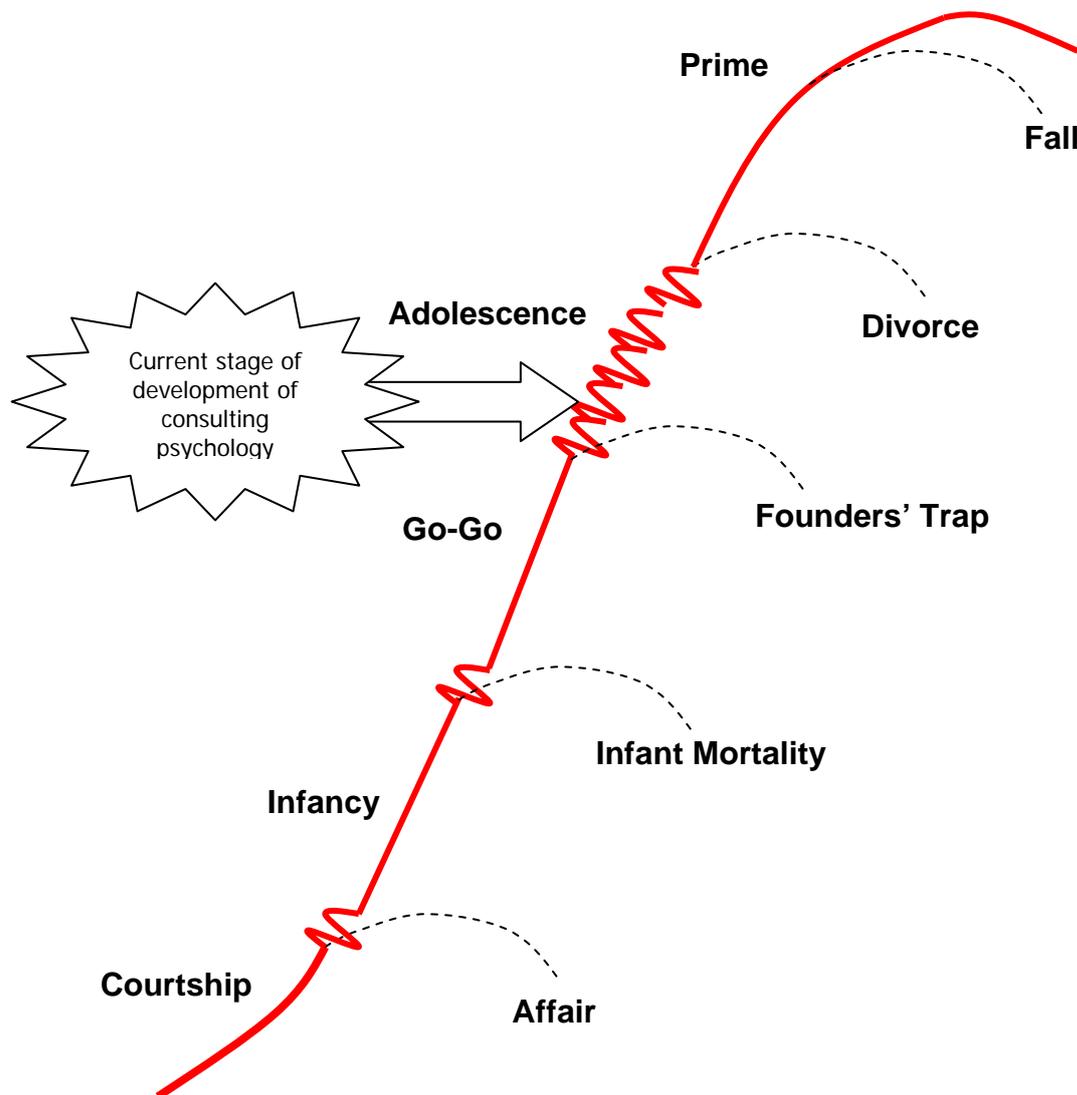
In an article in the publication *The Industrial-Organisational Psychologist* (De Nisi, 2000), the president of the Society for Industrial and Organisational Psychology (SIOP) described the SCP in a manner that greatly concerned members of the Education and Training Committee of Division 13 (Consulting Psychology) of the APA (Garman, O’Roark & Lowman, 2000).

Given that industrial and organisational psychology is one of the closest fields to that of consulting psychology and many of its members were originally trained in this field. This situation may be likened to proponents of industrial and organisational psychology viewing their discipline as the parent of consulting psychology.

This article prompted a rebuttal from prominent drivers of the independent consulting psychology discipline (Garman, O’Roark and Lowman, 2000) who state that the SIOP and the SCP would better serve the interests of their respective constituents by working together, rather than attacking each other. The field of consulting psychology must be perceived as a unified whole – a healthy Gestalt.

The following figure, adapted from Adizes (1999) depicts the discipline of consulting psychology as being in the early Adolescent stage of development. This stage is associated with an emotional rebirth aimed at independence from its founding roots and is often associated with conflict with the parents who may resist this new found sense of identity.

Figure 2.1
Stage of Development of Consulting Psychology



Note. Adapted from Adizes (1999).

In a similar vein, Eraut (1994, p.47) describes the potential in the professions for inter-professional relations to be “strangely absent, except insofar as they are used to assert the supremacy or primacy of what are considered the true professions over newcomers.”

A field of study that is in the prime stage of development (see Figure 2.1 above) is acknowledged by the parent discipline as being a field in its own right. In the prime stage, the field would be characterised by a network of people who walk the talk of its vision and values; the goals of the field would be clear, prioritised and focused. Functional systems and organisational structures would be in place. There would be intra and inter-organisational integration and cohesion – working together with parent and related disciplines as a mature field of study. The result would be that the field would grow and would exhibit predictable excellence. Based on the discussions in the preceding paragraphs, it is clear that the field of consulting psychology has some way to go before it reaches the prime stage of development (which is the desired stage).

In the phase of development prior to the Adolescent stage, or what Adizes (1999) refers to as the Go-Go stage, members of an organisation are excited, motivated and positive about what they are doing. The level of excitement about what can be achieved is high and anything seems possible. It is critical at this stage that the infrastructure supporting the system is shored up. In one respect, this refers to the development and manifestation of a body of knowledge (theoretical and practical) and a sociological network unique to the discipline to support it as it passes through adolescence. Lowman (2002b) emphasises the need for consulting psychology to have its own theoretical base (what Eraut [1994] refers to as its professional knowledge base) and empirical validation evidence. If this can be brought about, it may ensure that the field of consulting psychology does not regress to the go-go stage.

2.3.3 Future development

From the perspective of developing the field, Lowman (2002b) states that consulting psychology has the potential to be an independent speciality, overlapping with, but differentiated from, others. In terms of Adizes (1999) Lifecycles model, consulting psychology will ideally reach and remain in the prime stage (from the scientific and practice perspectives).

Consulting psychologists in independent practice, those who work in tertiary institutions and those who work for organisations in the public and private sectors must contribute to the realisation of Adizes' (1999) prime stage for the field. Indicators that the field is in the prime stage will include:

- A well established sense of identity

According to the Futures Task Group of the SCP (APA, 2001), as new graduate and post-doctoral programmes in consulting psychology are offered at universities, the primary identity of some psychologists who obtain these qualifications will be consulting psychology. In South Africa, however, doctoral students are able to study in the field of consulting psychology at the doctoral level (Koortzen, 2003), although most still study consulting psychology under the banner of various sub-disciplines of psychology, such as industrial and organisational psychology. It is hoped that subject status will be accorded to consulting psychology in its own right and that professional registration in this category will soon be possible in order to yet further establish a distinct sense of professional identity.

Success in establishing a sense of identity among practitioners also depends on the ability to create meaning in the minds and lives of consulting psychologists on a sociological basis (APA, 2001). This requires the forging of meaningful relationships among consulting psychologists in order to develop a sense of identity as, and a community of, consulting psychologists. A pre-requisite for identifying with the field is that consulting psychologists should be able to benefit, either directly or indirectly from membership of the field.

- Coalesced goals and conscious, focused priorities

According to Lowman (2002b), consulting psychology must develop a distinctive population and set of issues as well as its own theoretical base and empirical validation evidence. This process must be based on a clear awareness of the most important issues that impact on the field, both nationally and globally, now and in the future. The onus is on consulting psychologists to ensure that they remain relevant in terms of local issues, so that they can prioritise local client requirements and contribute to these, whilst ensuring that they remain abreast of international developments in this and related fields.

- Institutionalised governance processes and functional systems and structures

The rise of internet activism and the pressures of democracy increasingly drive professionals and their associations to be completely open about their governing processes, operating procedures, policy decisions and advocacy activities (American Medical Association, 2004). Good corporate governance and keeping the specialty's house in order is essential to build a viable, relevant and credible specialty.

It is also essential that consulting psychologists ensure their credibility on the basis of inclusivity. It is important to have input from a variety of backgrounds, be this in terms of ethnicity, race, gender, special interest groups and different generations of consulting psychologists. The different perspectives that are obtained in this way must be accommodated and leveraged in effective, meaningful ways to realise the potential synergies that exist.

- Delivering predictable excellence in terms of added value to clients

A substantial part of what is needed for consulting psychologists to deliver predictable excellence to clients is accounted for by Lowman (2002b), who states that consulting psychology must establish practice that is linked to keen observation, theory and empirical research. The field must also establish a model for practice and evaluation of what consulting psychologists do and the effectiveness thereof. Consulting psychology must also develop its own graduate training programmes (Lowman, 2002b). Although consulting psychologists may prefer to specialise in terms of specific content, consulting level or technique, a thorough grounding in the knowledge base of consulting psychology should be required.

Koortzen (2003) reminds that there are many ways to become competent as a consulting psychologist, only one of which is study at the doctoral level. Consulting psychologists may gain experience through course work in individual assessment, organisational dynamics, systems theory, test construction, professional ethics, practica in consultation, supervised training and internships, evaluation methods, leadership and management and more (APA, 2005).

Further attention must thus be paid by academia and practice to ensuring that the appropriate processes and contextually relevant mechanisms are implemented. This is important, not only to ensure that clients get excellent service, but also to attract new blood to the field.

- Intra and inter-field integration

Psychology has become increasingly diversified and specialised and most psychologists rarely venture beyond the boundaries of their specialities (Lowman, 2002b). Practitioners encounter many of the same questions at the individual, the group and organisational levels. They are also concerned with the same category of practices (such as assessment), yet the different specialisations rarely interface in a constructive manner. Consulting psychologists need to guard against the *not invented here* syndrome and ensure that they nurture relationships and constructive interaction with other areas of psychology, to benefit this field and others.

Consulting psychologists may also be part of multidisciplinary teams or project teams which are operating in the practical consulting or business domains. This will require that consulting psychologists are able to work in teams and to integrate effectively with professionals from other disciplines. Consulting psychologists also require a thorough exposure to elements of work and the working environment from a business perspective. Often, especially when working with organisational clients, a consulting psychologist will have to summarise, analyse and interpret phenomena within a given business context. This requires a certain amount of integration of disciplines and bodies of knowledge within the client system.

Similarly, consulting psychologists should increasingly attempt to learn about principles and developments in other sciences and explore the possibilities for their theoretical or practical application in the field as, for example Jung (1961) and Koch (2000) have done. The application of psychological principles can also be of value to other sciences, such as computer thinking (Dillenbourg, 2004) or the (still fringe concept) of personalities of neural networks described by Harry (1996), which will be of considerable value to computer scientists.

The interaction suggested above is not only to the benefit of consulting psychologists. By bringing their specialised backgrounds, training and experience in the psychology of conscious and unconscious factors in individuals, groups and organisations to the table, consulting psychologists are poised to make unique, value adding contributions to other sciences.

- Increased professional influence

The typical sponsor of a consulting psychologist is often an organisation (irrespective of whether the consulting project is conducted at the individual, group or organisational levels), consulting psychologists have a unique opportunity to increase the visibility, credibility and reputation of the profession, because, as Eraut (1994) states, the importance of the clients affects the status of the professional providing the service.

Organisations have an enormously compelling and influential effect on society, effectively influencing political, economic, social, technical, legislative and environmental factors (The Economist, 2005). By leveraging this status, consulting psychologists have the opportunity to continuously find ways to assist clients to achieve positive results. This will assure the future growth and development of the field.

- Synthesising new approaches

Eraut (1994) points out that much of the education and training of professionals is based on the segmentation and packaging of knowledge in terms of technical and scientific frameworks. This type of rendering of the knowledge-base, whilst essential (because consulting psychologists require a great deal of knowledge on a broad range of individual, group and organisational issues), is not sufficient to render the knowledge base integrated, holistic and applicable in practice.

Although, arguably, experience assists with the process of integrating the knowledge base, new approaches, theories, methods, techniques and instruments that integrate elements of the knowledge base can assist consulting psychologists to rethink their original perspectives on individuals, groups and organisations, and apply even more valuable solutions. The ability to synthesise value adding solutions from the wealth of knowledge available and to learn how to deploy these solutions in practice is important.

2.4 IMPACT OF CURRENT MOVEMENTS IN PSYCHOLOGY

Lundin (1996) describes various movements in psychology, which impact on the development of the professional knowledge base of psychologists. These include the following movements that have entered the world of work and thus impact on the field of consulting psychology. These perspectives are integrated with more recent literature in terms of their impact on the world of work at the individual, group and organisational levels.

- Systems psychology

There remains a strong emphasis on systems theory in the consulting psychology literature. Specific examples are that Fuqua and Newman (2002) discuss systems dynamics in consulting at the organisational level, Freedman and Leonard (2002) discuss the importance of systems theory at the group level in terms of consulting to representational and virtual teams. Kilburg (2000) uses a 17-dimensional systems model in consulting at the individual level and Levinson (2002) emphasises the role of systems in consulting at and across the individual, group and organisational levels.

- Psychoanalysis, psychodynamics and related theories

These approaches study the individual unconscious, the group unconscious and the institutional unconscious from a psychoanalytic perspective within the context of group and organisational life in a consultative way with issues like the way in which Oedipal and adolescent developments are reflected in organisational issues such as authority, power and the politics of difference (Lundin, 1996). Psychodynamic perspectives on organisations include topics such as identity, politics and change, creativity and change, the psychodynamics of ethical behaviour in organisations and the impact of a powerful female workforce as a threat to organisational identity (Harris, 2000; Obholzer & Roberts, 1994).

Kilburg (2004) utilises psychodynamic approaches in executive coaching. Using Tavistock methodology, Cilliers and Koortzen (2003) offer psychological consultation services to groups based on the psychoanalytic approaches offered by the Tavistock Institute. Freedman and Leonard (2002) discuss the role of the collective unconscious in groups and organisations; Kilburg (2000) emphasises the unconscious forces present in individuals, groups and organisations that drive emotions, conflict and defensive operations.

- Behaviourism and neobehaviourism

The behaviourist movement has made important contributions to methodology and established principles that have been utilised in other fields such as experimental psychology and behaviour therapy. Neobehaviourists describe and explain behaviour in the same way as the behaviourists (stimulus – response), but include the concept of consciousness. They anchor hypothetical psychological constructs to observable stimuli and behaviour in experiments but do not provide any description of the content of consciousness. Behaviourists approach topics such as leadership and executive coaching by focusing on examining and intervening in the behavioural aspects of leadership performance (Kampa & White, 2002; Wozniak, 1997).

- Neurolinguistic programming (NLP)

Practitioners, in the sports world, such as Foster (2001), are bringing techniques and methods, such as NLP, used in coaching athletes for top performance to the world of consulting psychology. Use is made of mental images of successful performance on a task, cultivating a set of routines to prepare for successful performance, positive self-talk or affirmation, activation control – consciously putting oneself into the appropriate emotional and physical state of activity required to perform successfully and the ability to focus and concentrate one's abilities on the successful performance of the task at hand. Other authors, such as McDermott and Jago (2001) utilise the principles of NLP in the development of personal well-being and personal success in the workplace.

- Humanistic and existential psychology

The subjectivist humanistic and existential views reject the objectivism of the behaviourists by proposing an analysis of the inner person based on the method of phenomenology. Humanists attempt to put the human back into human being. They maintain that people should be studied holistically, based on existentialist philosophy. From this perspective, people are conscious entities with the freedom to choose from alternatives available to them. Humanistic psychologists try to understand and describe the human experience as it is or as it happens – not in an artificial situation (Lundin, 1996).

According to the American Association for Humanistic Psychology (2004), humanistic psychology acknowledges that the mind is strongly influenced by determining forces in society and in the unconscious, but emphasises the independent dignity and worth of human beings and the conscious ability to develop personal competence and self respect. Quality of work life is emphasised, as is the responsibility for self-development, encouraging personal growth and interpersonal skills development.

- Sociobiology

According to Ceci (1990), the basic tenet of this approach is the neo-Darwinian view that behavioural traits, like morphological traits, are shaped by natural selection. Aggression, communal living (or working), cooperation and other forms of social interaction may help to determine whether a person succeeds or fails to develop optimally and this may influence the survival of the next generation.

Pugh (1978) contends that human values are innate, a production of evolution and genetics and drew on biological findings that indicate that the fundamental behavioural motivations of people are inherited and that general and social principles can be applied to human motivation in the work (and broader social) context and the role of these biological factors in human decision-making.

Blackmore (1999) and Brodie (1996) discuss memes as mechanisms by which culture and knowledge are transferred from one generation to the next by non-genetic means, such as imitation. According to Dawkins (1976), memes operate at the individual level to store, replicate and transfer ideas that are active at the level of culture and thus transcend the individual, group and organisational levels, which carries great promise from the perspective of consulting psychology.

- Physiological psychology and biopsychology

According to Kuhnert and Russell (1990), physiological psychologists contend that psychology is a biological science, which also includes social and clinical psychology. They study how the brain works and biological processes involved in sensation, motivation, stress and the effects of drugs on perception and functioning. The mind is viewed as the brain and consciousness being produced by the brain.

According to Shalif (2005), one of the principal biopsychological techniques, biofeedback, attempts, by touch or by other stimulus to change the physiological components of psychological processes. The National Institute of Mental Health (2004) describes biofeedback as a technique to assist tense and anxious clients to learn to relax. This is used in management development and coaching, to train individuals to alter habitual stress reactions by altering brain activity, blood pressure, heart rate and other bodily functions and to perform in a more effective manner. Biofeedback is a holistic approach to the human system, the core of which is the emotional subsystem. The emotions, in turn, have a physiological base in the neuronal and chemical processes and have a range of influences on the mind and body (for example, in terms of habits or personality trends).

In studying the neurological underpinnings of human behaviour, Anderson (2005) describes the concept of *mirror neurons* that are activated when a person plans an action. These same neurons are activated when a person observes someone else performing an action – hence the term *mirror neurons*. Anderson (2005, p.94) states that “mirror neurons will do for psychology what DNA did for biology”. As this movement develops, the impact on the study of behaviour in the workplace may change drastically.

- Narrative psychology

Sarbin (1986) describes narrative psychology as a viewpoint that is interested in human behaviour in terms of how humans deal with experience by constructing stories and listening to the stories of others. Berg (1989) states that psychologists studying narrative are interested in these stories as they, rather than logical arguments or formulations, represent the manner in which meaning is communicated. The methodology of narrative psychology is concerned with eliciting meaning in terms of storytelling using qualitative inquiry and interviewing in ethnographic inquiry, history, case studies, qualitative evaluation and phenomenology.

Mohrman (1989) emphasises that it is essential to create shared meaning in individual relationships and in groups and organisations through dialogue, discussion and conversation. Senge (1990) also stresses the role of dialogue for ensuring organisational learning.

Kilburg (2004) used dialogue in executive coaching in an empowering way, where he listened to the client's story about his experience of life and work and discusses how the client eventually reformulated his own plans, using the consulting psychologist as a soundboard. Along with dialogue, discussion and conversation, the utilisation of feedback techniques by consulting psychologists can enhance the consulting relationship and provide useful input for the client and consulting psychologist to work with (Kilburg, 2000; Levinson, 2002; Waclawski & Church, 1999).

- Cognitive psychology

According to Sternberg (1999), cognitive psychologists study mental processes, such as perception, thinking, memory and language. They systematise cognitive processes and their effect on people's behaviour, using informal introspection to develop intuitive knowledge that can be tested through methods such as questionnaires, interviews or other means of measurement to obtain information about what a person experiences in a particular situation. This information is then interpreted in terms of the underlying cognitive processes.

Fuqua and Newman (2002) regard the study the structures, processes and mechanisms of information gathering and dissemination in a work system to define the locus of a problem area and then to define the problem, as essential. Cognitive psychology focuses on conscious mental processes, although the data used tend to be behavioural rather than phenomenological.

The progress made in the field of computer science has contributed to the contribution of cognitive psychology to the field of consulting psychology in terms of, for example, cognitive-behavioural approaches to the coaching of business executives (Ducharme, 2004). Dillenbourg (2004) investigates the creation of computers with artificial intelligence (that can mimic human thought processes) that can be used for training purposes. On the fringes, the idea of the neural network and the neural computer investigate how computers may be thought to think and learn for themselves. This may even lead to the development of psychological disturbances in computers' *thinking* (Harry, 1996).

2.5 PSYCHOLOGICAL CONSULTING SERVICES

The levels at which psychological consultation services are provided and the settings in which these services are provided are briefly identified below. This is followed by a summary of psychological consulting services that may be provided by consulting psychologists.

2.5.1 Levels at which psychological consultation services are provided

The Education and Training Committee of the SCP (APA, 1999) describes the individual, group and organisation as three broad domains of expertise or consulting levels of consulting psychologists. These distinctions are made for organising and conceptual purposes, but are inextricably interrelated. From a holistic perspective, consulting psychologists have to be able to understand and work with all three levels, at the very least, keeping the interrelationship and potential impacts of each of these levels on the other.

Despite this, Kilburg (2000) describes the individual level interaction as the cornerstone of psychological consultation and emphasises that the competence to conduct this level of interaction effectively is a basic requirement for consulting psychologists, irrespective of whether the work required is at the individual, group or organisational level.

2.5.2 Settings in which psychological consultation services are provided

The SCP describes the settings in which consulting psychology is practiced as including businesses, industry, hospitals, universities, colleges, government agencies, military agencies, community groups, public and private schools, volunteer organisations, public service organisations, religious groups and political organisations (APA, 2002b).

Turniansky and Hare (1998) point out that individuals, groups and organisations do not exist only in the business world but also in other contexts, as varied as a kibbutz, a school or the military and that individuals, groups and organisations may have simultaneous multiple membership of these various levels both vertically and horizontally. Consulting psychologists may be employed internally (i.e. formally employed by an organisation), or externally (i.e. contracted for specific consulting projects). Insofar as consulting psychologists make contact with the client system, they become part of that system.

2.5.3 Services provided by consulting psychologists

Table 2.1, adapted from the competencies specified for the training of consulting psychologists at the doctoral level by the SCP (APA, 1999) serves as a broad index of the service offerings that consulting psychologists may be expected to provide at the individual, group and organisational levels of consulting, respectively.

Table 2.1
Service Offerings Provided by Consulting Psychologists

1. Individual level service offerings	
Individual assessment	Individual level assessment methods and techniques are employed for purposes of vocational assessment, employee selection or development, feedback is given to clients.
Individual interventions	Such services include educational, training, coaching and counselling interventions in, inter alia, the following areas: <ul style="list-style-type: none"> • Career management; • Managerial roles and behaviours; • Leadership and followership behaviour; • Technical roles in organisations; • Interpersonal relationships and psychosocial challenges of work; • Intrapsychic aspects of work such as motivation, resistance to change and emotional management; • Crisis management concerning individual behaviour in organisations; • Individual performance in relation to groups and organisations; • Role conflict management; and • Effective performance in globally oriented, culturally diverse environs.

Table 2.1*Service Offerings Provided by Consulting Psychologists (Continued)*

2. Group level service offerings	
Role analysis and renegotiation	Consulting psychologists assist clients to properly diagnose role conflicts and assist them to analyse and negotiate or renegotiate their roles.
Group formation and development	These services enable group leaders and members to form a group, to establish productive relations between the members and the leader, develop constructive relationships among peers in the group and foster cooperative relationships between the group and other role-players, be they other individuals, groups or organisations.
Work groups and inter-group problem-solving	Two or more groups may be assisted with improving their relationships in order to carry out interdependent work assignments more effectively.
Identity groups and intergroup relations	Such services aim to eliminate, ameliorate or make the group aware of group-level forces that result in members of some identity groups (defined on the basis of, for instance race or gender variables) in organisations being unfairly treated by members of other identity groups.
3. Organisational level service offerings	
Organisation theory and design	This includes organisational structure and design projects (e.g. legal structures, matrix configurations, centralisation or decentralisation); organisational ecology projects (for example, the effects of size, growth or market and life cycle); organisational effectiveness projects (e.g. productivity, benchmarking); globalisation projects (e.g. political, economic, social, technological, environmental and legal challenges) and ethics-related projects (e.g., locus of authority or diversity).
Organisational assessment	Conducting organisational assessment by collecting data, analysing it and providing feedback. Organisational assessment may include the systematic assessment of the entire population or component parts of the organisation.
Organisational change	Organisational change implies change that is atypical for an organisation. Consulting psychologists assist clients to create, develop and implement change interventions on an entire organisation or parts thereof.
Organisational effectiveness and development	Enhancing the effectiveness of existing organisational structures, by means of incremental rather than dramatic or transformational change program creation, development and implementation.
Research and evaluation	Research and evaluation services may extend across all three levels of consulting and includes the evaluation of the impact of all other services listed above.

Note. Adapted from Lowman (2002a).

2.6 COMPETENCIES OF CONSULTING PSYCHOLOGISTS

The key knowledge, skills and attitudes (competencies) required by consulting psychologists are discussed from the scientist-practitioner perspective. Consulting psychologists must develop awareness of phenomena in the client system for themselves and for the client and determine how to use this awareness to add value to the client system. The issue of competencies may be looked at from many angles, ranging from generic, applied competencies to core technical competencies, to Gestalt-oriented competencies and business-related competencies. These are discussed below in relation to the field of consulting psychology.

2.6.1 Generic, applied competencies

The Framework for Qualifications of Higher Education Institutions in Scotland (Bryce and Humes, 1999), describes generic, applied competence required at the doctoral and professional levels. These competencies apply to consulting psychologists from the scientific, academic and practice perspectives and embody a unified and holistic view of the domain of professional work. The generic, applied competencies are:

- A comprehensive and systemic grasp of a field's body of knowledge with expertise and specialist knowledge in an area at the forefront of the discipline, field or professional practice;
- A critical understanding of the most advanced research methodologies, techniques and technologies in a discipline or field; an ability to participate in scholarly debates at the cutting edge of an area of specialisation; an ability to apply knowledge, theory and research methods creatively to complex practical, theoretical and epistemological problems;
- An ability to conceptualise and perform substantial independent research and advanced scholarship resulting in the (re) interpretation and expansion of knowledge which is judged publishable by peers;
- An ability to identify, conceptualise, design and implement research projects that address complex, ill-defined problems at the cutting edge of a discipline or field;

- Advanced information retrieval and processing skills; an ability to independently study, analyse, interpret, evaluate and report on literature and current research in an area of specialisation;
- An ability to effectively present and communicate the results of research and opinion to specialist and non-specialist audiences using the resources of academic or professional discourse; the production of a thesis which meets international standards of professional writing; and
- A capacity to operate autonomously in specialised, complex, ill-defined and unpredictable contexts; intellectual independence and research leadership through managing advanced research and development in a field professionally and ethically; a capacity to critically evaluate own and others' work on the basis of independent criteria.

Developing these generic competencies can contribute to the well-being of the field of consulting psychology. These competencies must be nurtured by academic institutions and the consulting psychology community, as they can significantly benefit the contributions that can be made to the science and practice of consulting psychology.

2.6.2 Core, technical competencies

Core competencies of consulting psychologists are described below in terms of the expected competencies of persons receiving training at the doctoral and post-doctoral level in consulting psychology, developed by the Education and Training Committee of the SCP (APA, 1999). These competencies provide an overview of the generic body of knowledge that the consulting psychologist is expected to have and which characterises the knowledge base of the profession. These are the skills related to the discipline of psychology, applied in the work context. As such, they are the link to the broader community of psychologists.

- Individual level core technical competencies

Work at the individual level of consulting is fundamental in the practice of consulting psychology. At the individual level, a person is regarded as a separate, discrete entity in the non-clinical work context (APA, 1999).

Consulting psychologists must be competent to perform appropriate work and career-related assessments and interventions with individuals and are expected to be able to differentiate between situations that require skills outside of their range of skills, such as with abnormal psychological conditions (unless, of course, they are clinically trained) and normal ranges of behaviour in the work context (Koortzen, 2003).

- Group level core technical competencies

At this level, competencies take the group as the primary unit of analysis. Crucial propositions are that organisations are shaped by group level forces, that individuals in organisations function as group representatives whether or not they intend to do so and that the internal dynamics of groups cannot be understood independently of the external relations of those groups. Furthermore, the unconscious processes within individuals, within groups and between groups, affect individual, group and organisational behaviour.

- Organisational level core technical competencies

Organisational level core technical competencies focus on entire organisations either in the sense that the organisation itself is the primary unit of analysis, or in the sense that substantial parts of the organisation are the primary units of analysis and are critical in assessing and diagnosing issues in the organisation as a whole. Organisational level core competencies include those directed at organisational level assessments, organisational strategic planning, change management programmes, organisational effectiveness and development programmes and other types of research and evaluation functions.

2.6.3 Practice-related competencies

In addition to the generic, applied competencies, the generalised competencies of Gestalt-oriented consulting and the specific core psychology-related competencies described above, it is necessary, for consulting psychologists, working in practice, to have the practice-related competence to ensure that their practice survives and grows and forms a solid foundation from which to apply their professional knowledge. The literature on the business of consulting specifies, *inter alia*, the following areas of knowledge required by consultants, depending on their particular circumstances, for example, sole practice or in company with other professionals (Fields & Horwitz, 1982).

- According to Markham (1997), consultants must be competent business people. This encompasses the economic aspects of consulting and includes issues such as maintaining utilisation of consultants and resources, investing non-fee-earning time carefully and managing cash flow.
- Shenson and Nicholas (1993) describe the basic knowledge needed by professional consultants as including financial management, marketing, sales, trend prediction and human resources management. They also describe the need for understanding the various forms that a practice may take (for example, a sole proprietorship, partnership, professional practice, corporation or limited liability company).
- Shenson and Nicholas (1993) also point out the need to ensure the availability of the right support system, including legal advisor, accountant, banker and access to professional associations.
- Holtz (1988) states that professional consultants must be skilled in prospecting for work, the different types of methods for generating business, client-relations and keeping clients that one has, as well as consulting to special clients, for example, dealing with the government as a client. Marketing and selling services may include issues such as market planning and research, promotional planning and coordination and sales literature planning and coordination.
- Consulting psychologists must also understand issues related to competition and the protection of turf (Holtz, 1988). This extends to issues such as the protection of intellectual property. This is particularly important, because as Marjatta and Poulfelt (2000) point out, the knowledge base of most professionals is now globalised and easily accessible to almost anyone in the world at any time at a relatively low cost. Intellectual property, specifically in the domain of knowledge workers, such as consulting psychologists, is difficult to exercise control over.
- Consulting psychologists are expected to have the capacity for self-directed reflection, the ability to receive critical feedback from clients and colleagues, the willingness to change behaviour and to develop the professional and psychological maturity needed to work effectively with individuals, including ethical and legal issues.

2.6.4 Characteristics of consulting psychologists who add value

According to Sheth (2003), clients perceive that professionals who deliver a value-adding service listen to what clients mean, not only what they say. They ask excellent questions that enable solutions rather than supplying them (or trying to be seen as the only ones who can supply them). They are honest, independent and are seen to further the client's agenda rather than their own. Accordingly, they provide working sessions that advance the client's thinking, rather than being told a series of steps that can only be performed by a consultant. In order to be able to do this in a systemically relevant way, consulting psychologists must have a good understanding, not only of the client's industry, but also a breadth of knowledge, even to the extent of bringing to clients analogies from other fields.

Sheth (2003) proposes the following behaviours for consultants who add value to their clients.

- Listen with empathy

Besides the obvious requirement of listening more than talking, consulting psychologists should be acutely aware of the issues and concerns that keep their clients awake at night. They should also enjoy spending time with their clients and find that clients routinely confide in them.

- Be a deep generalist

Consulting psychologists should, by virtue of their training and experience, notice things that other people do not. Clients will ask for advice and respect their judgement on issues, even extending beyond their core expertise. Consulting psychologists should have a core expertise about which they layer knowledge of related fields. They have, therefore, to nurture continuous learning.

- Form a relationship of mutual trust

This extends beyond the understanding that the consulting psychologist will deliver good work, to a deeper, broader trust based on professional competence and personal integrity. Both parties feel free to bring up touchy subjects with each other.

- Be a big picture thinker

Consulting psychologists must be able to put things together into a whole – a Gestalt. This requires the ability to identify overarching patterns and themes. Consulting psychologists should continually collect facts, analyse them and ask *why*. They should summarise and highlight key issues in the client system.

- Display good judgement

This requires consulting psychologists to display the ability to arrive at opinions about issues that are trusted and valued by their clients, using a combination of the facts, their experience and their personal values.

- Display conviction

To display conviction, consulting psychologists should feel and project energy and passion for their work. In terms of the consulting process, Kilburg (2004) states that consulting psychologists need to know themselves in terms of their interpersonal, psychological and business-related capabilities in order to be effective. This is especially important when consulting psychologists use themselves as an instrument for diagnosis or intervention.

- Maintain selfless independence

This refers to maintaining a balance between commitment to clients and detachment from them, in the sense of intellectual, emotional and financial independence. In terms of commitment, consulting psychologists should focus on the client's agenda, ask the right questions (to which the client should provide the answers) and never steal the client's glory.

2.7 A GESTALT APPROACH TO CONSULTING PSYCHOLOGY

In the view of this researcher, the Gestalt approach has not been fully deployed in consulting psychology, especially not from within the field, and not in a complete, holistic manner. It is certainly true that sociological, epistemological, ontological, teleological and methodological aspects of other psychological approaches, such as psychodynamics and systems theory intersect with those of the Gestalt approach to some extent.

However, they do not necessarily adequately equip consulting psychologists to diagnose, explain, predict and intervene at the individual, group and organisational levels in a holistic, integrated manner, allowing consulting psychologists and their clients to explore, to experiment and to create awareness, insight and improve the well-being, functioning and growth of the entity.

2.7.1 Basic Gestalt consulting activities

The following consulting activities (described by Stevenson, 2002) conform to the basic Gestalt psychology and thus also to a Gestalt approach to consulting psychology. When adopting a Gestalt approach to consulting, consulting psychologists must:

- Attend, observe and selectively share observations of what is seen, heard, thought and felt;
- Attend to their own experience (feelings, sensations, thoughts, etcetera) and selectively share these experiences, thereby establishing their presence in doing so;
- Focus on energy in the client system and the emergence, or lack, of themes or issues for which there is energy, thereby supporting mobilisation of that energy so that something happens;
- Facilitate clear, meaningful, heightened contacts between members of the client system (and with the consulting psychologist); and
- Help the client system to complete units of work and to achieve closure around unfinished business.

2.7.2 Application of general Gestalt psychology principles to consulting psychology

According to Yontef (1993), the general principles of Gestalt theory must be adapted to the particular situation in which it is being applied. This requires that consulting psychologists operating from the Gestalt perspective require a background in more than Gestalt psychology.

Table 2.2*Gestalt Psychology Principles Applied to Consulting Psychology*

Gestalt Psychology	Consulting Psychology
"Learning occurs through examination of here and now experience. Acting in the here and now enables the client to secure the future by making the best possible decisions at the time" (Ivey, Ivey & Simek-Morgan, 1997, p.379).	Learning occurs best through focusing on the process of interaction with and between clients.
According to Ivey, Ivey and Simek-Morgan (1997, p.379), the Gestalt approach emphasises the processes of becoming, acting and action. Awareness is the precursor to effective action. Awareness leads to choice. Also, in terms of the paradoxical theory of change (Beisser, 1970), stated that change does not take place through coercion, either by the individual himself or by another person, but it does take place if the time and effort is taken to understand the individual (or group or organisation) and to recognise its potential to become.	More effective change occurs in systems those systems (individuals, groups or organisations) when they are involved in the change process. In the consulting situation, this means, inter alia, that consulting psychologists must attempt to allow the client to become aware of and accept aspects of reality on his or her own.
There is an inherent drive for people to behave as effectively as possible. The task of the psychologist is to help them learn this.	Individuals, groups and organisations have the potential for solving their problems. The task of consulting psychologists is to facilitate awareness, insight and understanding.
Change is the responsibility of the client, not the psychologist.	There has to be co-ownership of the consulting process and co-responsibility, even if it is only moral or ethical.
Individual autonomy is crucial to healthy adjustment. According to Ivey, Ivey and Simek-Morgan (1997, p.379), the Gestalt approach emphasises the processes of becoming, acting and action.	Individual, group and organisational autonomy are important in the healthy adjustment of these entities, but <i>figure</i> cannot be totally separated from <i>ground</i> and the task is to optimise the interaction by balancing integration, coordination of the entity, whilst empowering the other parts of the system.

Table 2.2 (Continued)*Gestalt Psychology Principles Applied to Consulting Psychology*

Gestalt Psychology	Consulting Psychology
Growth is facilitated by the interaction of the client and the psychologist. The presence of the psychologist in the system is critical.	Consulting psychologists have to engender a safe, healthy, enabling environment in which individuals, groups and organisations can become aware. Consulting psychologists use the self as instrument, and often take clients out of the normal working situation in order to create the environment for awareness.
Growth occurs at the contact boundary between what is known and that which is unknown or rejected. Very often, the client has more content knowledge than does the consulting psychologist and has to make the decisions. According to Ivey, Ivey and Simek-Morgan (1997, p.91), "by understanding how people construct meaning, practitioners can design treatment plans that are in concert with each individual's personal way of understanding and operating in the world. This also applies to groups and organisations".	The content of and manner in which consulting psychologists present to and challenge clients are critical. Methodologies such as action learning and experimentation have great potential for engendering growth. It also means that consulting psychologists should use techniques and instruments that stimulate interest – carefully maintaining the balance between the known and the unknown and constantly anchoring the client.

2.7.3 Centrality of the client-consulting psychologist relationship

According to Nevis (1987) consultants provide a presence which is otherwise lacking in the system. Thus, consulting psychologists represents both a literal and a figurative presence, representing certain values, bringing certain skills to the system, modelling a way of dealing with issues and dealing with life in general. This helps the client to focus on here and now issues that are pertinent to the consulting project, teaches basic skills (for example, behavioural problem-solving) and evokes conditions that enable experimentation.

Stevenson (2004) discusses the entry of the consultant to a consulting project. This entry is, in itself a powerful intervention that alters not only the psychological landscape in terms of figure and ground, but also the physical in terms of the presence of a person who was

not perceived by client members as part of *their system* prior to entry. Consulting psychologists thus have to take care that they introduce a positive, integrating force into the client system. The establishment and nurturing of a climate of trust and credibility between the client and the consulting psychologist is of paramount importance. The relationship between credibility and trust and the willingness to engage with another is well documented in the research, for example, in Sher (1999).

Specifically, in the world of work, individuals, groups and organisations generally require some convincing of the credibility and trustworthiness of people assumed to be in a leadership position (Kouzes & Posner, 1993). Similarly, Schein (1988) and Harrison (1994) emphasise that the consultant must be able to convince the clients that they will be able to justify the cost of the consultation, before they will allow a consultant to participate effectively in a consulting project, or reciprocate the efforts of the consultant. Therefore, the consulting psychologist's behaviour must be congruent with the message (in all modalities) portrayed to the client. Satir (2000, p.21) describes congruence as "one looks like one feels, says what one feels and means, and acts in accordance with what one says".

Consulting psychologists must be able to deal with preconceived ideas about how a psychologist is expected to behave. For example, clients may have certain expectations of how a consulting psychologist should dress. Contravening those expectations may cause resistance within the client system, which may require some time to overcome. As a consultant who is also a psychologist, consulting psychologists may also be typecast in the role of doctors who make people lie down on a couch and ask them personal questions. Such misconceptions (if they are misconceived) may also have to be dealt with before the legitimate relationship between consulting psychologist and client may be reached. Resistance may also originate from other forms of attribution, stereotyping or previous experience with consultants or psychologists.

Consulting psychologists need to guard against becoming overly engrossed with the content of the client's situation and to allow the client (individual, group or organisation) to make their contribution. JJN DeConing (personal communication, 14 January 2004) describes the success of a consultant as the extent to which clients feel that they (the clients) have gained the insight required to take their situation to another level. Paradoxically, with certain clients, this very concept may lead to the perception that the consulting psychologist has merely stood by, whilst the individual or members of the group or organisation do the work.

Clients may not always realise that the reason for the consulting psychologist's presence in the client system is to evoke some form of change in the system through creating awareness – clients may feel that they are doing all the work.

Argyris (1990) states, in terms of his theories of action, that defensive routines exist in individuals, groups and organisations. These routines are a type of immune system that attempts to preserve individuals, groups' or organisations' normal patterns of dealing with reality and function as a buffer between the entity and perceived or actual threats from the environment. These defensive routines often also prevent people from identifying and ridding the system of problems or sub-optimal states.

Satir (2000) states that it is beneficial to the relationship that constructive feedback is given in terms of the consultants' own reactions to contacts with the client system, as this builds awareness and can lead to a new way of operating being modelled. This can effect change within the system.

Naturally, the ability to use the self as instrument in the consulting situation and to display the characteristics of a good professional (Sheth, 2003) of building a relationship of mutual trust, seeing the big picture, displaying conviction and good judgement and being intellectually, emotionally and financially independent place further requirements upon consulting psychologists who wish to use themselves as instruments.

Piterman (1999) describes some of the stresses faced during the process of consultation. The environment may be anxiety provoking (for example, during a strike), the work complex (for example, each person may have a different experience of an event), ambiguous (for example, trying to read how someone feels or thinks), unsettling (for example, giving bad news) and fraught with inconsistencies and uncertainty (for example, making assumptions on the nature of the future). Events, motives and behaviours that may make sense in hindsight may feel extremely confusing at the time.

According to Stevenson (2002) behaving in a non-defensive manner towards clients also renders the consultant vulnerable. In reflecting on the consulting domain, consulting psychologists can use their own images and fantasies that occur while gathering information about the system to create diagnostic hypotheses. Even more powerful is when consultants share these with the *third ear* - a colleague outside of the client system to listen, reflect and

hypothesise on the consultants' experiences from an objective perspective. This can assist consulting psychologists to hear their own hypotheses being processed by a third party and highlight the counter transferences in their functioning (Czander, 1993).

2.7.4 Developing awareness in the client system

Nevis (1987, p.116) describes two types of awareness and encourages Gestalt-oriented consultants to "move back and forth (between the two modes)...keeping one's boundaries as open as possible to receive any and all data from self and other." Consultants are effective if the client system shows movement towards owning its conscious and unconscious behaviour in the sense that it is open for what happens in the here-and-now without being defensive towards the own behaviour. This implies insight in organisational and group dynamics, qualitative approaches to investigating organisational and group behaviour, being able to use the self as an instrument in learning, managing and leadership, and eventually taking up the role as a Gestalt oriented consulting psychologist.

Active, directed awareness emphasises the structured, guided questioning of members of the client system. There is a high resolution focus on figure, searching in terms of sensory modalities, supported by conceptual biases and content values. Consulting psychologists attend to things in terms of knowledge of how they work and what is present or missing. They may use a structured framework or process and actively encourage *something* to emerge.

Open, undirected awareness attempts to hold hypothesis formation in abeyance for a longer period of time to manage the risk of bias, misperception, or the sub-optimal awareness of the client system. Consulting psychologists may, for example, use silence (waiting for something to emerge, or take a break at a particular time to give group members an opportunity to talk). Open, undirected investigation is process-oriented and relatively content-free. As such it is not organised, structured or prejudiced and there is as little as possible held in the foreground - as much as possible is regarded to be part of the ground.

2.7.4.1 Experimentation as a technique for developing awareness

Goodman, in Stevenson (2002) states that awareness may be gained through experience or through experimentation. The presence of the consulting psychologist in the client system

aims to evoke some form of change in the system through creating awareness. According to Kolb, in Stevenson (2002) experimentation focuses on creating opportunities for insight into how the client experiences the self and the environment. It is critical in this area to link awareness and insight gained in terms of figure back to ground so that the learning becomes crystallised, in context.

Experiments are, in effect, small-scale tests (Stevenson, 2003). In these tests, the potential suitability of decisions at the individual, group or organisational levels of consulting are explored at relatively low cost as opposed to the untested, full implementation of decisions. There are many types of action research experiments or small-scale tests - from trying out an individual development plan to determining size of budget or criteria for success of a group or organisation on a test-basis (Tomke, 2001).

Experiments give people the opportunity to test ideas, sit back and reframe problems or consider behaviour without personal risk or risking other resources. It is particularly important, in the context of this research to note Stevenson's (2002, p.15) contention that experimentation can lead to an awareness on the part of the client of what is possible – what could be – and how things could be better in the future. This is critical for consulting psychology in that the tension that exists between the conception of the current reality and a better or more desirable future. This creates impetus for change.

Stevenson (2002, p.15) adds to the value of experimentation, stating that "all outcomes are valuable. Experiments reveal several possible new ways of thinking and behaving that could provide significant insights into organisational courses of action." He adds that the value of the outcomes of experimentation is equally valid at the individual and group levels of consulting.

Several examples of the value of experimentation, both by the researcher (a consulting psychologist) and by clients) can be found in this research. Specifically, the freedom to experiment in a way that gives the researcher the intellectual freedom to forego constraints is critical in terms of the thought experiment, which is described in Chapter 4. In this thought experiment, open, undirected awareness is consciously pursued, with the researcher attempting to hold interpretations, judgements and conclusions in abeyance for as long as possible, waiting for something to emerge – for the Gestalt to appear. Once this occurs, the researcher then proceeds to more directed creative experimentation, trying to

imagine how the Gestalt can be applied to psychological consultation and then to develop the mental model in a more interpretive, descriptive manner. Gestalt principles for experimentation are built into the methodological framework for applying the String Model in Chapter 5. Examples of how clients utilised the workshop environment to experiment with different ways of thinking about themselves and their business are described at length in Chapter 6.

2.7.4.2 Conversation as a means of developing awareness

Along with experiments, conversation between clients and consulting psychologists is an almost ubiquitous means of influencing awareness, insight and understanding. This is as much for the benefit of influencing the awareness, insight and understanding of consulting psychologists (in terms of their ability to diagnose, explain, predict and intervene), as it is for clients (in terms of their responsibility to deal with their working environments in the optimal manner). Stanfield (2000) describes various types of conversation with clients.

- Descriptive, objective conversation

Descriptive, objective conversation provides a convenient, concrete beginning point for conversation and may be described as building rapport and a common foundation. The focus of descriptive, objective conversation, facilitated by the consulting psychologist is on collecting data about the topic, external reality, directly observable events. The purpose thereof is to begin to establish a clear understanding of the objective what is (as described by the interviewees), that is relevant to the unit of work. This is normally the focus of the first part of the interview, as the consulting psychologist attempts to create rapport with interviewee or interviewees and allows all parties to overcome as much anxiety as possible in relation to the situation and the presence of the consulting psychologist in the client system (Stanfield, 2000).

- Reflective conversation

Reflective conversation refers to elaborating on, or fattening the picture. This type of conversation is directed at exploring the internal relationship of the data to the interviewee, in order to reveal information about feelings, moods, emotions, attitudes, associations, thoughts of the interviewees – expanding the picture presented by interviewees over and

above the description of facts. The consulting psychologist has to decide at what stage sufficient rapport exists, to begin asking the interviewees questions that are deeper and more revealing about the interviewees' perspectives of phenomena related to the unit of work (Stanfield, 2000).

- Interpretive conversation

According to Stanfield (2000), interpretive conversation is aimed at deepening understanding. Interpretive conversation builds on awareness created in the preceding conversation. The consulting psychologist explores layers of meaning, purpose, significance, implications, stories, insights etc. related to the unit of work. This area, particularly, requires that the consulting psychologist's approach (paradigm perspective, methodological convictions and behaviour) be congruent.

When engaged in interpretive conversation, the consulting psychologist asks directed questions, from within a particular framework. In this research, for example, this framework is provided by the mental model that is developed taking into account Gestalt psychological principles, together with a congruent methodology for applying this model. During this and the preceding levels of conversation, the researcher interprets what is heard in terms of the characteristics and dimensions of the mental model and asks relevant questions based upon this interpretation. Here, the interviewees may be quite unaware of the mental model and the consulting psychologist asks questions related to his or her interpretation of what the interviewees are saying.

This is arguably the most difficult level of conversation and the consulting psychologist must be particularly well prepared if useful information is to be yielded. Stanfield (2000) suggests that the interviewer support this level of conversation with pre-prepared notes that can support the process and also take notes of the awareness created by this level of conversation.

- Decisional conversation

Decisional conversation refers to discussion in preparation for action (Stanfield, 2000). The focus is on the implications of the conversation, clarifications of what is to happen next,

what the direct response will be and what decisions are required. As such, decisional conversation is important in attempting to create a bridge from talk to action.

2.7.4.3 Holding space as a means of provoking awareness

Holding space can contribute the creation of a safe, enabling environment in which clients can experiment and in which they can enhance their awareness. Epstein (1995, p.186) regards holding space as “filling the moment with positive silence, with a relaxed attentiveness. This enables clients to fill in gap in their internal and external realities and to surface awareness that otherwise is drowned out in superficial speech. When this awareness of gaps or inconsistencies occurs, then real, unscripted, spontaneous communication occurs”. This concept has important implications for the process of facilitation, such as taking breaks within an intervention or between appropriate steps or phases in a consulting project, to give clients the opportunity for reflection on their own.

2.7.4.4 Using the self as an instrument

As previously described in this chapter, the consultant must be skilled in engendering awareness in individuals, groups and organisations and must, therefore, be able to demonstrate a highly developed sense of awareness personally (Yontef, 2005). This is described by Latner (1992, p.101) as being “aware of the present, to be totally in it, ensures that the self is functioning as it is meant to. The self is us, the accumulation of our experiences, our heredity, and predispositions.”

The consulting psychologist therefore steps the self in the immediate environment of the consulting project and uses the self as an instrument to observe, experience and bring insights to the client, that would otherwise remain undetected or unrealised. Such observations or insights are reflected to the client, with the consulting psychologist acting as Stevenson (2002, p.3) describes it, “as a mirror for the client, and adding value by sharpening the clarity of the reflection.” Stevenson (2002) describes the goal of Gestalt consultation as to be as fully present with oneself and with the client as possible.

Consulting psychologists may use themselves as diagnostic instruments and collect genetic, structural, process or interpretive data to do with the client system. The advantages of using the self as instrument are the following (McCormick & White, 2000):

- Triangulation of data - by reflecting within the self and using the third ear concept, consultants are checking whether preconceived ideas excluded other important data;
- Initial hypothesis - the hypothesis carried across the boundary into the client system must be re-visited continuously, to ensure that it does not become the conclusion;
- Integrative hypothesis - integrating the initial experiences with, for example, survey and interview data leads to more in-depth understanding;
- Inexpensive and accessible data - being observant and aware in the client system, paying attention to the offices, rituals and artifacts; and
- Reducing stress – distancing the self from the dependency of the client system with its projections of the Messiah to save it from its misery.

In order to facilitate using the self as an instrument, Levinson (2002) advocates keeping a diary of contacts with the client, activities carried out, impressions and feelings about the consulting system. Such notes provide a useful framework for reflection about phenomena in the client system and can optimise the ability of the consulting psychologist to draw on all of his or her abilities in a holistic sense in interpreting these from the cognitive, emotional, dispositional and personal perspectives.

2.8 ROLES OF THE CONSULTING PSYCHOLOGIST

Campbell (1995) defines consultation as a process that assists individuals and organisations to become more effective and efficient. Schein (1988, p.24) elaborated on this definition by stating that "as the relationship between consultant and organisation evolves, the concept of who is the client comes to be broadened so that the consultant may be working with individuals, groups and organisational units at different times".

Sheth (2003) describes an emerging polarisation of relationships between professionals and their clients. Characteristics of the relationship at the poles are the options of being a vendor of a particular commodity only at one pole, with being a trusted advisor to the client at the other end. Irrespective of where consulting psychologists prefer to be along this

continuum on a personal basis, consulting psychologists must be able to understand and apply consulting roles, ranging from non-directive to directive, as depicted below.

Figure 2.2, adapted from Campbell (1995), illustrates a continuum of roles that may be adopted by consulting psychologists, depending on personal preference, skill, nature of the consulting project or client preference. In a non-directive role, the consulting psychologist typically facilitates (as indicated by the different roles on the left hand side in Figure 2.2), adopting the process consultation approach (Schein, 1988). In contrast, consulting psychologists may have to consult in a more directive manner, providing expert answers and assisting with relatively more with content (Schein, 1988) issues (adopting roles more to the right hand side of Figure 2.2).

Figure 2.2
Roles That May be Adopted by Consulting Psychologists

Non-directive				Directive				
Client								Consultant
Reflector	Process specialist	Fact finder	Alternative identifier	Collaborator	Trainer / educator	Technical expert	Advocate	
Raises questions for reflections	Observes problem solving processes and raises issues mirroring feedback	Gathers data and stimulates thinking	Identifies alternatives and resources for client and helps assess consequences	Offers alternatives and participates in decisions	Trains the client and designs learning experiences	Provides information and suggestions for policy or practice decisions	Proposes guidelines, persuades or directs in the problem-solving process	

Note. Adapted from Campbell (1995).

In terms of Gestalt psychological theory, the purpose of psychological consultation is to highlight incongruencies and inconsistencies in the client system and to bring these into the foreground. This requires consulting psychologists to adopt various roles and stances, depending on the demands of the consulting situation. This may sometimes require consulting psychologists to adopt more a more confrontational stance if, for example, clients display avoiding or deflecting behaviour.

2.9 A TYPOLOGY OF CONSULTING PROCESSES

Larsen (1997) provides a typology of consulting processes that elegantly summarises the options for the interface of consulting psychologists with their clients, including the role of the consultant, the phases of a consulting project, the balance of client versus consultant dominance, the time span, place and orientation of the consulting task. This is reflected in Table 2.3 below.

Table 2.3
Typology of Consulting Processes

Type of process	Role of consultant	Phases	Client / consultant dominance	Time span and place of task	Task orientation
Traditional	Spanning from reflector to advocate, possessing both analytical and interactive roles and skills	Contact, improvement, production and implementation	Interaction in production and implementation phase where the client typically dominates	Once-off relationship with relatively short time span on clients premises	Spanning from analytical report oriented output to interactive problem-solving tasks
Back-and-forth	Collaborating on problem-solving and identification of alternatives	Contact, continuous interaction, adding value to client with respect to task, questioning each phase in order to improve solutions	Active client and consultant. Consultant offers alternatives and participates in decisions in a pedagogical way	On-going and medium term relationship that ends with solution to a problem	Focus on problem-solving process. Consultants improve the solution to the problem – a process of creativity
Spiral-oriented	Advocate and innovator of new potential value added areas for the client	Multiple phases during interaction according to each task. Phases may overlap.	Consultant dominates in problem-solving activity	Long-term ongoing relationship	Focus on the client's strategic information base which is enhanced with the consultant's knowledge of related tasks
Expert-oriented	Collaborator and team-oriented across knowledge fields in problem-solving	Phases are redefined according to project and interactive participation	Active clients and consultant (group working and team building)	Long-term expanded relationship. Not necessarily on client's premises. According to type of project and number of participants	Network focused process with multiple points of interaction

Note. From Larsen (1997).

Consulting psychologists may adopt a variety of styles or role with clients throughout the consulting process (Campbell, 1995). The same psychologist may adopt a different role with other clients, depending upon the specific needs, skills or experience of the clients and dealing with group dynamics.

Different roles may also be adopted at the different consulting levels. For example, a consulting psychologist may advise on the process of organisational restructuring (organisational level) to the board of directors of a company, whilst providing best practice or benchmarking guidelines to a task team working on a restructuring project (group level) and conducting an audit of the competencies of individuals required to fill certain positions (individual level). Different roles may also be adopted at various phases of the same consulting project.

Arguably, if one considers the application of Gestalt psychological principles (described in Table 2.2), the development of insight, awareness and understanding is promoted when participants have the opportunity to explore phenomena in the consulting domain, to learn best through the process of interaction with others (including the consulting psychologist), to become aware of, and accept, aspects of reality on their own. Consulting psychologists should act in terms of all the roles described in Figure 2.2 and Table 2.3, depending on the demands of each particular situation and strive to ensure that clients are afforded the opportunity to develop awareness, insight and understanding themselves, so that they have the opportunity to learn and to become whatever it is that they perceive as valuable.

2.10 CONSULTING PSYCHOLOGY AS A SCIENCE AND AN ART

As highlighted above, the work of consulting psychologists is very much about knowing when, why and how to intervene. Harrison (1995) refers to consultation as being both a science and an art and this applies equally to consulting psychology. It is useful to consider consulting psychology as both a science and an art in terms of empirical, ethical, aesthetic and personal aspects, as described by Chinn and Jacobs (1987). These aspects are important, given the complexity of the consulting domain and the demands of consulting. They exist side-by-side with one another and, in a systems sense, impact on each other and should be in balance in order for the consulting psychologist to achieve sustainable success. Neglect of one of the aspects implies a disregard for the Gestalt – they are aspects of the Gestalt that is the consulting psychologist in context.

2.10.1 Empirical aspect

The empirical aspect of consulting psychology follows the phenomenological perspective that reality is a subjective phenomenon, where different observers may have different perspectives on the same phenomena (Latner, 1992). This is in contrast to the traditional notion of science, described in Chinn and Jacobs (1987), that reality is an objective phenomenon that can be verified by multiple observers.

Nevertheless, the principle that is brought to bear emphasises that empirical views of phenomena are translated into scientific theories or models and the focus is on description of the major ideas in terms that can be interpreted as empirically real (either objectively or subjectively). In terms of the scientific underpinnings of consulting psychology, consulting psychologists are compelled to heed the empirical requirements for factual description, describing the nature and functioning of phenomena, validation of findings and replication thereof.

2.10.2 Ethical aspect

The ethical aspect refers to moral knowledge, which goes beyond mere knowledge of the norms or ethical codes of consulting psychology to judging in relation to deliberate and voluntary actions in terms of the critical questions of what is responsible behaviour. Answering these questions often involves invoking values, norms or principles that may conflict with one another (Chinn & Jacobs, 1987). Consulting psychologists are often looked upon as role models. They are also expected, from the professional perspective, to behave ethically. A review of ethical aspects of organisational consulting psychology is provided in Lowman (1998; 2002a).

Ethical questions often arise such as when, for example, a consulting psychologist works for a client who makes weapons for the military. These weapons are made to kill other people and the consulting psychologist may therefore have to examine his or her beliefs about whether it would be ethical to work for such an organisation. The complex interrelationship between consulting psychologist and client (individual, group or organisation) may also call for moral decisions having to be made around, for example, putting people through the hardship of retrenchment when the motive of the employer for separating the employee is questionable.

2.10.3 Aesthetic aspect

The aesthetic aspect refers to comprehending the meaning of phenomena in the here and now, including imagined possibilities, as well as moving beyond the circumstances of the moment to discern meaning, to take action or to create a possibility. According to Chinn and Jacobs (1987), the various dimensions of aesthetics are representing (a reality in mental or physical form), interpreting (fostering creative envisioning of what can be) and creation (integrating representation with interpretation in the moment of experience or action).

The Gestalt perspective supports the notion that representations can be perceived to have power, liveliness, vigour, clarity, unity, movement and to be compelling. The law of Pragnanz or *good form* is an aesthetic concept (Latner, 1992). This results from, inter alia, the Gestalt principles of organising, including the principles of good form, closure, stability, balance and proportion, which become part of an individual's reality and influence interaction with the environment and which impact on the way in which phenomena are experienced. When, for example, consulting psychologists consult on managing change, the process often involves imagining a future situation or scenario (representing), describing what the future will be like (interpreting) and developing and implementing a specific plan of action to actualise the desired scenario (creating).

2.10.4 Personal aspect

The personal aspect of consulting psychology is of critical importance in terms of the centrality of the relationship between consulting psychologist and client. The consulting psychologist is required to enter into the client system and may adopt various roles in order to facilitate or enable raised awareness and insight in the client system (Harrison, 1995; Levinson, 2002; Schein, 1992).

According to Carper, in Chinn and Jacobs (1987) personal aspects of professional knowing concern inner experience and becoming a whole, aware person who is able to express the authentic self. This occurs through the processes of experiencing, centering and realising whether individual consulting psychologists *know what they do* and whether they *do what they know*. The basic methods for determining this are in personal reflection and in the response of clients. Without being authentic and centred as a person the consulting psychologist is unlikely to be truly successful.

2.11 CHAPTER SUMMARY

This chapter provided a review of literature in respect of the field of consulting psychology in order to guide the process of creating, exploring and developing a Gestalt approach to consulting psychology that can assist consulting psychologists to add greater value to their clients. Consulting psychology was presented as the function of applying the specialised knowledge of the psychologist, through the processes of consultation, to clients (who may be individuals, groups or organisations) in the work context (APA, 2002b). Consulting psychologists come from a broad range of fields of psychology and a variety of backgrounds, approaches and methodologies. Various programmes, designed to educate and train psychologists in the field of consulting psychology in the USA and South Africa were described.

The historical development of consulting psychology, with its roots in industrial and organisational psychology was discussed. The stage of development of the field, as it emerges as a specialty in its own right, was explored in the context of the work of Adizes (1999). It was posited that consulting psychology is currently experiencing some of the growing pains associated with the adolescent stage of development. The future of the field is discussed in terms of the requirements for development as a specialty and as a profession. The impact of several developments in systems psychology, psychodynamics, behaviourism, humanistic and existential psychology, physical psychology, biopsychology, socio-biology and narrative psychology on psychological consultation in the context of work was discussed.

Within this context, the levels at which psychological consultation services are provided and the settings in which they are provided, are discussed. The nature of the services (as presented by the APA, 1999), were reviewed. Important aspects of the competencies required of consulting psychologists were considered. Generic, applied competencies at the doctoral or professional level (Bryce and Humes, 1999), which are relevant to consulting psychologists, were reviewed. The individual, group and organisational level competencies required (Lowman, 2002a), as well as various practice-related competencies and personal characteristics of good consulting psychologists were explored. This was followed by a discussion of the potential roles that consulting psychologists may adopt and a typology of consulting processes was presented.

The researcher's attention then shifted to a Gestalt perspective of consulting psychology. Basic Gestalt consulting principles were identified and Gestalt psychological principles were applied to aspects of consulting psychology. The relationship between consultant and client was described as being essential to the ability to provide psychological consultation services. The consulting psychologist becomes an inextricable part of the phenomena in the consulting domain, influencing events in the domain and, in turn, being influenced by domain phenomena. Various methods of developing awareness in the client system that are congruent with Gestalt consulting principles, including experimentation, conversation, holding space and using the self as an instrument were discussed.

Various roles that consulting psychologists may adopt in the consulting situation, ranging from directive to non-directive were considered. A typology of consulting processes, varying from traditional, back and forth, spiral-oriented and expert oriented, was analysed. These provide a number of options for the approaches, methods and instruments that may be used in the consultation process. Depending upon the client and the nature of the consulting project, consulting psychologists may maintain a certain style or process throughout a project, or may switch among styles or processes.

Consulting psychology was explored in terms of the criteria for being both a science and an art, specified by Chinn and Jacobs (1987). From an empirical perspective, empirical views of domain phenomena can be translated into theories or models; the ethical nature of the work that psychologists do is a central consideration in every contact with a client; aesthetically, psychological consultation requires being able to experience phenomena in the here and now, but also being able to move beyond the moment to discern meaning and create possibilities; and from the personal aspect, psychologists are impacted upon by domain phenomena and are able to develop personally as a result.

In Chapter 3, the intrapsychic subsystem of humans is explored in terms of a review of literature, to determine the effect of the various intrapsychic subsystems on the way that the consulting psychologists and their clients perceive phenomena in the consulting domain. The purpose of this is that the researcher wishes to understand how domain phenomena are experienced by people, influenced and acted upon, so that sound Gestalt psychological principles can be accommodated into the development of the mental model and congruent methodological framework.

3.1 INTRODUCTION

This chapter explores various aspects of the intrapsychic subsystem in the context of the field of consulting psychology, described in Chapter 2. The intent is to determine the effect of the various intrapsychic subsystems on the way that the consulting psychologists and their clients perceive phenomena in the consulting domain. This understanding enables the researcher to accommodate sound Gestalt psychological principles into the development of the mental model and congruent methodological framework.

The perceptual processes that govern how humans perceive the environment and allocate active, conscious attention to certain stimuli (perceptual subsystem) are explored. The role of cognition, central to the ability to diagnose, explain, predict and intervene effectively and the phenomenon of imagery (the creation of mental representations or mental models) is discussed in terms of aspects that contribute to the ability to perceive domain phenomena effectively and efficiently. The relationship of imagery to the thinking process which is so central to the work of consulting psychologists (cognitive subsystem) is discussed. The way humans feel about people, events and situations (emotive subsystem) is discussed, as are their predispositions to act in a certain way (dispositional subsystem) and the way people evaluate themselves (self subsystem).

This chapter also addresses the intrapsychic aspects of using mental models as aids that can be used by consulting psychologists to make sense of the consulting situation their intrapsychic sub-systems. Literature concerning mental models and how they are developed is explored to orientate the researcher in this process. The process of creating a mental model and a suitable method for doing so are discussed in terms of the Geneplore Model (Finke, 1990). Various principles of modelling are also considered.

Intrapsychic factors which govern the use of a mental model in the consulting domain are considered. This chapter must provide guidelines and specifications, based on the review of literature on intrapsychic aspects that will increase the probability that a successful mental model will be the outcome of the research. The chapter is concluded with a discussion of implications of the literature review for the process of creating, exploring, developing and applying the mental model to be developed in Chapters 4 and 5.

3.2 ROLE OF INTRAPSYCHIC PROCESSES IN CONSULTING PSYCHOLOGY

Intrapsychic processes lie at the core of individual, group and organisational behaviour and are central to consulting psychology. Schein (1988, p.63) regards the most important thing for consultants to understand as being "what goes on inside their own heads". The intrapsychic processes govern how people experience domain phenomena, and act (or do not act) to satisfy needs or wants, at the individual, group or organisational levels.

In Gestalt terms, an entity starts off at rest and relaxed. There may be many possible concerns and issues but these are all accepted. An interest assumes dominance and forces the entity to spontaneously mobilise itself. Certain images or figures brighten, become more intense and certain behaviours are initiated and other behaviours are excluded (Perls, Hefferline & Goodman, 1951).

In the field of consulting psychology, one of the major problems concerns how to ensure that individuals, groups and organisations become excited by the same or similar figures or stimuli, so that they display the same positive interest and excitement about a particular issue and engage with it in a focused manner, as opposed to only some becoming interested and mobilising themselves. At the same time, it is not optimal for individuals to become interested in, and excited about issues that are not appropriate or relevant to the entity.

According to Rowan (2001), Frits Perls first described the sequence of stages that all human experience goes through as follows:

- A person is at rest and his or her field of consciousness is undifferentiated;
- A need or want emerges (physical, psychological, emotional, spiritual), which may have to be clarified;
- Energy has now been mobilised and scanning of the field for possible sources of satisfaction ensues;
- One source of satisfaction is selected under whatever constraints may be operating, and the person moves towards it;

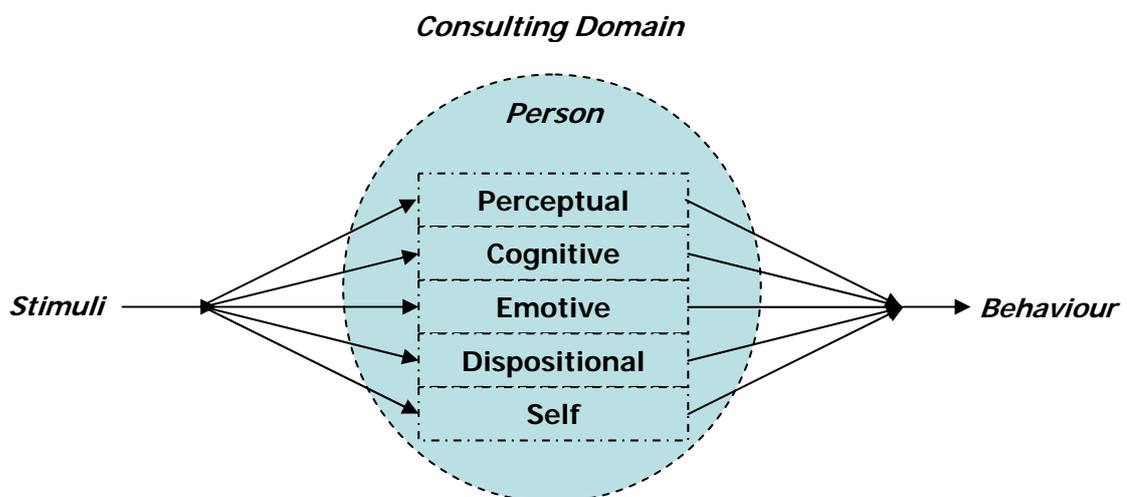
- Contact is made with the object of choice and experience takes place;
- The source is judged to be suitable and satisfaction is experienced, or;
- Withdrawal occurs and energy is directed inward, to digest the experience; and
- A new cycle begins.

These phases provide consulting psychologists with a prescription for guiding clients through their experiences of growth and development and to facilitate their progress from the current state to a new, more optimal or appropriate state.

3.3 INTRAPSYCHIC PROCESSES IN THE CONTEXT OF THIS RESEARCH

Jordaan and Jordaan (1998) provide a simple, yet holistic depiction of intrapsychic context of human beings. This incorporates the perceptual, cognitive, emotive, dispositional and self-subsystems of the intrapsychic context of the human being. The intrapsychic context incorporates various aspects of how people become aware of, interpret and experience domain phenomena and navigate their way through the stages of the experiential process described in section 3.1 above.

Figure 3.1
Intrapsychic Context of Consulting Psychology



Note. Adapted from Jordaan & Jordaan (1984).

In terms of Figure 3.1, a person experiences a situation by means of perceptual processes and uses this awareness cognitively, emotively, dispositionally and in terms of the self, to decide upon an appropriate action. Experiential processes and actions are interdependent rather than independent and are not linear processes, either within a single person, or among people (Cornoldi & McDaniel, 1991). Stolorow, Atwood and Orange (2002) state that intrapsychic phenomena must be understood in the context of the larger interactional systems in which they manifest - the intersubjective context. This means that an individual must be studied, not as a separate entity, but as part of the interactional field within which the individual lives and works, that is, with other individuals, in groups and organisations.

3.4 CONSCIOUSNESS AND UNCONSCIOUSNESS

According to Jerry (2005), behaviour is dynamic, and results from continual intrapsychic and interpersonal activity and includes both conscious and unconscious processes. It is necessary to bear in mind that the conscious and the unconscious form an intrapsychic unity of human experience and there is no doubt, therefore, that the unconscious will have an impact in and on behaviour in the client system (Chinn & Jacobs, 1987; Eraut, 1994; Hamlyn, 1994).

Hamlyn (1994) adds several distinctions to the concepts of the conscious and unconscious, as reflected below:

- The concept *field of consciousness* refers to everything that a person is aware of at a given moment, including that of which they are only vaguely aware;
- The *focus* of consciousness is that which the person is attending to and the *periphery* is that of which they are only vaguely aware;
- The *degree of consciousness* refers to the clarity and vividness of an experience and ranges from complete unawareness to optimal clarity;
- The *monitoring unconscious* operates on the periphery of the conscious and integrates the perceptual processes;

- Experiences can fade from consciousness over time but are recalled in specific situations either spontaneously or because of conscious reflection – the *recallable unconscious*.
- The *reflected unconscious* refers to the way people perform actions without being aware of the knowledge system underlying a particular ability. This occurs when knowledge is so assimilated that it is taken for granted and a person no longer has to think about what they are doing – they just do it.
- The *repressed unconscious* refers to the thoughts, feelings and wishes that people either cannot or do not wish to allow to become conscious.

An example of the use of conscious and unconscious phenomena in the consulting situation is provided by Cilliers and Koortzen (2003) who utilise a psychoanalytic approach to team development. These authors state that, too often, only the more obvious, conscious factors are considered by consulting psychologists and that this weakens the consulting approach by making it less dynamic than it could be.

As stated by Nuttin, de Bie, Levi-Strauss and Jacobson (1994) people act in a given situation on the basis of both conscious and unconscious stimuli and such actions embrace and integrate the person's experience. This is part of the process of developing the individual's base of personal knowledge or frame of reference (Chinn & Jacobs, 1987, Eraut, 1994). As summarised in chapter 1, many authors describe how to utilise conscious and unconscious factors to improve individual, group and organisational performance (Cilliers & Koortzen, 2003; Freedman & Leonard, 2002; Harris, 2000; Obholzer & Roberts, 1994).

Consulting psychologists must continually bear both conscious and unconscious factors in mind as these must be integrated in terms of the concept of the intrapsychic whole. In terms of the quest to create a powerful and useful mental model, the researcher may try to ensure that the model has some degree of ambiguity or complexity to it (such as in Rorschach's inkblot), to allow both conscious and unconscious forces to contribute to the processes of awareness and insight. As far as the deployment of the mental model is concerned, opportunities should be created to allow for individual consideration of the meaning of the mental model as well as for dialogue and debate about it.

3.5 THE PERCEPTUAL SUBSYSTEM

Hamlyn (1994) defines perception as the human ability to process, interpret and attribute meaning to information received via the sensory systems of sight, hearing, smell, taste and touch. Perception is important, because according to Neisser (1967), it is the basic cognitive ability upon which all other cognitive abilities are based. In the context of consulting psychology, perception centres primarily on sight (for example, when observing behaviour) and hearing (when, for example, conducting an interview). The other physical senses, smell and touch, may contribute to the process of interpreting and attributing meaning to situations.

According to Sherrill (1986), perception through seeing or hearing, is immediate, although sometimes time may elapse between total unawareness and total awareness of a stimulus in the interactive field. This depends upon the way in which a stimulus is detected (detection threshold) and when it is recognised (recognition threshold). These two processes together form the awareness threshold, the point at which a person becomes consciously aware of the stimulus. The physical characteristics of a stimulus (for example, intensity) influence the awareness threshold and the subjective involvement of the person in the situation. In order to render a mental model useful, the characteristics of stimuli and how they influence the perceptive processes must be considered.

Individuals' awareness thresholds may rise or decline, depending on their focus (Hamlyn, 1994). Individuals can become more receptive (lowering the awareness threshold), or they can put up perceptual defences (raising the awareness threshold) for various conscious or unconscious psychological reasons. The perceptual processes play a key role in whether individuals are able to perceive changes in the interactive field and act effectively to remain healthy and balanced.

This has important implications for process consulting in terms of timing, especially in terms of getting participants' attention and keeping it. Levinson (2002), for example, describes how he writes down all his initial impressions in a little notebook whilst he is consulting and reviews these later. The distinctions made by Hamlyn (1994) between the various phases in the process of perception, with each phase providing greater perceptual clarity and intensity, and the Gestalt principles for consulting (Nevis, 1987; Stevenson, 2002) that were discussed in Chapter 2, are important from this perspective.

3.5.1 Monitoring

According to Stolorow, Atwood and Orange (2002), monitoring refers to the brain's ability to process, without conscious control, incoming information. It monitors potentially significant events in and around a person. When a stimulus is detected physiologically (through the senses), it is compared with related memory information (outside of the awareness). This comparison determines the person's experience of the stimulus and its meaning to the person. Monitoring leads to a number of side effects. These include orienting responses (increasing the flow of information from the environment to prepare the individual for effective perception); anticipatory sensations (a sense of expectation or unpleasantness); or the creation of sensory memory (visual or auditory representations of the stimulus).

Monitoring may be manifested in the consulting situation where participants monitor the behaviour of the consulting psychologist and other participants in the process (relevant), whilst considering the task at hand, but may also consider what messages are on their mobile phones (arguably, less relevant).

According to Murray (1995), habituation refers to the disappearance of orienting responses after the repeated presentation of a stimulus which originally gave rise to the orienting response. This occurs when the stimulus information no longer takes up the individual's active, conscious attention. If, however, a habituated stimulus is changed, or altered in some way, an individual can experience orienting responses to that stimulus once again through the process of dishabituation.

There is a necessary selection and ordering of information to determine what the individuals become aware of and how they will react. People have the capacity to monitor (both consciously and unconsciously) a great many phenomena in their environments. From the consulting perspective, this means that it is important to encourage participants to focus their energy and attention optimally, in the face of many intrapersonal, interpersonal and environmental distractions. The perceptive processes, however, often mitigate against this.

In a Gestalt psychological consulting sense, care has to be taken to overcome habitual patterns where, for example, clients respond to the intervention situation without any interest or excitement, otherwise growth is unlikely to occur.

These intrapsychic processes may be engaged more effectively if consulting psychologists use an approach that is holistic, relatively complex, that creates some unease or tension in or amongst the participants, or something that seems out of the ordinary and incorporates visual or auditory stimuli. This will promote the likelihood that orienting responses will take place and habitual patterns of thinking about domain phenomena are disabled as much as possible. The deployment of intrapsychic processes is just as important in terms of the consulting psychologist's own perception as is that of the client.

3.5.2 Spontaneous perceptual organisation

The processes of spontaneous conceptual categorisation offer vital clues as to the nature of the mental model and framework for implementation, as the principles of Gestalt perception impact significantly on the manner in which phenomena are experienced. According to Murray (1995), spontaneous perceptual organisation depends on the interaction between properties of the stimulus, functional properties of the individual's nervous system, the individual's previous experience and personal frames of reference.

According to Sherrill (1986), spontaneous organisation of perceptual information takes place at a low level of awareness, and according to Gestalt principles. A Gestalt may be a visual percept, a temporal pattern such as a melody, an organised memory, or a concept such as an organisation. People perceive a Gestalt by organising it intrapsychically and interpreting it so that it has coherent meaning. Although the Gestalt principles of organising are described under the perceptual subsystem, Boeree (2002b) states that these Gestalt principles apply equally to all intrapsychic processes, such as memory. For example, relevant information in sensory memory enjoys priority over irrelevant information.

According to Sherrill (1986), Goldstein extended the concept of a Gestalt to cover all intrapsychic activity, such as perception, cognition and emotion and observed that figure and ground can be discriminated not only visually, but in terms of thinking, feeling and speaking. Stimulus situations are spontaneously differentiated into figure and ground in terms of Gestalt principles, where they are not only grouped together, but perceived to have certain characteristics, such as movement, or colour.

Mullet and Sano (1995) describe the Gestalt principles of spontaneous perceptual organisation as follows:

- Figure and ground

The principles of figure and ground refer to spontaneous organising of perceptions by distinguishing between a figure and a background. Picking out form is described by Boeree (2002b) as the most primitive unit of perception and was originally described by Rubin as the innate tendency to perceive one aspect of an event as the figure or foreground and the remainder as the ground or background. According to Sherrill (1986), Kurt Lewin emphasised the importance of ground in interpreting and understanding the dynamic of psychological experience. Thus, a mental model should offer considerable stimulus, both in terms of figure and ground.

According to Sherrill (1986), Frans Koffka observed that individual needs influence figure-formation if the stimulus is ambiguous. If the objective stimulus properties were weak, the subject would exhibit active searching that could cause an undifferentiated part of the field to coalesce into a figure. Thus, boredom or fatigue may cause a conceptual model to lose figure or ground articulation if they do not appeal to clients' interests.

Part of the reason for this activity is that, as Duncker, in Sherrill (1986) observed, parts and elements of a situation which appeared to be in the background or were considered unthematic in the context of the unit of work, suddenly emerge and become the main point of attention – the theme or figure. This may happen if information is selectively provided to the consulting psychologist during initial data gathering, especially if a holistic model is not utilised to guide diagnostic preparation. An example of this may be that, during a group intervention, deep underlying interpersonal conflicts that were not mentioned by client participants during preparatory interviews suddenly become manifest because of the tension of the situation and then dominate the focus of the group.

According to Yontef (1993), full awareness is the process of being vigilant with the most important events in the foreground and background of the entity, with full sensorimotor, emotional, cognitive and energetic support. Effective awareness is grounded in and driven by the present need of the entity. This involves self-knowledge and a direct knowing of the current situation and how the entity is positioned in that situation.

- Contour

Ballesteros (1993) describes the principle of contour as the spontaneous tendency to identify form (the boundary that differentiates the stimulus from its background). Related to figure and ground considerations, this principle offers a key guideline for the mental model. Where possible, the figure in the model should have some kind of contour, so as to promote the spontaneous identification of form.

- Pragnanz

According to Boeree (2002b), people have the innate drive to experience things in as good a Gestalt as possible (good can mean many things such as regular, orderly, simplicity or symmetry). In consulting psychology, this drive may be interpreted, inter alia, as facilitating the ability to deal with the complexity of the client system. The conceptualisation of organisational structure in terms of functions may be an example of the desire to shape the organisation according to the shaper's desire for good form, more than a consideration of efficiency or effectiveness. It is important that the mental model be created in terms of offering as good a Gestalt as possible to as many people as possible.

- Proximity

Especially when considering the figure aspect of the mental model, it will be important to consider what Mullet and Sano (1995) describe the principle of proximity - the spontaneous perceptual grouping of phenomena that are close together, either in space or time. The mental model should represent and imply relationships between appropriate phenomena in such a manner as to clearly link related phenomena in space and time.

- Continuity

Mullet and Sano (1995) describe the principle of continuity as a psychological preference for continuous, or whole (rather than fragmented) figures. From the perspective of this research, the creation of a single, continuous, unfragmented figure for a mental model may take advantage of this principle.

- Similarity

Ballesteros (1993) describes the principle of similarity as the spontaneous tendency to group phenomena together because they are perceived to have similar attributes. Every attempt should be made in the development of a mental model to group those characteristics of dimensions that may be perceived as having similar attributes together in order to take advantage of this tendency.

- Closure

A key defining principle of a *Gestalt closure* is described by Mullet and Sano (1995) as the tendency to see complete figures even when a part of the figure is missing means that, the demands of figure and ground, Pragnanz, similarity, etcetera notwithstanding, the mental model does not have to be an overly elaborate representation. It should allow for the completion of perceptions to render them as whole as possible. This is an important guideline, especially in terms of the methodological framework, if the conscious and unconscious intrapsychic forces within the consulting situation are to be allowed to play themselves out in the consulting situation.

- Zeigarnick effect

According to Benjafield (1996), people remember interrupted tasks best because the tension created by the unfinished task helps people to remember. This has implications for the planning and facilitation of an intervention, in terms of breaks and scheduling.

Some researchers have identified over 140 different Gestalt principles of perceptual organisation (Perls, Hefferline & Goodman, 1951). In the context of this research, however, only some of the more common and widely reported principles are presented.

3.5.3 Spontaneous conceptual categorisation

According to Murray (1995), spontaneous conceptual categorisation means that figure information is meaningfully described. An individual spontaneously attributes meaning to figure information. This process occurs at a higher level of awareness than the previous phase. This is where it exceeds the individual's recognition threshold.

Spontaneous categorisation can result in the creation of anticipations at a high level of awareness. This may lead to the creation of perceptual hypotheses (if this, then that) which serve to focus conscious attention, reduce reaction time or simplify complex stimulus situations. This influences the meaning that people attribute to particular situations. This means that they can effectively reduce the amount of information that they have to process and interpret spontaneously. Once a concept is categorised, any single feature of this concept will lead to spontaneous recognition of the full concept. The memory thus houses a prototype of a given situation so that, despite differences in some of the elements of a situation, the situation is immediately recognised and categorised in a particular way. The mental model, its characteristics and dimensions will be interpreted accordingly.

3.5.4 Categorisation styles

According to Stolorow, Atwood and Orange (2002), categorisation styles or perceptual styles refer to the relatively constant and spontaneous tendency to follow a particular perceptual approach, regardless of the situation. It is a paradigm of filter through which a person categorises and attaches meaning to what is perceived.

Murray (1995) discusses two categorisation styles, as follows:

- *Field dependence* refers to the tendency to perceive globally and not to be able to differentiate the elements of a particular figure from the interactive field as a whole, and then to integrate them again. Field dependent people tend to see the forest rather than the trees.
- *Field independence* refers to the tendency to perceive, analytically and articulately, the elements of a particular figure from the interactive field as a whole and then to integrate them again. Field independent people are able to see the forest for the trees.

According to Musser (2003) strategies that allow field independent people the opportunity to select information sources, search for and validate information, transfer knowledge by predicting, inferring or evaluating, generating metaphors and analogies and analysing information structurally, should be employed.

Strategies to involve field dependent people should include a social learning environment, deliberate structural support with cues, clear explicit directions and guidance, a distinct phase of orientation, presenting simplifying outlines or graphics and providing examples (Musser, 2003).

3.5.5 Active, conscious attention

The aforementioned steps in the perceptual process take place automatically at a relatively low level of awareness. Spontaneous conceptual categorisation of incoming information provides a psychological product of the perceptual process, the *percept*. The percept represents a person's clear awareness of the figure information.

The process by which a percept is maintained and given meaning often transcends the stimulus properties and is called active, conscious attention. Active, conscious attention includes the processes of active ordering and selection of the information by means of active conscious attention (Murray, 1995). According to Stolorow, Atwood and Orange (2002) individuals generally give attention more readily to stimuli that exhibit high levels of these properties. Given that a stimulus gets the attention of an individual, psychological dispositions induce the individual to give conscious attention to it. These internal dispositions determine the importance of meaning of the stimulus information from the perceiver's point of view.

Stolorow, Atwood and Orange (2002) describe the concept of *anticipatory schemata*, which direct a person's exploration of the world and create certain expectations. The person's exploratory activity is directed at testing whether or not these expectations correspond with available information. Anticipatory schemata can limit the potential for awareness and insight and may even promote defensive reactions from clients because they direct attention toward that which is the habitual way of dealing with phenomena.

Understanding the way in which anticipatory schemata are created, how they work and how clients can be led to heightened levels of insight and awareness despite these sets is one of the primary advantages that psychologists have over other professionals. It is one of the primary reasons that clients use consulting psychologists – to help them think, feel and act outside of their normal sets. However, consulting psychologists must continuously manage anticipatory schemata in their clients.

According to Perls, Hefferline and Goodman (1951), active, conscious attention may involve a deliberate attempt by the entity to become excited about, and interested in, a task. It may be difficult for the entity to clear the ground of distracting issues. When the attention is caught by a stimulus that has potential meaning to the entity, then the entity can focus on the figure at increasing levels of resolution and the figure becomes well differentiated from the ground. When the latter situation occurs, an individual may forget about time and other distractors and become totally absorbed in the task. Csikszentmihalyi (1996) describes this as being *in flow*.

The mental model to be created should thus ideally offer something unique – a set of stimuli with which individuals are unfamiliar initially and which promotes active, conscious attention and invokes the orienting responses of the perceptual subsystem. However, given the holistic, interrelated nature of experience, the Gestalt approach must take account of more than the perceptual processes, but also the cognitive, dispositional, emotive and self-subsystems that constitute the intrapsychic context of consulting psychology.

3.6 THE COGNITIVE SUBSYSTEM

As explored in Chapter 2, many of the services that consulting psychologists provide and the competencies that they should have, require extensive cognitive input. Stolorow, Atwood and Orange (2001) describe the cognitive subsystem of the human being in terms of the following aspects.

3.6.1 Types of thinking

Thinking is a set of mental activities involved in the manipulation of representations with, as outputs, the construction of new pieces of information that complement an individual's knowledge base (Denis, 1991).

3.6.1.1 Undirected thinking

According to Pidd (2003), undirected thinking involves the relatively unsystematic and disorderly manipulation of symbols – a spontaneous flow of more or less disconnected thoughts that are not directed toward any specific task or problem.

Undirected thinking may be viewed as a component of directed thinking (Pidd, 2003), especially when the consulting situation appears to defy efforts at directed thinking to yield a solution.

3.6.1.2 Directed thinking

Reproductive thinking is the process by which a mental task is executed by reproducing already acquired knowledge (Neisser, 1967). Broudy and Smith (1969) refer to this as the replicative use of knowledge. Reproductive thinking processes are regulated by the principles of complex completion (Gestalt principles), where, if only a part of a knowledge complex is presented, people tend to complete the total complex. If there is also a schematic anticipation of a missing part, together with the presented part of a knowledge complex, it becomes easier to complete the (whole) total knowledge complex.

Productive thinking involves the orderly and systematic manipulation of symbols in a way that makes the execution of a mental task depend on more than the mere reproduction of existing memory information. Given that consulting psychologists are likely to intentionally adopt productive thinking strategies given the demands of diagnosing, explaining, predicting and intervening at the various consulting levels. Consulting psychologists are often required to create information by discovering new relationships and by reorganising existing information in an original way.

3.6.2 Thinking as symbolic representation

Thinking is a type of knowledge that involves the formation of symbolic representations and the mental manipulation of these (Denis, 1991). Symbolic representation amounts to making visual representations of objects or situations in the imagination. Symbolic representations (or figures) can be made in the presence of physical objects as well as in the absence thereof. Specifically, in this research, the ability of consulting psychologists to conjure up, contemplate and manipulate symbolic representations (mental models) is important. It is also important that in doing so, the appropriate conceptual properties of these representations are clear.

3.6.3 Concepts and thinking

According to Pidd (2003), a concept is a set of abstracted features, which together form a category. The name of the category refers to, or symbolises the concept. Abstraction refers to forming a conceptual category by selecting certain features of an object, situation or idea and disregarding others.

In the consulting situation, or when thinking about a consulting project, the consulting psychologist or client thinks about abstract concepts, the features of which have been determined by, for example, observation and must be named or classified in some manner. According to Jordaan and Jordaan (1998), concepts (and the figures and the names that are allocated to them) have extensional and intensional characteristics. Extensional characteristics are commonalities which are understood to have a certain appearance, behave in a certain way or display certain properties. Anything that conforms to these extensional characteristics will be classified in the same conceptual category, regardless of differences within themselves. Intensional characteristics attributed to concepts are those which differ within each object or abstract idea.

The researcher must bear in mind that features of a mental model and their naming or classification can play a significant role in the nature of the meaning that is assigned to the model or its properties in the client situation. An attempt should be made to maximise the extensional characteristics of the mental model.

3.6.4 Language and thinking

The discussion of concepts and thinking above outlines how sets of abstract characteristics are combined to form concepts. The names assigned to concepts are also symbols (Jordaan and Jordaan, 1998) which people use to think and to communicate. The name of a concept serves as a symbol of the concept, assisting people to recall its determining characteristics. Similarly, thinking about the characteristics of a concept assists in the recall of the name of the concept. Words are representations of reality, just as images are.

Concepts have denotative and connotative meanings (Jordaan & Jordaan, 1998). The denotative meaning of words refers to their agreed upon sense – what they refer to or designate – separately from the feelings they conjure up.

The connotative meaning of concepts refers to the feelings that a word can elicit – the emotive power of the word, including the feelings that it arouses which are the result of experiences and associations with the word and what it stands for. Carroll, in Jordaan and Jordaan (1998), believes that the formation of a concept (or, in Gestalt terms, a formation of a figure), can precede the naming of the concept.

The denotative meaning of a word assists in ordering thinking about a particular concept. The subjective connotations that people attach to words (and thereby to the concepts they represent as well) mean that interpersonal differences in how people think about concepts occur, depending on the connotations that the words carry for them.

Concepts and language constitute important components of symbolic representation and are major tools of the thinking process. Together with concepts and language, the remaining tool of the thinking process is that of imagery (Denis, 1991). Imagery and thinking are discussed in detail in the following section.

3.6.5 Imagery and thinking

Denis (1991) describes images as models for thinking (i.e. special types of mental models), which although they may be situation-specific, may be used to generate conclusions or decisions well beyond their specific content. Paivio and Clark, in Cornoldi and McDaniel, (1991), discuss static images (stationary representations of phenomena) and dynamic images (that represent phenomena in motion or in the process of being rotated or being transformed).

Denis, in Cornoldi and McDaniel (1991) states that imagery is beneficial to thinking in that the visual images preserve the intrinsic coherence of the phenomena and configurations that they reflect. It is of primary importance to consider the emergent properties of the image and their capacity to be useful for generating valid outputs of the processes of diagnosing, explaining and prediction.

Intons-Peterson (1983) suggests that images may be analogous in the sense that information may be coded in an array format. This means that properties of the image (such as shape or colour) may be bound to specific locations. These elements of the image may be related to phenomena in real-life consulting and may influence perception.

Logie (1986) states, however, that the physical layout of the image need bear no relation to the spatial relationships among the phenomena studied in the real-life situation.

Shepherd's (1977) idea of first-order isomorphism implies that internal mental images are isomorphic to the objects that they represent but not necessarily in a concrete way. Isomorphism does not imply that the structure of the mental model and the structure of the external phenomenon resemble each other in any principled way, although Kosslyn (1981) proposes that images convey spatial extent and limited resolution (in the sense that it is not possible to see all the requisite detail from the image, but at least some of the structures and relations).

Shepherd (1977, p.129) described second-order isomorphism as being present when the mental model has something in common with "what went on in the brain" when a phenomenon was previously experienced, enough so to produce relations among images that parallel the relations among perceived phenomena. *What goes on in the brain* may be a function of prior experience, learning, perception or generation from long-term memory.

Cave and Kosslyn (1989) showed that images of objects seem to be used to evaluate objects when they are physically presented and suggest that forming an image is part of perceiving an object or situation. Kosslyn (1980) describes images as a form of symbolic representation in which information about the appearance of phenomena can be depicted and manipulated in a visual buffer or working memory. Such representations could possess emergent properties not easily deduced from the knowledge on which the representation is based.

Kosslyn, Ball and Reiser, in Cornoldi and McDaniel (1991) suggest that images are analogous representations in that they depict relative distances among physical objects. Mental imagery was studied in the 1960's to determine representations of city streets and the use of these for individuals to plan routes and find their way around cities (Milgram, 1977). This is important in the current research, because it means that the distances implied or represented by the image will be related to the amount of time required to scan the image and therefore to perceive the status thereof and relations between phenomena. It also means that a danger, in the creation of a mental model, is that the physical distance between various elements of the image may be perceptually related to a distance between the real-life phenomena that the image represents.

Denis (1991) describes four conditions for imagery processes to be brought into play. The first condition is that the data to be processed can be pictured mentally. Most phenomena can be made pictorial on the basis of symbolic value. A second condition concerns the availability of methods to picture a problem – such as translating the problem into a metaphor. Thirdly, the use to which the model is to be put must be considered as an image can either constrain or facilitate thinking. The fourth condition is that the most appropriate type of visualisation for the resolution of a given problem must be identified.

The ability to imagine a mental image in the mind has been found to be important for the resolution of perceptual problems such as those where spatial configurations must be compared, the properties of phenomena analysed, judging whether situations correspond or to anticipate the effects of some transformation (Barolo, Masini & Antonietti, 1990). This has also been found to be the case where the image does not reflect only spatial data, but represents non-spatial data through some symbolic format, such as problems where data have continuous dimensions or the problems of classification.

Paivio and Clark, in Cornoldi and McDaniel (1991) discuss various individual differences that play a role in determining the preference of individuals to use static or dynamic images, including cognitive abilities, such as spatial perception. It is seen as essential that the mental model created have both static and dynamic properties so as to appeal to the broadest possible spectrum of preferences and abilities. High visualisation ability has been shown to distinguish high performers from low performers (Dietrich & Markman, 1984). Richardson, in Cornoldi and McDaniel (1991), states that mental imagery makes a distinctive contribution to the performance of thinking tasks.

Increased reaction times were observed by Cornoldi and McDaniel (1991) when subjects are primed by prior exposure to an image or mental model, although the first presentation required some perceptual analysis in order to understand and explore the image. This may be related to the need to internalise a mental model before it can be utilised appropriately and facilitate the ability of the consulting psychologist to respond, rather than hinder this.

Johnson-Laird (1988) described using spatial and linguistic strategies in thinking about a representation (image). Spatial strategies are seen to dominate initially, but are replaced by linguistic strategies later on. Kauffman (1980) claims that imagery has a greater impact on the initial phases of the problem-solving process, however, with increasing familiarity,

linguistic strategies become more economical and become more important. X and Y are examples of spatial and linguistic psychological models respectively.

Kosslyn (1980) states that individuals utilise whichever of the two forms of representation is accessed first. This suggests that a model, developed for consulting psychologists should have both imagistic and linguistic properties so as to maximise utility in consulting, both from the points of view of contextual phenomena and the preferences, skills and orientation of the psychologist.

Logie (1986) describes the value of working memory, which refers to the temporary storage and processing of information as is required in real-life tasks. Part of working memory is described as the *visuo-spatial scratch pad*. This is a mechanism for retention and manipulation of visuo-spatial material and acts as a form of work space for manipulating, scanning and inspecting visual images generated from information in long term memory or may comprise temporary storage of a particular visual concept. A consulting psychologist uses working memory, for example, when interviewing a client and having to take in a wide variety of information, concurrently bringing specialist knowledge to bear and remembering salient questions to ask next.

Cornoldi and McDaniel (1991) distinguish between *holistic* and *sequential* rotation of a three-dimensional cube. Although holistic rotation is seen to contribute more to problem resolution, it is sensitive to the complexity or amount of information to be processed simultaneously. This implies that the mental model created should constitute as simple an image as possible to facilitate holistic rotation. The structural organisation of the image has implications for cognitive operations performed using it. If the structural organisation is deficient, distortions in the thinking processes are likely to occur (Denis, in Cornoldi & McDaniel, 1991).

Poor visualisers have overall more difficulty in finding solutions to complex problems. However, when they are prompted to visualise, there is often a significant improvement in performance on a cognitive task (Denis, 1991). In a phenomenological sense, practice with the construction of novel images can increase the production of creative images in subsequent sessions (Intons-Peterson and Roskos-Ewoldsen, 1989), although discovering new information, in general, may be much more difficult when current information is already well organised (Reed in Roskos-Ewoldsen, Intons-Peterson & Anderson, 1993).

Expectations (or what Stolorow, Atwood and Orange [2002] term *anticipatory schemata*) may constrain the utility of imagery (Roskos-Ewoldsen, Intons-Peterson & Anderson, 1993). They affect what can be detected in images and, if a particular orientation is expected (created by the researcher's background and experience), it is cognitively difficult to re-orient images and this reduces the probability of making discoveries using images.

An important implication of this for the consulting psychologist is that, although the working memory may have become trained to accommodate a large amount of information, using mental images may assist the psychologist in two ways. It may assist in the here and now consulting situation in that it can be used as a diagnostic prompt to ask the right questions. Mental images may also be used by the psychologist in reflection upon a consulting situation. The process of thinking about, solving problems, explaining, diagnosing and designing interventions can be facilitated by using a mental image as a model.

3.7 THE EMOTIVE SUBSYSTEM

Jordaan and Jordaan (1984, p.268) discuss the term emotive as refers to "that which accompanies emotion". That which accompanies emotion includes all the cognitive experiential processes. What we know always has emotional undertones to a greater or lesser extent. This interaction gives people a tendency to act or react to a stimulus in different ways. Thus, the feelings or emotions are part of the interrelated human system of knowing. Vygotsky (2002) believed that it is important to know emotional underpinnings in order to understand any thinking and viewed emotion as being central to cognition, rather than an autonomous process.

The literature provides a number of competing perspectives on the relative role of the emotive subsystem in behaviour. According to Pett (2000), Zajonc found that every stimulus is subject to initial processing to assess its affective tone (positive versus negative or safe versus threatening) and thus, cognition occurs subsequent to affective action. Marcus, Neuman and MacKuen (2000) state that the sequence of experience in terms of sensory data processing runs from perception to reception to conceptualisation and finally to expression. The implication of this is that emotional responses come before rational assessments and that the kind of emotional evaluation determines what kind of rational responses are actually triggered.

According to Shalif (2005), the emotive subsystem is the only intrapsychic subsystem that regularly over-rides conscious thinking processes. According to Hall, Gardener & Campbell (1998), a great deal of behaviour can be explained by the hypothesis that, in most people, the emotive subsystem subconsciously decides what the action or reaction of the person will be and that reason (cognitive function) merely rationalises these choices for the person. In contrast, Lazarus (in Pett, 2000), believed that cognitive appraisal is the most important function of the mind and that cognitive processes could over-ride emotive decisions. According to Cognitive Appraisal Theory (Arnold, in Jordaan and Jordaan, 1998), the decisive factor in the differentiation of emotion (what feelings are triggered) that a person experiences in a given situation is the meaning that the person gives to the situation.

As discussed in the section on language and thinking above, words are important visual or auditory stimuli that are laden with meaning – both from a cognitive and an emotive perspective. Although a consulting psychologist will be relatively unable to control the meaning that individuals assign to a given situation prior to them participating in an intervention, efforts may be made either to dispel negative emotions associated with the intervention or with domain phenomena by describing and viewing them in a different light, by for example, making the manner of looking at domain phenomena fundamentally different to what individuals would expect.

According to Marcus, Neuman and MacKuen (2000), the primary emotion that operates to induce fundamental reconsideration of the person's habitual ways of behaviour is anxiety. Following this type of reasoning, the most effective way of encouraging people to re-evaluate their original, sedimented ways of thinking is to put them in a situation or provide them with input that makes them anxious to a certain extent. It is, however, important to try and associate relatively neutral names to dimensions and to allow the individuals to assign their own meaning to them. According to Fiedler (1995), that meaning becomes more salient for people who are experiencing uncertainty.

Irrespective of the sequence in which the intrapsychic processes of cognition and emotion occur, there is a connection between cognitive meaning and emotional state (Kaufman, 1996) and both the mental model and congruent methodological framework should take account of the strong role played by the emotional subsystem in determining behaviour.

From a procedural perspective, it may be useful to provide a relatively structured process and to keep participants informed of exactly where they are and what they will do next, so as to allay anxieties. This is especially necessary if, during the conduct of an intervention, the consulting psychologist intends to present participants with a mental model that is very new or unfamiliar.

3.8 THE DISPOSITIONAL SUBSYSTEM

According to Vanderbeeken and Weber (2002), dispositions are stable properties that specify how a person will behave in certain situations or given certain triggering stimuli, without necessarily referring to the underlying causal basis for such behaviour.

Dispositional experiences form a fourth category of experiential processes, which refer to a relatively consistent tendency to act in a certain way, rather than in some other way and are an integral part of the unitary process of human functioning. Dispositional types are inseparably interwoven elements of perceiving, thinking, reasoning, learning, feeling, remembering and acting. As stated previously in this chapter, the reasons why people behave as they do include both conscious and unconscious reasons (Vanderbeeken & Weber, 2002).

Vanderbeeken and Weber (2002) describe the dispositional subsystem functions as a type of autopilot that tells the conscious mind that the person's existing habits and behaviours are adequate and appropriate to the tasks at hand. A dispositional type may be that of the pessimist who tends to interpret everything in a cynical and suspicious light, irrespective of the true intention.

It is also important to bear in mind that the experience that consulting psychologists have of the consulting situation, the way that they interact with people and with problem issues will be influenced by their own dispositions. If a mental model is to be really useful to the consulting psychologist, it should not attempt to control these instincts, drives, needs and plans but to create a framework that will harness each consulting psychologist's particular pre-dispositions to think and act in a certain way, within the context of providing a professional consulting service that adds value to clients.

However, although dispositions do not necessarily explain the underlying causal factors, they may provide clues as to what these causal factors are (Vanderbeeken & Weber, 2002). The training and experience of consulting psychologists should enable them to have insight into such causal factors and to incorporate them into both the content of the mental model and the procedure for its implementation in an integrated manner. This is especially important, considering the dispositional subsystem provides information about possible situations that will trigger specific behaviours and consulting psychologists need to anticipate these and incorporate them in terms of preparing for and conducting their interventions.

In the context of this research, it is important that the potential role of dispositional factors be borne in mind. Given the wide variety of dispositional factors that can impact on the consulting situation and given the fact that it will not always be possible to evaluate all participants' dispositional types, it seems pragmatic not to try and tailor-make the mental model or the methodological framework for any particular dispositional type, but rather to enable these to function at the more meta-level, where meaning can be assigned to the characteristics and dimensions of the model on an individual basis.

3.9 THE SELF SUBSYSTEM

The self is defined as the perceptual, cognitive and emotional and processes that make up the person, and using the self as instrument means becoming aware of and using these processes (McCormick & White, 2000). Sullivan (1953) conceptualised the self subsystem as an individual's collection of self-perceptions. Every person has experiences of the self and forms a self-image composed of physical, psychological and social characteristics. Self-image is formed on the basis of self-knowledge which is acquired through the act of self-evaluation.

According to Fox (2003), the term self includes the self-concept (the person as known to the person), identity (an integration of self-description and values), self-esteem (awareness of good possessed by the self), self-acceptance (recognising and integrating strengths and weaknesses) and self-perceptions (a generic term applied to specific self-referent constructs). The self subsystem plays an important role in communicating with the rest of the intrapsychic subsystems.

The self is a malleable and flexible entity. Perls, Hefferline & Goodman (1951, p.121) state that "the self is not to be thought of as a fixed institution; it exists wherever and whenever there is in fact a boundary interaction. The self *is* the figure and ground process in contact-situations". The self is the agent of change, an individual as a whole, in contact in the present moment, being aware in the process of creative adjustment throughout the stages of figure formation and destruction over time, and growing.

The term *self* refers to the system of contacts in any present situation and the way our experience is organized. These systems of organisation are called structures or aspects of the self. The self exists wherever contact occurs, not as an additional object of the psyche, but as the process of figure formation in the individual. When we are not referring to any particular boundary contact but only to a generalized present or present, as in this discussion, the self is felt only as an experiential potentiality or a memory (Latner, 1992).

Latner (1992) discusses the self in terms of the forms or structures that it takes in the different phases of figure formation and in different situations. These are partial constructs of the self, similar to the ways that individuals are each different in different kinds of situations. People are thoughtful and receptive when listening to something which interests them and animated and active when they are responding. These structures of the self are the id functions, the ego functions, and the personality functions.

Fox (2003) describes the objective self as the *I* (an executive function) and the subjective self as the *me* (concerned with self affairs, abilities and roles in the areas of work, spiritual, social and physical life). The tasks of the self subsystem include self-enhancement and self-consistency. Self-enhancement incorporates personal growth strategies and maximising social approval and support, with a self serving bias. Self-consistency tasks are directed at maintaining personal stability, maintaining the status quo, retaining familiar patterns and a stable self, in order to cement the identity.

Sullivan (1953) describes the self as actively protecting the person from information that would cause the person to re-evaluate pre-existing self perceptions, by the process of selective inattention. This process also involves evasive manoeuvres that allow the person to maintain congruence between his or her interpersonal world and the perceptions of the self and which result in behaviours that force others to give way to the person's own interpersonal strategy.

Added to this, Fox (2003) states that the natural desire to change is present in the self subsystem in terms of the self-enhancement function, but only to the extent that the change is congruent with the self-image. This desire is balanced by the drive toward self-consistency which encourages the status quo and directs the person either consciously or unconsciously not to change.

Given the central role of the self sub-system in determining the meaning that an individual assigns to domain phenomena, the type of mental model presented and the procedure for implementing it must recognise individuals' own self concepts, their interpersonal strategies and the role that these will play in influencing others in a group or organisation.

Although indications are that creating a sense of tension or anxiety within individuals can lead to more conscious, focused attention and openness to awareness, learning and change, the self should never be threatened, either by the content of the mental model or by the procedure for implementing it. As discussed in the section on language, the words used to describe characteristics of the mental model should be as neutral as possible, creating some tension within individuals and allowing them to attribute their own meaning to them.

Throughout the processes of consulting, the consulting psychologist must be aware of the self and use it to optimum effect. The knowledge, skill and experience of the consulting psychologist (as discussed in Chapter 2) are vital to being able to design and implement most interventions at individual, group and organisational levels. According to Professor Frans Cilliers (personal communication, 9 September 2006) consulting psychologists' own emotional responses and fantasies can be used to create working diagnostic hypotheses, because consulting psychologists form part of the system, studying itself and their reaction reflects part of the client system. Consulting psychologists' feelings of surprise, disappointment, boredom, confusion, hostility or excitement can reflect specific conditions existing unconsciously in the organisation or introduce new variables to the client system.

Lewin's (1952) life space theory expressed human dynamics in the form of a map representing a person's life space. This map is patterned with needs, desires and goals with vectors indicating the directions and strengths of these forces, all operating as a Gestalt. Last, but certainly not least in this section, consulting psychologists must bear in mind their own self subsystems and manage the influence that this subsystem has on behaviour and decisions made in the consulting system.

3.10 INTRAPSYCHIC PROCESSES AND MENTAL MODELS

There are two important elements to using mental models successfully in consulting psychology. These are the mental model and the users. The users of a mental model may be consulting psychologists, their clients or both parties together. The mental model and the users form a system. The intrapsychic subsystems of the consulting psychologist and the client ideally interact with the mental model to extract value from the interaction.

Research has indicated that one of the best methods of enhancing the efficiency and effectiveness of perceptual and cognitive functioning is by using mental models – images imagined in the mind (Johnson-Laird, 1988; Pidd, 2003; Senge, 1990). Whereas the previous discussion focused on the processes used to perceive and interpret phenomena within the consulting situation, this section discusses the use of mental models to enhance productive thinking – either in the undirected or in the directed sense.

Johnson-Laird (1983) developed a theory of mental models as a method for reasoning without the rules of inference. This kind of reasoning may be simplified by stating that it involves imagining a situation on the basis of various premises and then formulating an informative conclusion based on the imagined situation. Johnson-Laird (1988:24) states that “to imagine a situation is... to create a mental model”.

The theory of mental models is closely related in the literature with learning. Initially mental models develop as a result of teaching and documentation (Senge, 1990). After the initial learning, however, experience with the system is the most important external factor for the continuing evolution of the user’s mental representation of given phenomena. Kaplan (in Mouton and Marais, 1990) states that models merely agree in broad outline with the phenomenon of which it is a model. Certain characteristics of the phenomenon may be excluded from the model and the most obvious aspects emphasised.

In cognitive psychology, a mental model refers to the semi-permanent tacit maps of the world that people hold in long-term memory and the short-term perceptions that they build up as part of their everyday reasoning processes (Senge, 1990). A model assists people to understand phenomena by providing a picture, a mechanism, a pattern or other analogy and frequently give scientists ideas for new hypotheses to test (Polanyi, 1967).

From a cognitive perspective, a mental model may be regarded as a representation (Schiffer & Steele, 1988). Representation is defined by Denis (1991) as a human activity which consists of generating symbols, i.e. entities which stand for other entities. Individuals create objects to represent other objects using the mind as a medium. It is also the process by which humans create representations or cognitive end-products of what they derive from their interactions with the environment (Murray, 1995).

According to Pidd (2003), models are tools for thinking that may be used to add leverage to human thought and analysis. As Pidd (2003, p.11) states, "mental models are tools for thinking, not tools to replace thinking". A mental model is an explicit representation of part of reality as seen by the people who wish to use that model to understand, to change, to manage and to control that part of reality.

Powell (1995) describes the process of modelling (creating an abstraction of reality) as a fundamental way in which human beings understand the world. Powell (1995, p.42) describes a heuristic as "an approach, a strategy, or a trick that experience has shown may help in constructing a useful model" and lists visualisation as an important modelling heuristic. According to Schiffer and Steele (1988, p.126), "it is easier to work with an external artefact than with an inchoate idea".

3.11 MENTAL MODELS AS AIDS FOR STIMULATING AWARENESS AND INSIGHT

Theoretical models are a map of limited aspects of reality, introducing simplifying assumptions that are adjusted or removed in the light of the model's predictive successes (Ruse, 1988). A theoretical model describes constructs, explains the interrelationships between variables and explains or predicts phenomena. Kaplan, in Mouton and Marais (1990), states that a theoretical model merely agrees in broad outline with the phenomenon of which it is a model. Certain characteristics of the phenomenon may be excluded from the model and the most obvious aspects emphasised.

The idea is for a (theoretical) mental model to be utilised as a tool (likened to a lens in Figure 3.2) that allows participants in the consulting situation (either the consulting psychologist or the client) to integrate and marry their experience of the symbolic outer world, the physical outer world and their intrapsychic contexts from the particular perspective allowed by the mental model.

Consulting psychologists can use mental models to scan patterns or simulate events and so diagnose, explain, predict and intervene in a given consulting situation. It is important, in the context of the work that the consulting psychologist does, to consider the value of having such a mental model. One of the most pressing arguments that such a model will facilitate is the consulting psychologist's ability to diagnose, explain, predict and intervene, is the relationship between imagery (or representation), experience and the formation and destruction of good Gestalts.

According to Gentner and Stevens (1983) people form mental models of the systems with which they are interacting. These models provide predictive and explanatory power for understanding the interaction or the behaviour of systems and how they work. They provide simplified mechanisms with which to approach and deal with problems. According to Halpern (2003), mental models can be explored in a disciplined way, to become aware of the underlying assumptions that influence our behaviour.

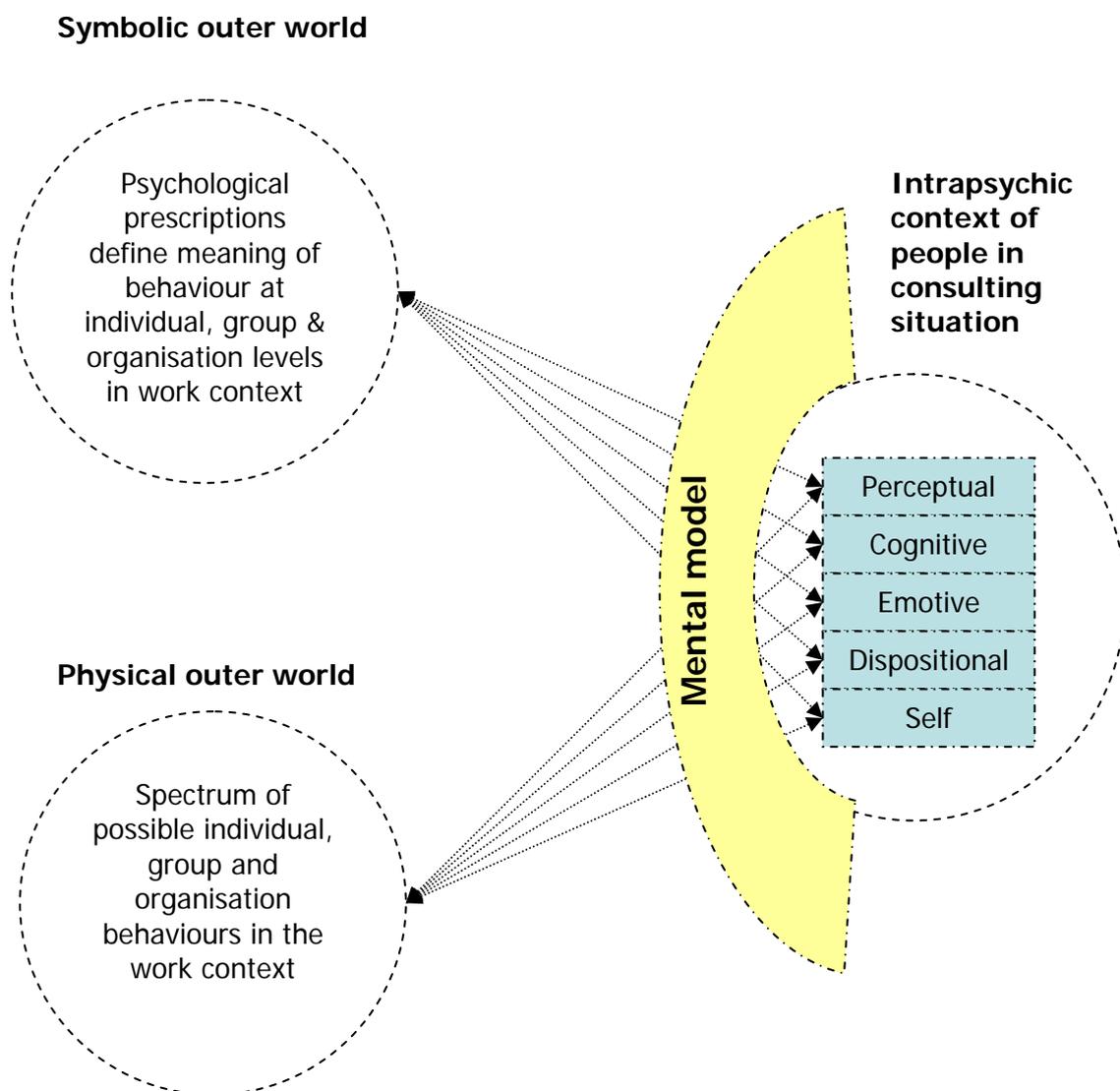
Johnson-Laird (1983) described mental models as structural or functional. Structural models are models of what something looks like and how it works, describing the nature and internal mechanics of an entity in terms of its component parts. Functional models, on the other hand, describe how the entity operates. The theoretical, structural and functional aspects of mental models are all important in the context of the current research. Whereas reality is often complex, subtle and ill-defined, a model must, in contrast, be simpler, more concrete and more well-defined in order to be of practical value (Pidd, 2003).

Within a given research domain, scientists can construct an explanatory mental model that is a simplified representation or description of observable properties and their relationships. An explanatory model can enable researchers using the model to make predictions by using inductive logic, by making a deductive generalisation that if this model is similar to a certain phenomenon in the research domain, then the result will be similar or identical (Pidd, 2003).

Using a mental model also allows consulting psychologists and their clients to experiment with, reflect upon and discuss the entity in a holistic and relatively simple manner, focusing on the entity (represented by the mental model) as the figure, in sharp contrast to a relatively clear background.

In reality, there is a huge potential universe of both quantitative and qualitative data and information that could be considered by the consulting psychologist in a given consulting situation. This data may be incomplete or vague and even if such data is not immediately apparent, it may be considered to be important by some of the role-players within a particular context. In addition, role-players in a particular consulting situation may not agree on what constitutes current reality. There is often confusion and lack of clarity about problem-definition except at the basic level, the urge for survival (Ackoff, 1979).

Figure 3.2
Using a Mental Model at the Meta-Level



Note. From Jordaan & Jordaan (1998).

Intons-Peterson and McDaniel (in Cornoldi and McDaniel, 1991) describe two consequences of using mental models that are important in the current research – one positive and one negative. On the positive side, invoking the mental model may desediment original ways of thinking, thereby improving awareness, insight and understanding of domain phenomena. On the negative side, if the users of the mental models resist the mental model on the basis of any of the intrapsychic subsystems discussed earlier in the chapter, the effectiveness of the mental model may be reduced.

3.12 CREATING A MENTAL MODEL

In this section, the literature is explored in order to determine how to create a mental model in a creative and innovative way, incorporating the learning gained by the researcher from the previous chapters.

Rusbult (2000) proposes that mental models may be generated both by selecting old models and improving upon them or by inventing new models. Rusbult (2000) describes various strategies for generating theories, including retroduction and deduction, hypothetico-deduction, retroductive generalisation, retroduction and induction, generation and evaluation, invention by revision, analysis by revision and analysis of external relationships.

3.12.1 Thought styles

Rusbult (2000) describes thought styles as a system of concepts, developed from prior experience, about nature and research science. Thought styles provide an operating paradigm that guides decisions about what to study and how to plan and conduct research. (An overview of the operating paradigm that has influenced and guided this research is provided in Chapter 1.) This operating paradigm is related to the social and institutional structures within which the researcher operates, that is the context of consulting psychology as discussed in Chapter 2.

The impact of the researcher's view of the research, the paradigmatic perspective adopted, what is viewed as meta-theory and what is viewed as theory is a thought style that allows for, as it were *leaving the banks of the river and swimming to the other side*, as opposed to research with *know-every-step-in-advance* preliminary planning.

Thus, the thought style adopted is what Rusbult (2000, p.24) refers to as “improvisational serendipity”. The researcher adopts the roles described by Rusbult (2000, p.26) of experimentalist, generating observations and of theorist, applying energy to interpretation.

This approach is quite congruent with that which consulting psychologists may be faced in the consulting situation. They must apply energy to theory and experiment with new interpretations in their own thinking, by conducting what Rusbult (2000) describes as thought experiments. It is also congruent with process consultation and Gestalt consulting principles (discussed in Chapter 2) of heightened awareness through experimentation.

3.12.2 Thought experiments

As described by Rusbult (2000) thought experiments are mental experiments, done relatively quickly to explore a wide variety of possibilities, ranging from conventional to daringly innovative research. (This is in contrast to some types of research, such as those described in Pidd (2003) - experiments that take a great deal of time, effort and resources to, for example, study the effects of a decision that took only a few minutes to make). The thought experiment is particularly useful and appropriate in this research as it encourages creativity (Rusbult, 2000). Significant use was made of analogies and metaphors to assist in establishing a state of creative adjustment in the researcher’s interactive field.

The rationale for the conduct of a thought experiment relates to the observation of Burns and Grove (in Muller, 1997) that, to change our way of thinking, we need to get outside of any existing theories or habits we have by changing our Gestalts. Muller (1997) states that changing our Gestalts requires the deconstruction of our original sedimented views of research phenomena and the reconstruction of another view. This enables the destruction of existing Gestalts and the development of better, more healthy Gestalts.

Pidd (2003) states that an *analogy* refers to a correspondence or partial similarity with or between phenomena. This research uses analogies from the physical and biological sciences as tools for creative thinking at the project level. The approach is not new practice in the field. Jung (1961) used various principles of physics (equivalence and entropy) as analogies for dynamic forces in the human psyche. Koch (2000) uses principles from the biological, physical and social sciences to describe behaviour in business organisations.

According to Gentner and Wolff (2000) there is broad consensus in the scientific community that metaphors can lead to change of knowledge. According to Pidd (2003), a *metaphor* is the figurative application of a name, descriptive term or phrase to an object or action. According to Kosslyn (1981) language is linear and this limits the manner in which ideas and patterns of thinking can be represented. Visual tools such as models, charts, cartoons and illustrations enable a break from the linearity of language.

According to Rusbult (2000), thought experiments are normally a precursor to physical experiments, but they can also be done to probe the possibilities contained in a model, that cannot be attained physically. This will be the focus of this chapter – using a qualitative, exploratory and unstructured thought experiment to pre-invent the structure of suitable mental model. This done, the task to explore the pre-invented image and to develop the image into a tentative, working mental model that complies with the aims of the research on the basis of the specifications developed in Chapters 2 and 3.

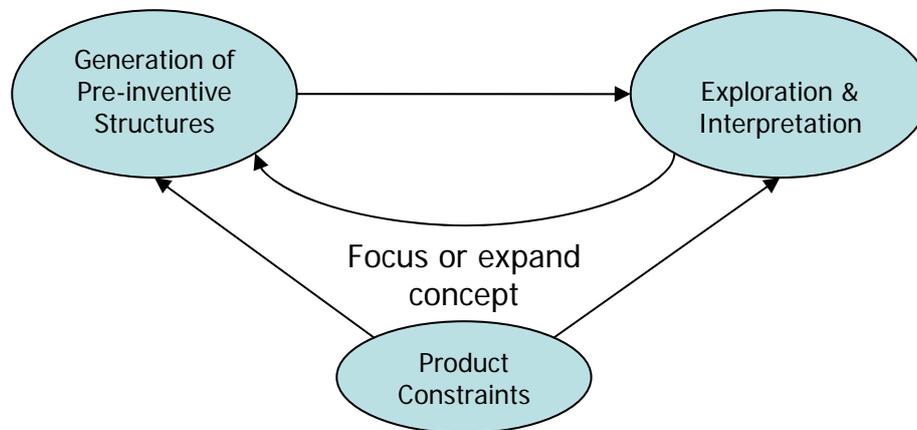
The thought experiment described in Chapter 4 is thus a form of retroductive-deductive exploration, using various theories and models from cosmology and quantum physics to assist the researcher to think creatively and imaginatively. In this context, there are no physical constraints – only the limits imposed by the imagination. Experimental design is regarded as taking theoretical input (to motivate and guide design), gaps in knowledge about a system (that can be filled by experimentation) and the conduct of thought experiments (to facilitate the process of design).

3.12.3 The Geneplore Model

In terms of the Geneplore Model (Finke, 1990), there are two main phases in the development of a mental model. In the generative phase, a mental representation is constructed (pre-inventive structure). These structures have emergent properties that are then exploited for creative purposes in the exploration and development phase. The resulting concepts can then be focused or expanded according to task requirements. Constraints on the final product can be imposed at any time during either the generative or the exploratory phases. Figure 3.3 illustrates the basic structure of the Geneplore Model (Finke, 1990), which is in itself a process model, for developing a mental model.

Figure 3.3

Geneptore Model for Generating and Exploring Mental Models



Note. From Finke (1990).

The Geneptore Model is explored below in terms of the generation of a pre-inventive structure, which will ideally be a holistic figure, a Gestalt. The application of product constraints and the idea of exploring and interpreting the pre-inventive structure for meaning are also discussed.

3.12.3.1 Generation of a pre-inventive image

Finke (1990) described pre-invention as an exploratory strategy wherein human beings begin the process of inventing something new by imagining interesting, stimulating or suggestive forms and then trying to interpret them afterwards – as opposed to starting out with a particular concept in mind and then trying to imagine an object that conforms to the concept.

Finke (1990) stated that forms generated by pre-invention may be interpreted as representing an abstract concept or concepts associated with given categories of a conceptual domain. In this research, the pre-invented form is used as a symbolic or metaphorical representation of an idea, rather than as a literal depiction of a concrete object. Pre-inventive forms need not actually look like any particular object; they should simply represent the concept or idea in a general or indirect way.

In accordance with the exploratory strategy adopted in this research, the first phase in the process of developing a new mental model for consulting psychologists is that of pre-invention, where a mental model is created, initially without interpretation. According to Finke, Ward and Smith (1992), pre-inventive forms can be created by professional scientists to enhance conceptual discovery.

Whilst Finke (1990) emphasised the discovery process within the larger realm of the creative process and described the generation and exploration phases of the Geneplore Model as being of equal importance, with creativity assumed to be possible in either phase, Roskos-Ewoldsen (1989) described creativity as a process that results in a form or figure (generation) that may or may not be judged to be creative and discovery as the interpretation and exploration of the form. In terms of the Geneplore Model (Finke, 1990) pre-inventive interpretation and exploration of the pre-invented structure is required in order to discover new information and to discover functional relations between concepts.

Marr (1982) describes three stages in the interpretation of visual precepts. The first stage is formation of a two-dimensional primal sketch which comprises the basic visual features of the image. The second stage (referred to as the 2½ - dimensional sketch) is a description of the visual information but with some indication as to three-dimensional characteristics – such as depth.

The object is viewed from the orientation of the viewer with information as to the distance of the object and relative distances between elements of the object. The third stage comprises a representation of the three-dimensional image that is irrespective of its orientation to the viewer. This stage is referred to as the 3D-model representation and is described as the responsibility of the long-term memory to store.

3.12.3.2 Pre-inventive exploration and interpretation

Finke, Ward and Smith's (1992) research indicated that a mental model, constructed by one individual (based on background, intuitions and even aesthetic sense), can be readily interpreted by that person, but may be interpreted with more difficulty by others. Individuals were found to be able to interpret their own pre-inventions more easily than the pre-inventions of others. Intons-Peterson (1983) also referred to the importance of preparation in creative thinking and pre-invention may be part of the preparation process.

Finke (1990), in a summary of experimental findings on pre-invention and interpretation of mental models, identified the following implications:

- The likelihood of discovering a creative mental model using mental synthesis is greater when the component parts are restricted;
- Restricting the interpretive category increases the likelihood of discovering a creative mental model; and
- It is helpful to generate pre-inventive forms before one knows what the interpretive category is.

It is interesting to note that Finke (1990) stated that experimental results indicate that more creative results are achieved when, contrary to the usual *form follows function* approach to invention and design, no attention is given to function until the form of the pre-invention is clear. This presents an alternative strategy of *function follows form*.

Creativity is enhanced when forms are pre-invented before the interpretive constraints are imposed. Ordinarily though, Finke, Ward and Smith (1992) stated that a considerable amount of refinement and restructuring is needed to transform an inventive concept into a working model. As the concept matures, the pre-inventive image becomes more specialised with possible directions for further exploration and refinement becoming more restricted.

Whilst the Geneplore Model (Finke, 1990) provides a macro-guide for generating a pre-inventive image and then exploring it, it is also necessary to understand some of the more micro-level principles for modelling in order to prepare for the development of a mental model.

3.12.4 Principles of the modelling process

Pidd (2003) specified five general principles of modelling, which provide useful pointers in the quest to create a mental model. These principles are presented below and are then used, together with Finke's (1990) Geneplore Model to structure a thought experiment, which will generate a pre-inventive image and direct its exploration.

- Model simple, think complicated

Pidd (2003) recommends that mental models are kept relatively simple. This makes them easier to work with and manipulate (that is what they are created for), more generalisable (applicable to a wider variety of situations and variables) and more transparent (which means they stand a greater chance of being used). Trying to build a model that is as complete and accurate as possible (in respect of reality) is regarded as, almost inevitably, being erroneous.

- Start small and add

Pidd (2003) states that models should be developed gradually, starting with the basic elements which may then be developed and refined as required. This is often accomplished by either refining a model and adding complexity, or replacing a prototype model with later, more appropriate versions. Finke (1990) provides useful assistance in this regard in terms of the phases of the Geneplore Model.

- Avoid mega-models

Pidd (2003) suggests that it may be more useful to try and create a series of simple models or a model that has certain components that can be identified, explored and utilised independently than to try to create what Raiffa (1982:22) refers to "as general purpose, grandiose models that try to incorporate practically everything".

- Use metaphors, analogies and similarities

Instead of attempting to create a mental model by means of direct consideration, Pidd (2003) recommends that use is made of analogies, metaphors and similarities. There are many possible strategies in this regard (Ackoff, 1974), such as using metaphors from other sciences. Pidd (2003) includes the use of fantasy, symbolism and personal or direct analogies. It is vital to note that the perspectives used to create and develop the mental model are distinguished from the use of the model. Once the model is created (for example, by means of analogies or metaphors taken from the physical sciences), the use thereof returns to the domain of consulting psychology and describes the context of consulting psychology and not the analogy or metaphor used to create it.

- Do not fall in love with data

Pidd (2003) argues that, just because a model represents some system, the examination of data from that system does not necessarily reveal all that is needed to construct an appropriate and useful model. The mental model should drive the data and not vice versa. The researcher should try to develop some ideas of the model and its parameters and from this, develop what type of data may be needed.

Whilst Chapter 2 highlighted the large size and complexity of the domain of potential consulting situations, levels of consulting and the knowledge base, a relatively simple mental model will be a helpful tool. Even simple models can support very complex analysis (Johnson-Laird, 1983). The user (the consulting psychologist) must always supplement the use of a mental model with critical thinking, rigorous argument and analysis.

3.13 GUIDELINES FOR CREATING, DEVELOPING AND APPLYING A MENTAL MODEL

The following guidelines are based on the preceding sections and serve to guide the process of creating, developing and applying a mental model and a methodological framework for deploying the mental model that will be undertaken in chapters 4, 5 and 6:

- Gestalt psychologists describe the task of psychologists as assisting their clients to differentiate figure from background, highlight incongruencies, inconsistencies, conflicts and resistances (whether conscious or unconscious) in the client system and shift them into the open, conscious arena where they can lead to awareness, insight and changes in behaviour (Latner, 1992; Nevis, 1987; Perls, Hefferline & Goodman, 1951; Yontef, 2005). A mental model to be utilised by consulting psychologists must engender an awareness and understanding of the unified whole (figure) against a relatively uncluttered background, in order to optimise the potential for excitement, growth and development in the client system.
- The mental model must represent an individual, group or organisational phenomena in the client system and promote the perception of figure phenomena in a complete and holistic manner. This requires consideration of the principles of Gestalt organisation, such as figure formation, contour, colour, symmetry and Pragnanz.

- The mental model should be simple enough to facilitate the processes of spontaneous perceptual organisation and categorisation to improve the processes of instantaneous interpretation, rapid interpretation and deliberation of domain phenomena and the implications thereof.
- The selection of an aspect from the discipline-based body of knowledge is influenced by existing conceptual frameworks that may derive from external sources, such as reference books or other colleagues, or from within the various intrapsychic subsystems of the consulting psychologist. These conceptual frameworks may not be explicit at all and this makes all possible approaches or consulting situations virtually impossible to cater for with a single, mental model. This reinforces the need for the mental model to be developed as a high-level, holistic and integrated model in order to render it appealing and usable to consulting psychologists on a broad scale. This will also render it more amenable to the processes of metacognition which will make it applicable in a greater variety of consulting situations.
- Using imagery represents an opportunity for the development of a high-level mental model as it presents the opportunity to generate an image that is novel, represents an integrated structure, has dynamic and static properties, and may have an element of spatial orientation and movement – a Gestalt figure.
- Care must be taken in respect of the symbolism of an image, the concepts and the language used to describe it in terms of their connotative and denotative meanings. It will be useful to use metaphors and analogies to generate an image that is not traditionally part of the way that consulting psychologists view phenomena. According to Shah (1999) who studied the cognitive processes and practical implications of graph comprehension, difficult inferential processes are assisted when parts (of a graph) are labelled and when other visual cues are used to help keep track of what the information represents. The cognitive load should be minimised by presenting as few qualitative or quantitative concepts as possible.

The researcher considered each of the abovementioned observations in order to determine the most appropriate way forward in this exploratory research. These observations are interwoven into the content and methodology of the research process in the ensuing chapters.

3.14 CHAPTER SUMMARY

This chapter provided a review the literature in terms of the intrapsychic subsystems and considered their potential impact on the psychological consulting situation. The intrapsychic subsystem of humans was explored to determine the effect of the various intrapsychic subsystems on the way that the consulting psychologists and their clients perceive phenomena in the consulting domain. The researcher wished to understand how domain phenomena are experienced by people, influenced and acted upon, so that sound Gestalt psychological principles can be accommodated into the development of the mental model and congruent methodological framework.

Boeree (2002b) states that learning is essentially recognising meaning that is there in the experience, awaiting discovery and that insight refers to the recognition of a Gestalt or an organising principle in an event or among phenomena. Consulting psychologists attempt to facilitate discovery and insight by creating an environment within which clients can explore, become aware of organising principles and spontaneously restructure the situation, either perceptually, cognitively, dispositionally, emotionally or in terms of the self.

Intrapsychic subsystems interact to determine a person's experience of a situation, consciously or unconsciously. The intrapsychic processes, by which people acquire information, make sense of it and then act (or do not act), largely control their behaviour. The perceptual processes were discussed, with a special emphasis on the Gestalt principles of conceptual organisation. In the exploration of the cognitive subsystem, various aspects of thinking, including thinking as symbolic representation and the roles of concepts, language and imagery in the thinking process were explored inasmuch as they can provide guidelines of the Gestalt approach.

Similarly, the emotive subsystem was explored as, irrespective of whether emotional factors precede the cognitive in determining behaviour, or whether more cognitive processes precede emotional moderation prior to behaviour, these factors impact on domain phenomena at the individual, group and organisational levels of consulting. Similarly, the dispositional and the self subsystems were explored in terms of their impact on the psychological consultation process. It is essential to understand and appreciate the various intrapsychic processes and to incorporate them into any approach to psychological consultation.

In the next section, the role of the intrapsychic process was explored in terms of using mental models. Mental models are symbols or representations phenomena (Denis, 1991). They are tools that are used to make sense of a problem or situation (Pidd, 2003). Consulting psychologists utilise mental models to scan patterns or simulate events in the consulting domain. These representations can also be used in the process of thinking about domain phenomena to access an individual's base of knowledge. According to Cornoldi and McDaniel (1991) mental models can not only improve the thinking process but can also sensitise the perceptual mechanisms and thereby improve perception.

Finke's (1990) Geneplore Model, which prescribes two steps in the generation and exploration of a mental model, was investigated as a potential method for creating the desired mental model. The Geneplore Model describes the first step as generating a pre-inventive image or structure, which can then be explored and interpreted for meaning in the second step. Various constraints for the resulting mental model (such as the prescriptions provided in Section 1.5 of Chapter 1) can then be applied and the concept focused or expanded as required. Several principles of the modelling process, suggested by Pidd (2003) were also reviewed, as were Rusbult's (2000) explication of thought experiments.

The researcher then summarised how a mental model can be used as a tool to aid consulting psychologists and their clients in making sense of the consulting situation, using the mental model as a paradigmatic lens through which phenomena in the symbolic outer world and the physical outer world may be perceived and integrated with the user's intrapsychic context (the perceptual, cognitive, emotive, dispositional and self subsystems), in order to create awareness and insight into domain phenomena that was not possible without the mental model.

In Chapter 4, the contextual requirements and guidelines derived from Chapters 2 and 3 are integrated with the theory and practice. A detailed thought experiment is conducted - the first empirical test of the research. The thought experiment is described in narrative form and details the researcher's thought style and phenomenological experience of the process. A pre-inventive image is generated and explored to yield a complete mental model that incorporates as many of the requirements derived from the chapter on consulting psychology and the intrapsychic aspects of psychological consultation as possible. The mental model is named, various dimensions thereof are identified and defined and the various characteristics thereof explored.

CHAPTER 4 CREATION OF THE MENTAL MODEL

4.1 INTRODUCTION

This chapter describes a thought experiment used to create a mental model that conforms to Gestalt principles and which has the potential to allow consulting psychologists and their clients to perceive phenomena in the consulting domain in a manner that promotes awareness, understanding and insight into domain phenomena in a unique way, which would not be apparent to those not using the mental model.

In order to de-sediment the researcher's typical thought styles and in the quest for creativity, the thought experiment involves metaphorical and analogous thinking. This requires a journey of the imagination into the realms of cosmology and quantum physics in terms of, primarily, the work of Hawking (1988; 1993, 2002) and Kaku (2000; 2004). The thought experiment (presented in terms of a journey of the imagination) is described in narrative form, with the aid of explanatory figures.

The journey is guided by Finke's (1990) Geneplore Model and the first part of the thought experiment is directed at the creation of a pre-inventive image that conforms to the researcher's perceptions of a Gestalt and which takes advantage of as many of the guidelines for the mental model that were developed in Chapter 3, as is possible.

Once again drawing on analogies and metaphors from the physical sciences, the second part of the thought experiment involves imagining the pre-inventive image at various levels of resolution (as if one were viewing it under a microscope), in order to discern various characteristics and dimensions thereof. The result of this process is the basis of a new mental model, the String Model. The characteristics identified during the process of interpreting the pre-inventive image are discussed. Each of the ten dimensions of the String Model that were identified is defined and discussed.

The thought experiment is concluded with an attempt to test the applicability of the newly developed String Model to the requirements of one of the major aims of this research, namely that the mental model that is created be applicable to consulting projects at the individual, group and organisational levels. The chapter is concluded with a chapter summary.

4.2 PHASE 1: GENERATING A PRE-INVENTIVE IMAGE

The practical thought experiment used to generate a pre-inventive image for a mental model is described below. It is important to note that the thought experiment, although delving into the realms of cosmology and quantum physics, accepts these principles at the meta-level and uses these concepts only to spur experimentation at the project level. The thought experiment is described in the sequence that it occurred in the researcher's experience. The researcher provides a narrative of the thinking process and then summarises the main points that should be taken forward to next phase. The main idea to take to the next phase of the thought experiment is that the researcher should think about these concepts in the context of consulting psychology.

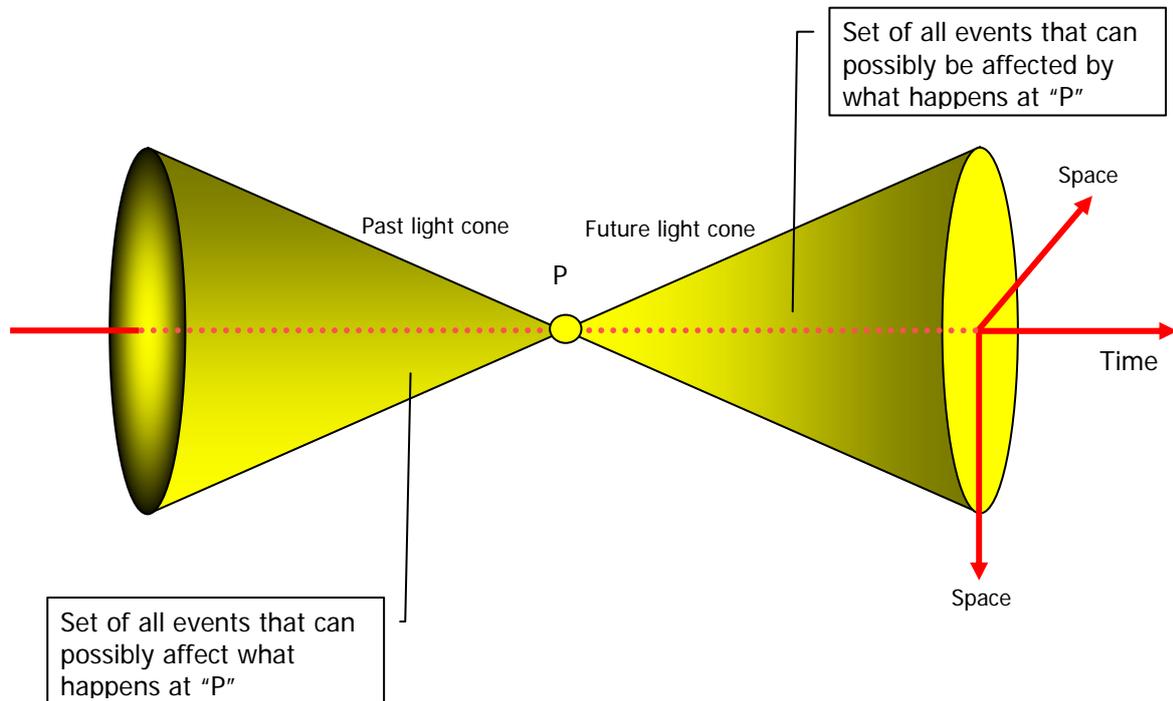
4.2.1 Light cones

According to Hawking (1988), an event is something that happens at a particular point in space, at a particular time. Accurate measurement has confirmed that the speed of light is the same regardless of the source, as predicted by Maxwell's equations. This means that if a pulse of light (the event) is emitted at a particular point in space, then as time goes on, it will spread out, at finite speed, into a cone of light, much as ripples spread out on the surface of a pond if a stone is thrown in.

In three-dimensional (i.e. length, breadth, depth) space, the expanding circle of ripples will mark out a cone whose tip is at the place and time that the stone hit the water. Similarly, the light spreading out from an event forms a three-dimensional cone in the four-dimensional (length, breadth, depth, time) space-time. This cone is called the future light cone of the event. In the same way, another cone, the past light cone, is the set of events from which a pulse of light is able to reach the given event, may be drawn. The concepts of a future light cone and a past light cone are illustrated in Figure 4.1.

As illustrated in Figure 4.1 below, the past and future light cones of an event (P) divide space-time into three regions. The absolute future (set of all events that can possibly be affected by what happens at event P) is the region inside the future light cone of P. Events outside the light cone of P cannot be reached by signals from P because nothing can travel faster than light and they cannot therefore be influenced by what happens at P. Conversely, the absolute past of P is the region inside the past light cone.

Figure 4.1
Past and Future Light Cones



Note. From Hawking (1996).

This is the set of all events that are travelling at or below the speed of light and can reach P and are thus regarded as the set of all events that can possibly affect what happens at P. Given the enormous dimensions of the universe and that nothing can travel faster than light (Einstein, in Kaku and Thompson, 1995), we today see the universe as it was in the past. If, as per the example provided in Hawking (1993), the sun were to die, we would be oblivious to the fact for eight minutes because this is the time that it takes for events happening at the distance of the sun from the earth, to reach the earth. By the time the sun appears to an observer on earth to go out, it would have gone out eight minutes earlier.

This would be true unless, of course, individuals on earth were watching the sun through some kind of telescope and were observing the sun from earth at the moment it went out. The effect of the telescope is to detect the event long before it becomes apparent here on earth. Thus, an observer using a telescope here on earth would seem to be able to predict events before they happened (Capra, 1983; Hawking, 1993; Kaku, 1992).

From a Gestalt perspective, Perls, Hefferline and Goodman (1951, p.33) state that “a healthy person, with the present as reference point is free to look backwards or forwards, as the occasion warrants”. One significant implication of the above, which occurred to the researcher upon reflection upon Figure 4.1 is that, at a given time, say today, all the possible events that will determine what happens today have been set in motion somewhere in the past. The better we can define and describe our past light cone, the greater the clues provided in terms of what will happen today and then, because we can act on phenomena in the present, we can think about what is happening, try to explain it, predict what will happen in the future and try to act accordingly to influence the future. This notion parallels that of Ackoff (1974) in terms of clues to the future being found in the past.

Of course this is a very much simplified and even naïve statement. We are not the only forces at work in the universe, and it is impossible to perceive and predict everything – in any of the sciences. Earthquakes, wars, stock market fortunes, drunk drivers crashing into cars and the weather are mostly out of our control. Nevertheless, in the context of the thought experiment, it remains a valuable implication. Perls, Hefferline and Goodman (1951) state that it is healthy to continually examine the relationships between past and present by describing the situation that the entity is in, and learning from this.

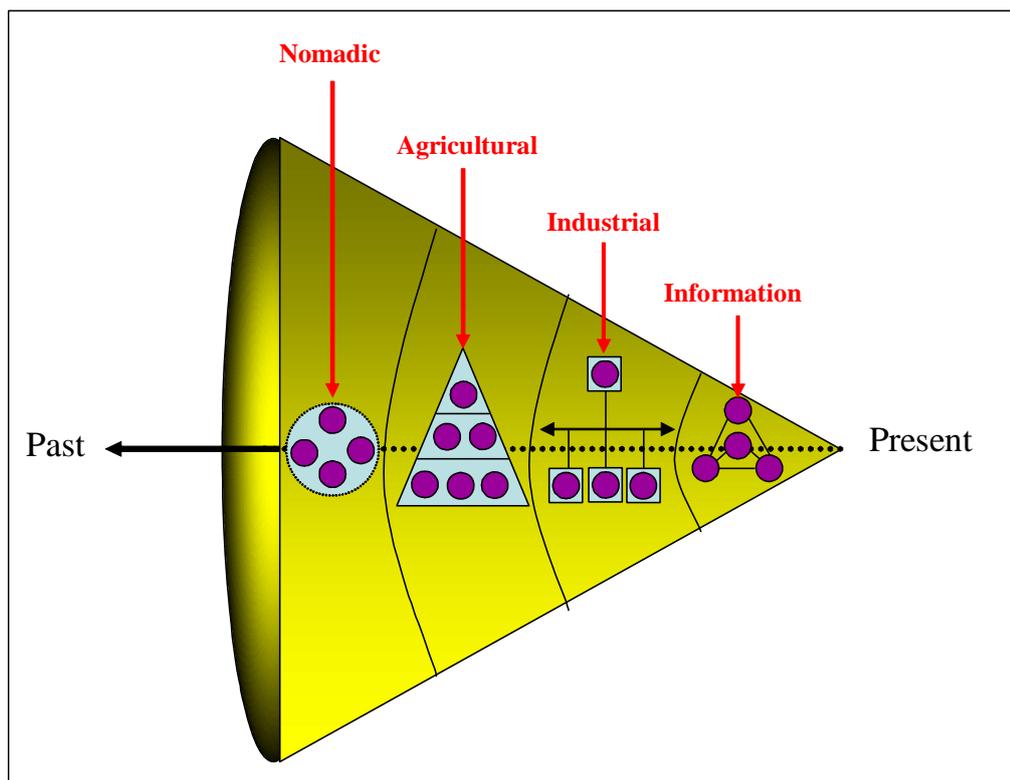
In the next section, the thought experiment is continued by taking the notion of the past assisting us to predict the future further by attempting to do just that. The past light cone is explored from within the field of consulting psychology in terms of the work of Lipnack and Stamps (1996) and others, in an attempt to identify some of the events and developments that led to the present in terms of particular aspects of the evolution of individuals, groups and organisations and, thereafter, to reflect upon the metaphors to attempt to discern any implications for the future.

4.2.2 Exploring the past light cone

Instead of employing a telescope to detect when the sun shuts down as imagined in the previous section, the past light cone or set of events that led up to the present time in the field of consulting psychology may be explored. For purposes of this step in the thought experiment, the discussion focuses on the ages of human development throughout the history of humankind. Lipnack and Stamps (1996) describe four sequential ages that developed on the basis of human learning, over time.

Overlaying Lipnack and Stamps (1996) concepts of ages upon a representation of the past light cone yields some promise in respect of the shared conception of changes and development over time within the light cones. This overlay yields the past light cone perspective of this research which is depicted in Figure 4.2.

Figure 4.2
Past Light Cone Perspective



Note. Adapted from Hawking (1996) and Lipnack & Stamps (1996).

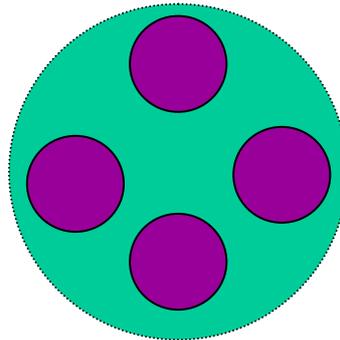
Figure 4.2 above implies that, at present, we are in the information age, which was preceded by an industrial age, preceded by an agricultural age, finally preceded by a nomadic age. Each of the sequential ages depicted in Figure 4.2 is explored below.

4.2.2.1 Nomadic Age

Humans emerged as hunter-gatherers about 200 000 years ago (Koch, 2000). This was the Nomadic Age (Lipnack and Stamps, 1996), where small nomadic groups hunted and gathered. People formed tribes and were able to survive better than separate individuals.

These tribes defined their boundaries which clarify and then blur over time. People honed their small group skills. The nomadic age provided the basic idea of individuals defining boundaries. An iconic representation of the Nomadic Age is presented in Figure 4.3 below.

Figure 4.3
Iconic Representation of the Nomadic Age



Note. From Lipnack & Stamps (1996).

They lived in clans and evolved traits to suit that lifestyle (Koch, 2000). Hunter-gatherers had alert instincts vital for survival as they were exposed to predators like sabre-tooth cats, enemies who raided them and weather that might flood, freeze or bake them. Emotions were the first reaction to everything seen and sensed. Individuals were required to classify or categorise phenomena in the interactive field very quickly – what could or could not be eaten or who could or could not be trusted. Quick decisions ensured survival. So did optimism, self-confidence and breast beating.

According to Koch (2000), hunter-gatherers tended to take risks only when faced with threats to their continued survival, such as hunger. It was dangerous to hunt and so, when there was something to eat, hunter-gatherers tended not to venture forth to build up stockpiles. However, primitive humans did take risks and scramble around in panic when their lives were threatened. The tendency of hunter-gatherers to live in fairly large groups and to co-operate with the rest of the clan was highly functional. Each member of the clan had a clear role in the group. Successful hunter-gatherers lived in large clans of up to 150 people. Dunbar, in Koch (2000) also states that the larger the clan, the larger the brain-size of clan members tended to be.

There is also evidence that individuals in these clans developed a number of roles that were fulfilled by individuals. This was the beginning of specialisation. One individual would make spears. Another would know how to hunt game and another would be an expert spear thrower. The hunter-gatherers also exhibited gender specialisation, in that men tended to hunt, women to gather. However, humans have also been able to benefit from the substantial similarity between the genders, allowing cooperation and substitution of tasks (Koch, 2000).

According to Koch (2000), the ability of the hunter-gatherers to share food and to bargain and conduct co-operative exchange allowed individuals and clans to survive and evolve. It made sense for hunters to share food. The animals hunted were large and often scarce. This reduced the risk of going hungry. There were social skills – trading information, bartering and doing reciprocal favours. In hunter-gatherer societies, hierarchies were prevalent. Food, shelter and sex gravitated to leaders. Following powerful individuals created a sense of safety and security in the clans. Clans also tended to conform internally and to be suspicious of those outside. This led to a sense of identity within the clan and to cohesive behaviour in the face of external threat.

One of the chief survival characteristics of this age was the ability of the hunter-gatherer to be able to identify food, to formulate a plan to acquire it and to carry out this plan successfully, either alone or in co-operation with others.

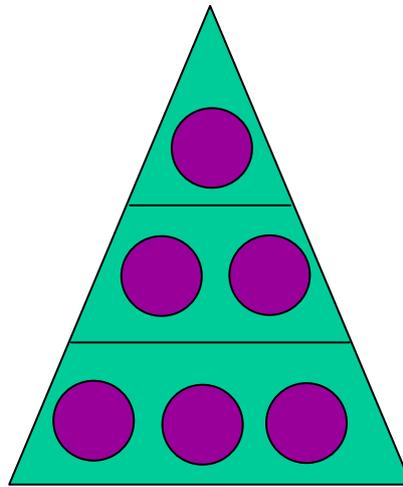
4.2.2.2 Agricultural Age

About 7 000 years ago, the agricultural age emerged and gave rise to a totally different society. In the agricultural age, the concepts of organisational hierarchy and the top-down approach were manifested. This gave the concept of multi-level structures and introduced different sets of dynamics around status, power and influence. In this kind of organisation, the stronger you were, the more power you had (Lipnack & Stamps, 1996). An iconic representation of the Agricultural Age is presented in Figure 4.4 below.

The concept of levels helps individuals, groups and organisations to deal with complexity. (In this discussion, levels do not imply one-way information flow or top-down control – merely that the different levels manifestly exist). Each level has its own regularities and scales of space and time (Lipnack & Stamps, 1996).

Figure 4.4

Iconic Representation of the Agricultural Age



Note. From Lipnack & Stamps (1996).

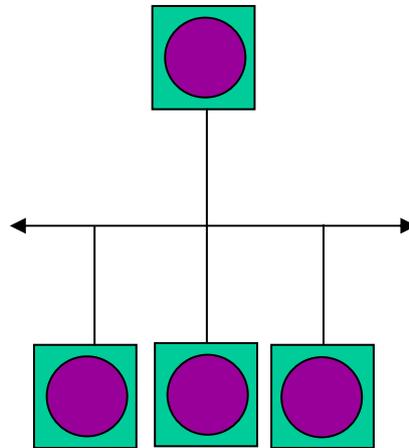
The ability to nurture the ground – to prepare the soil and the seeds, to sow the seeds, to irrigate the ground and prepare seedlings from the weather as far as possible and the ability to successfully reap the best of the harvest is regarded as one of the most important concepts arising from the discussion of the agricultural age.

4.2.2.3 Industrial Age

Some 200 years ago, industry and commerce took over and gave rise to the industrial age with the steam engine bureaucracies, spread out across departments, divisions and subsidiaries. The main theme of the industrial age was the refinement of specialised purpose (Lipnack & Stamps, 1996). An iconic representation of the Industrial Age is presented in Figure 4.5.

This specialisation is sometimes referred to as bureaucracy, which employs a top-down approach to legitimise action (as opposed to the brute strength). Bureaucratic organisations formally specify their purpose and divide and manage work in pursuit of a goal. Specialisation offers the ability to spread out work and obtain tremendous performance or production improvements. This approach was particularly effective in the times of mechanised, mass production.

Figure 4.5
Iconic Representation of the Manufacturing Age



Note. From Lipnack & Stamps (1996).

This gave rise to specialities and repetitive, sequentially ordered and planned work. Communication tended to be formal and one-way (generally top-down). Despite the many negative connotations of this bureaucratic structure, one of its most effective characteristics was to be able to produce (Lipnack & Stamps, 1996).

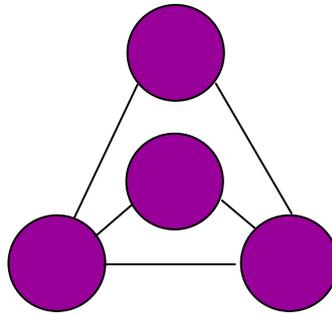
4.2.2.4 Information Age

In the Information Age, Lipnack and Stamps (1996) regard time as the new frontier to be conquered because the global village has closed the frontiers of our local space. Today, there are networks, groups of people working across boundaries of all kinds as knowledge replaces resources as the new source of wealth and the electronic, speed of light Information Age redefines ordinary human-scale space and time. An iconic representation of the Information Age is presented in Figure 4.6 below.

According to Lipnack and Stamps (1996), there are links that cross boundaries, levels, specialities, cultures, places, industries, jurisdictions, politics, religions and every other difference important to people. People and organisations have to “cross boundaries but not smash them” (Lipnack & Stamps, 1996, p.41). They work closely with clients, vendors, suppliers and even competitors (co-opetition), making a myriad of connections with other people and organisations.

Figure 4.6

Iconic Representation of the Information Age



Note. From Lipnack & Stamps (1996).

These linkages may be formal or informal and may be labelled as flexible business networks, strategic alliances, joint ventures or outsourcing partnerships. The global economy and workplace affects the way individuals, groups and organisations work and cope with change. The ability to gather and utilise information optimally, either as an individual, or in co-operation with others is of primary importance to the work of the consulting psychologist. Individuals, groups and organisations must link with one another in an organic fashion, in order to realise the synergies of sharing physical, mental, emotional and spiritual information and functioning.

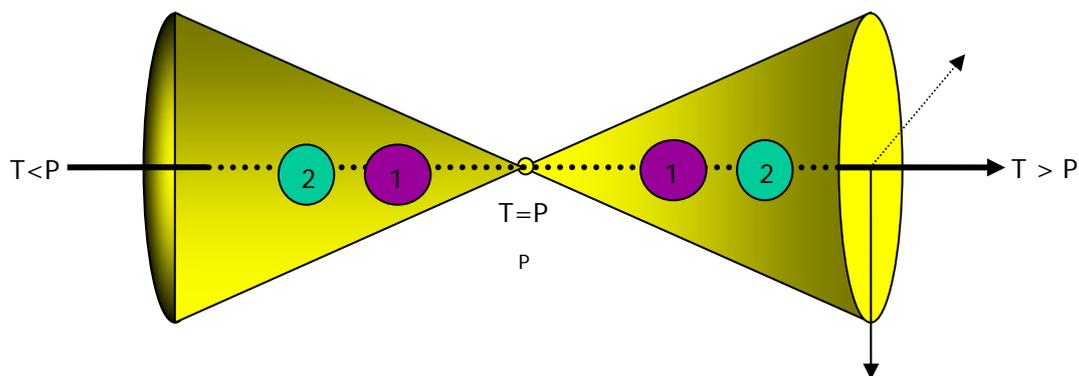
A fundamental premise arising from the thought experiment so far is that the past can be used to predict the future. This section of the thought experiment was conducted to explore the past light cone from a consulting psychology perspective. Figure 4.8 below illustrates the overlaying of Lipnack and Stamps' (1996) four ages of human development upon a representation of the past light cone of Hawking (1993) in an attempt to develop a perspective on the past.

In the next part of the thought experiment, the concept of a sequential inversion effect (an artefact of the researcher's imagination, not a concept from the physical sciences) is explored. This concept was generated in reflection upon the concept of past and future light cones. Thus, the thought experiment necessitates a brief return to the realms of cosmology, before exploring how one may be able to predict the future on the basis of the past.

4.2.3 Sequential inversion

The key to this discussion occurred to the researcher upon reflection upon Hawking's (1988) discussion of past and future light cones and Ackoff's (1979) notion of the past being able to predict the future. According to Hawking (1988), one can construct a light cone for every event in space-time. The path of any object through space-time is represented by a line that lies within the light cone with each event on it. Since the speed of light is the same at every event and in every direction, all light cones corresponding to different events will be identical and will all point in the same direction.

Figure 4.7
Sequential Inversion Effect



Note. Adapted, using creative license, from Hawking (1996).

This step in the thought experiment is illustrated in Figure 4.7 and requires us to imagine that we are a stationary observer, standing at point P at a given time T. The past light cone developed at some time in the past, when $T < P$ and the future light cone will develop in the future when $T > P$. The researcher assumes that two objects (designated 1 and 2 respectively in Figure 4.7) are travelling through their past light cones towards P in the same direction, at the speed of light, having originated at some point where $T < P$. (Figure 4.7 above is actually a composite of events at various moments in space-time, with the congruent light cones superimposed upon one another). The observer, stationed at P and, turning to look into the past sees the two objects coming closer, with Object 1 in front (closer to the observer) followed by Object 2.

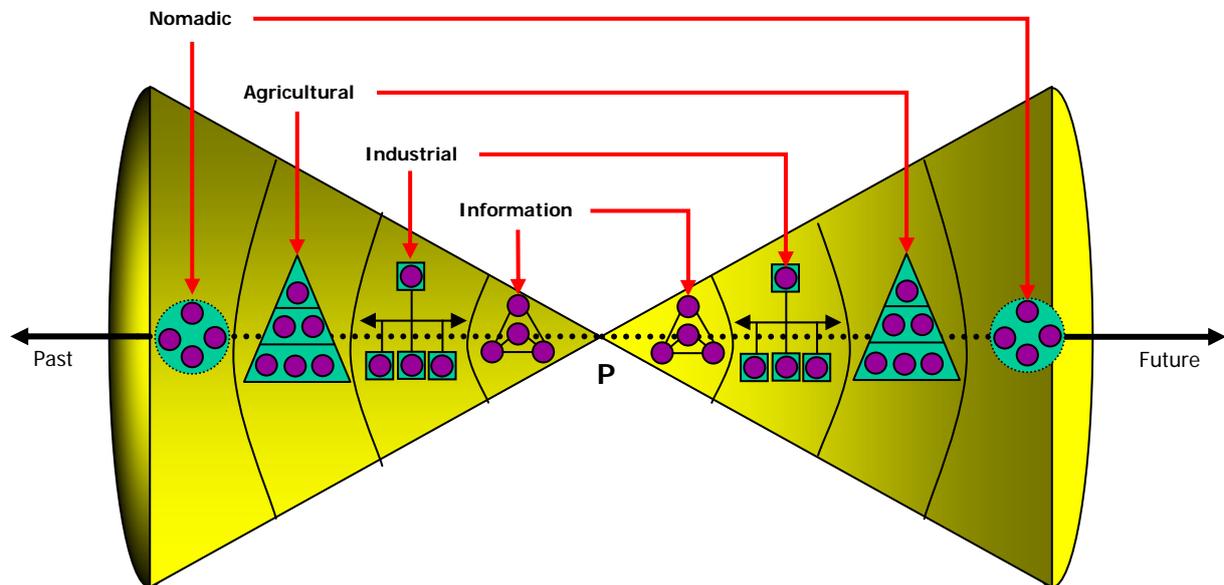
Object 1 passes P and then moves past the observer and moves into the future light cone behind the observer. Similarly, Object 2 first reaches and then passes the observer. The observer, still stationary at P now turns and looks into the future light cone. As both Object 1 and Object 2 are travelling at the speed of light in the same direction, the observer, now looking into the future light cone notices that Object 2 is now closer to P than is Object 1. Object 1 has already travelled some distance further in time and is thus further from the observer than is Object 2. This is a critical concept in the thought experiment and has been termed the sequential inversion effect. There is, of course, no actual change in the sequence of the objects in linear space and time. However, because of the way the thought experiment is set up, there appears to the observer to be sequential inversion. In the past light cone, Object 1 was closer to the observer and then, with the passage of time, Object 2 appears to be closer.

It is important to bear in mind that the term *objects moving through the light cones* is used for illustrative purposes in the discussion above. In terms of Hawking's (1988) discussion, the light cones govern events, not only the paths of physical objects. Thus, the past light cone is the hypothetical set of all possible events that lead up to what happens at time P (see Figure 4.2). This allows the researcher to consider events in the history of human work and how they have developed up to the present time and is of value to the thinking process in terms of the potential development of a pre-inventive image for the mental model by means of metaphorical thinking. It is considered to be a tool for thinking and not necessarily a statement of physical reality. Using the notion of a sequential inversion effect as a tool for thinking (Pidd, 2003), the researcher is now able to imagine what the future light cone may look like, given the representation of the past light cone provided in section 4.2.2.

4.2.4 Exploring the future light cone

Making use of the exploration of the past light cone as described in section 4.2.2 and the sequential inversion effect described in section 4.2.3, the researcher explores what a future light cone might look like. Invoking the sequential inversion effect, and given the events in the past light cone illustrated in Figure 4.3, the observer turning to look into the future light cone observes the sequence of the ages from the past light cone in reverse order. The observer sees elements of the Information Age closest to point P, continuing onward to elements of the Industrial Age, the Agricultural Age and furthest away, the Nomadic Age. This is illustrated in Figure 4.8.

Figure 4.8
Sequential Inversion Effect in the Future Light Cone



Note. Adapted From Hawking (1996) and Lipnack & Stamps (1996).

The implications of this are myriad and seem initially to be self-evident. What the thought experiment seems to be suggesting is that the Information Age now present in the domain of the consulting psychologist will continue in the immediate future. This is certainly understandable without the help of a thought experiment. However, it is what will follow the Information Age that, the thought experiment suggests, is of interest. After the prevalent elements of the Information Age in the immediate future, it is suggested that elements more comparable to those of the Industrial Age will become more prevalent.

This thinking also suggests that the new Industrial elements will be superseded by Agricultural elements and then again by Nomadic elements. At first, Figure 4.8 seems to be implying regression in the sense of going back from whence we came. This seems hardly possible. People and societies learn and develop from experience and continually develop. It also seems, however, to have a great deal of promise and warrants further exploration. However, the thought experiment is continued, by reflecting upon the work done so far and studying the literature in the disciplines of physics, biology and psychology.

What this concept is actually illustrating is that we are a product of the events (things that have happened to us, decisions we have made or not made etcetera, in the past). All these things have brought us to the particular point in time, P. If, as Winston Churchill said people are to “stumble across the truth, then pick themselves up and hurry on regardless” (Petrie, 2004), what we will find is that we will continue to make the same mistakes as in the past. Individuals will fail to learn from the past and to destroy figures that no longer serve them optimally, replacing these with healthier, more effective figures. Their habits, ways of thinking and behaviour will be the same and will lead to the same kinds of outcomes as we realised in the past. We will effectively either achieve the same patterns of success or failure, but in reverse order, unless we do two things. We need to learn from the past and change our way of looking at the world.

4.2.5 Back to the physical sciences

The thought experiment has thus far, focused on the theories of the large-scale structure of the universe, primarily as per Hawking (1988). Now, however, the researcher finds a lack of progress in using the analogies and metaphors of cosmology to yield a suitable, pre-inventive image which conforms to Gestalt principles such as representing a holistic form, but with awareness and insights not previously evident. At this juncture, the thought experiment seems to have stalled. The researcher returns to the physical sciences and continues the process of open, undirected exploration.

According to Hawking (1996) and Kaku (2004), physical scientists describe the world in terms of two basic, partial theories. The general theory of relativity describes the force of gravity and the large-scale structure of the universe – on scales from a few miles to as large as a million-million-million-million miles. Quantum mechanics deals with phenomena on extremely small scales – such as a millionth of a millionth of an inch. The theories are partial because they are inconsistent with each other.

According to both Hawking (2002) and Kaku (2004) the search for a theory that would unify these physical laws into one simple framework consumed the efforts of Albert Einstein for the last thirty years of his life – in unsuccessful endeavour. In an attempt to progress the thought experiment, the researcher turns to the suggested unifying theory to the universe, Superstring Theory. In the literature, Superstring Theory is described as a theory that unifies the theories of cosmology and quantum physics.

Superstring theory (Kaku, 2004) presents what modern day physicists think could be the theory that unifies the physical laws of cosmology and quantum physics. Kaku, a professor of theoretical physics at the City University of New York, states that physicists today think they have finally solved this problem. He describes the solution as "crazy enough to be correct" (Kaku, 2000, p.14). Superstring theory postulates that all matter and energy can be reduced to tiny strings of energy vibrating in a 10-dimensional universe (some authors believe that superstrings have as many as 21 different dimensions!). Although Superstring Theory is controversial, Kaku (2000) states that Edward Witten of the Institute for Advanced Study at Princeton University, whom some claim is the successor to Einstein, has said that Superstring Theory will dominate the world of physics for the next 50 years in the same way that quantum theory has dominated for the past 50 years.

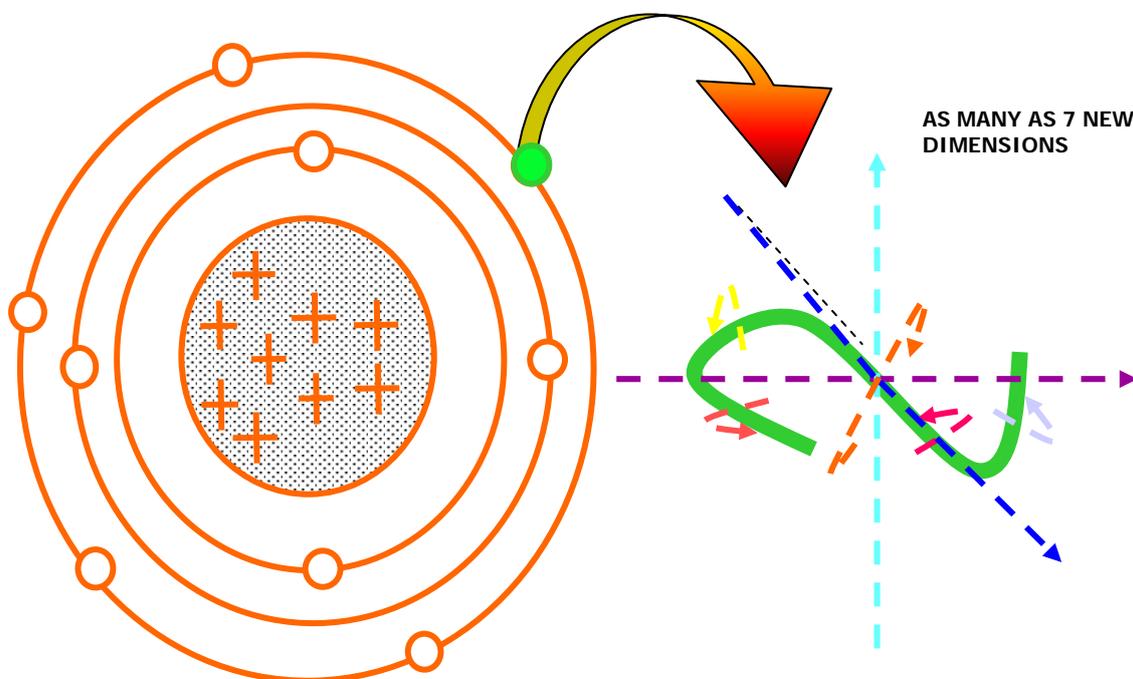
According to Einstein (in Kaku and Thompson, 1995) all physical theories can be represented by simple pictures. In terms of the Superstring, the analogy is to that of a violin string. Whilst the notes played on a violin string are not fundamental, the String itself is. By studying the vibrations that can exist on a violin string, physicists can calculate the infinite number of possible frequencies that can exist. In a similar way, the Superstring can vibrate at different frequencies, each of which corresponds to a different sub-atomic particle or quanta. The parallel to be drawn from the above discussion into the domain of consulting psychology is that there are dimensions that we cannot yet detect and cannot yet measure. This makes psychology a relatively imprecise science at this time. What we need to do is build the theory that allows for other dimensions to be conceptualised - perhaps first in terms of a mental model.

In terms of the violin string analogy, Kaku (2000) summarises the notes of the Superstring as the subatomic particles, with the harmonies of the Superstring as the laws of physics and the universe being compared to a symphony of vibrating Superstrings. However, as human beings operate in predominantly three-dimensional space, it becomes virtually impossible to conceptualise certain problems optimally, unless an instrument or tool is used that enables us to represent more dimensions in the mind and to use this representation as a tool for thinking (as suggested by Pidd, 2003).

Figure 4.9 below illustrates that physicists believe that the structure of protons in an atom actually look like strings which exist in ten dimensions. This means that, in addition to the Newtonian dimensions of length, breadth, depth and the Einsteinian addition of time as the fourth dimension, there may be as many as six other dimensions (Kaku, 1992).

This explains why physicists are not yet able to predict exactly when quantum leaps will occur and what the effect will be. Perhaps understanding some new, as yet unknown dimensions will assist in the quest to design a new mental model for consulting psychologists.

Figure 4.9
Superstring as the Fundamental Form of Matter



Note. Adapted from Kaku (2004).

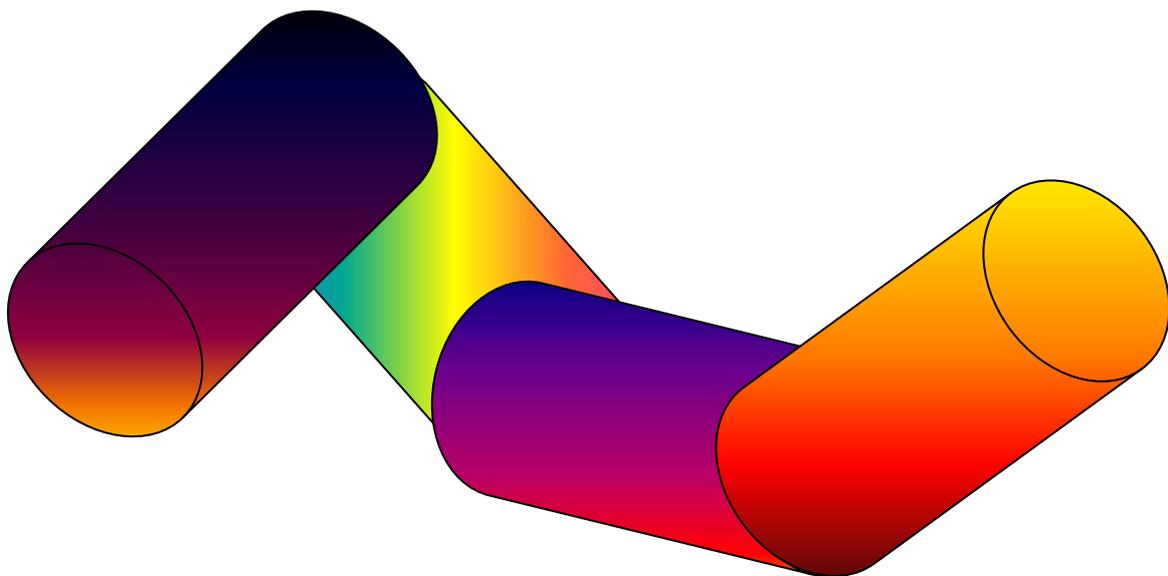
The concept of a String that may constitute the fundamental structure of individuals, groups and organisations is central to this research and is investigated further in this thought experiment. It provides the mould for a general, mental model that can help consulting psychologists to understand and describe individuals, groups and organisations. The String represents a Gestalt pre-inventive image in the researcher's phenomenological experience.

Superstring theory is not far fetched. Studies of quantum physics are currently leading to breakthroughs in areas such as computer memory design. According to Carr (2005), the property of quantum spin which electrons possess, is being used to develop high-density data storage media that will provide computers with the ability to boot up instantly and to store data even with no power – the concept of *spintronics*.

4.3 PRE-INVENTIVE IMAGE: THE STRING

Figure 4.10 below illustrates the pre-invented image which, together with the personal knowledge (Eraut, 1994) gained by the researcher, is the primary outcome of this part of the thought experiment.

Figure 4.10
Pre-Inventive Image: The String



For the researcher, the pre-inventive image of the String forms a Gestalt. It is both visual and complete. It has an element of Pragnanz (good form) in that it is orderly and simple. Despite this simplicity, there is the promise of different levels of complexity. The String image may be clearly distinguished (in a figure) from the background (because of its inherent form and because it seems quite unique). From an intrapsychic perspective, the image of the String may be organised in such a manner as to have the potential to represent an individual, group or organisation.

There also seems, in the String image, the potential for possessing certain characteristics, both dynamic and structural, which await exploration. The String image is pregnant with opportunities and possibilities. Accepting that one of the primary notions of Superstring Theory, that of 10-dimensional hyperspace, then there may be as many as ten dimensions to a String. The String image thus has the potential to unite the study of individuals, groups and organisations under a single, Gestalt conceptual framework.

Just as in the violin analogy discussed earlier, the contention is that individuals, groups or organisations may be represented in String terms. So can groups and so can organisations. In this research, the mental model forms the framework for understanding this. Whilst the vibrations (for example, behaviour) of an individual, for example, are not fundamental, the human being (group or organisation) is.

In the analogy, the String can vibrate at different frequencies, determined by corresponding characteristics of the particular String. This explains why there appear to be an infinite number of variables that explain human phenomena. The same reasoning applies to groups and to organisations. Next, the researcher considers the pre-inventive of the String in terms of the guidelines for creating a mental model described by Marr (1982) and Pidd (2003), who refer to a primal sketch, which can then be explored and interpreted.

4.4 CHARACTERISTICS OF THE STRING

Following on from the line of thinking developed through Chapters 2, 3 and 4, the following structural, dynamic and developmental characteristics are attributed to the pre-inventive image - the String, in order to explore and begin the process of interpreting the Gestalt figure that was generated in the first part of the thought experiment.

4.4.1 Holonic and holarchic characteristics

The String is conceptualised as inherently holonic. According to Koestler (1980), the term *holon* is the basic unit of organisation in biological and social systems. The term has its roots in the Greek word *holos* which means whole and the suffix *on* meaning particle. A holon is an identifiable unit of organisation, such as an individual, who is composed of more basic units (for example, brain, heart, muscle tissue), while at the same time forming part of a larger whole (for example, a group).

Koestler (1980) describes holons as being simultaneously autonomous, self-reliant units that have a degree of independence and can function to an extent without input from higher authorities, whilst being subject to control from multiple higher authorities. This ensures that holons are stable, efficient and can survive disturbances in the environment. The concepts of holism and systems theory are central to the concept of a holon.

A holarchy is defined by Koestler (1980) as a hierarchy of self-regulating holons which function as autonomous wholes in supra-ordination to their parts, as dependent parts in sub-ordination to controls on higher levels and in coordination with their local environment. According to Koch (2000) complex systems evolve from simple systems more rapidly if they are stable than if they are not. This is the basis upon which individuals work together in groups and organisations, for security, stability, contact and goal achievement.

In terms of the hierarchy of systems described by Sundberg, Taplin and Tyler (1983) an individual lies at the level of an organism; work groups lie at the next level of the hierarchy (the group level) and organisations (for example, professional associations, factories or businesses) lie at the organisational level. Each of these levels (individual, group or organisation) may be conceptualised as holons, within a myriad of potential holarchic arrangements.

Each String constitutes a holonic *figure*, which is a well differentiated unity and is distinct from the *ground*, and which either explicitly or implicitly, has a purpose. Each component part of a String or entity (individual, group or organisation) can exist on its own for only a very short time before survival is threatened. Strings (and their component dimensions) may benefit from (or being detrimentally affected by) interaction with other Strings or the components of others Strings. There are numerous voluntary and involuntary multilevel, omnidirectional, links (both internal to a String and among Strings) among Strings.

The String Model allows for (and reinforces) the potential impact of the different levels (individual, group or organisation) both horizontally and vertically on one another. It is thus important to view, for example, organisations as multilevel, three-dimensional phenomena, with the appropriate levels of detail being brought into focus against the background as per the requirements of the situation.

4.4.2 Systems characteristics

A system is a perceived whole whose elements hang together because they continually affect each other over time and operate toward a common purpose. The structure of a system includes the quality of perception with which the observer causes the system to stand together. Systemic structures are often invisible until someone points them out (Senge, 2002).

Haines (1998) discusses various theoretical principles according to which social systems operate. Given the view of the systems view of the String as a mental model that may represent an individual, a group or an organisation, the following characteristics are attributed to the String Model and its component dimensions:

- Open systems

Biological and social systems are inherently open systems (Koch, 2000; Senge, 2002). They must interact with the environment, fit the environment and be connected to the environment in order to be successful and survive. It also means that events that occur in the external environment can have an impact on the well-being of the entity and vice versa. It is crucial that any system scans the internal and external environment (the interactive field) to make sense out of both internal and external phenomena and adapt to these in the most effective and efficient manner, by forming appropriate figures and destroying inappropriate ones. In terms of the open systems principle, an entity, whether individual, group or organisation, cannot be balanced if, for example, it contravenes the laws or the moral will of society.

- Boundaries

All systems have boundaries that separate them from their environments. Open systems have permeable boundaries between themselves and the environment and can thus interact and collaborate with the environment. The boundaries of social systems are becoming increasingly blurred in the presence of global developments. A number of boundaries exist at the individual, group and organisational levels, be they between colleagues, departments, competitors, collaborators, suppliers or customers, distinguishing entities (figures) from each other in terms of Shape.

These boundaries can have a major impact on the Organic Integration and Infobility of an entity and the way that entity makes contact with other entities and with phenomena in the interactive field. If there are very strongly defined boundaries between departments, for example, the departments may be working at cross purposes, to the detriment of a group or organisation. Boundaries, either physical or conceptual can prevent Strings from making contact with each other or with phenomena, so that they co-exist in a state of what Perls, Hefferline & Goodman (1951) refer to as confluence.

- Multiple Outcomes and Goal Seeking

Biological and social systems appear to have multiple goals or purposes (Koch, 2000). Social organisations set multiple goals, if only to portray the differing goals and values of their components. This is assumed to be true for individuals, groups and organisations and, thus ultimately for the String by which they may be represented.

- Equivalence

According to Hall and Nordby (1973) psychodynamics is concerned with the distribution of energy throughout the structures of the psyche and the transfer of energy from one structure to another. Jung (1961) uses two principles to describe these actions, both of which were derived from the laws of physics. This principle of equivalence states that if the amount of energy consigned to an element decreases or disappears, that amount of energy will appear in another element. This is posited to be the same for the String at the level of the group and of the organisation, in the same way that Jung (1961) viewed the human psyche.

- Hierarchy

Systems consist of sub-systems and are, themselves, part of greater systems or suprasystems. The organisational system is hierarchically higher than the group as a system, which is higher than the individual as a system (Sundberg, Taplin & Tyler, 1983). How the hierarchy is arranged depends upon where the attention is to be directed. For example, when working in an organisation, the focus can be on an individual (or individuals), each conceptualised as a String entity, with another String entity, such as a group (a String on its own) as a suprasystem.

- Interrelated parts

By definition, systems are composed of at least two interrelated components in some kind of relationship with one another. The various dimensions of the String Model are interrelated and cannot continue to exist without the others.

- Dynamic equilibrium

Open systems may attain a state where the system remains in dynamic equilibrium through the continuous inflow of materials, energy, information and feedback. This leads to balance and stability, but can also increase resistance to change.

- Entropy

The principle of entropy accounts for the direction in which energy flows in the same way that the flow of water between two containers is always from a higher level to a lower level when a channel is available until the water level is the same in both containers (Hall and Nordby, 1973). Jung (1961), who described the principle of entropy in personality dynamics, states that the distribution of energy in the psyche seeks an equilibrium or balance among all the structures of the psyche. In the same way, in the String Model, the distribution of energy seeks equilibrium among all its various dimensions.

Systems (and therefore Strings) tend toward maximum entropy – a movement to disorder, complete lack of resource transformation and death. In biological and social systems, entropy can be arrested or turned into negative entropy – a process of more complete organisation and enhanced ability to transform resources because the system imports energy and resources from the environment, leading to renewal.

4.4.3 Dynamic characteristics

The following dynamic characteristics of the String Model were identified through the continuation of the thought experiment.

- Energy

According to Jung (1961), energy refers to the force that drives an entity and enables it to do its work. This energy cannot be measured quantitatively as physical energy can be. It expresses itself in the form of actual or of potential forces that perform work. Energy is present throughout a String and is the life force that drives each of the String dimensions. Potential forces are latent tendencies or inclinations of the organisation that may be activated at any time.

- Progression and regression

In psychodynamics, progression is defined as an individual's daily experiences, which advance psychological adaptation. This is a continuous process (Hall & Nordby, 1973). In the same way, the progression of an entity can be said to advance or regress in accordance with the demands of environmental conditions. The interaction between the different structures of the organisation and the balance of energy creates tensions, which may cause the organisation to progress or regress.

- Canalisation of energy

Jung (1961) states that in man's natural state, he will live by instinct, doing what is needed to survive. However, modern men and women depend upon will, as well as instinct. People decide to do something and then find a way to do it – channelling their psychic energy into effective working energy. This same principle can be used to describe how an organisation develops a will and canalises its energy to perform activities that will lead to desired results.

The work of Bormann (1985) on Symbolic Convergence Theory (concerning the extent to which individuals, teams and organisations come to share a cluster of fantasy themes and types and how they may integrate them into a coherent, rhetorical vision of some aspect of their social reality, particularly in terms of the way people communicate).

4.4.4 Developmental characteristics

In this research, increasing levels of consciousness refer to the increasing ability of the String (individual, group or organisation) to, for example, Shape itself so as to optimise its ability to hunt, nurture, produce, communicate and to change its direction in an increasingly discerning manner or to manage its' combining power in the most beneficial way to itself and to other Strings.

According to Harrison (1995), living organisms differ in their levels of consciousness or awareness. As its level of consciousness increases, the entity that is the String, develops the capacity to make finer discriminations among its perceptions of the world; to discern subtle relationships among ideas and to probe deeper into the meaning of objective phenomena and thus to become more aware. As the entity becomes more aware, its capacity for *aesthetic knowing* increases (Chinn & Jacobs, 1987). An increased ability to do these things increases the chances of survival of the entity and the realisation of its purpose or reason for existence.

Harrison (1995) outlines the predicted path of development of individuals, groups and organisations in terms of increasing consciousness. The striving of the entity to develop is inherent. Development takes place from lower to higher levels, subject to two sets of phenomena. Firstly, progress from one level to the other is retarded if some force or event precludes the entity from making the transition. Secondly, just as some individuals appear to be *wired* to progress more easily through the various phases, so too some groups and organisations seem to develop more naturally toward higher levels. Harrison (1995) ascribes the fact that some organisations are born at a higher level of consciousness because their founders have the wisdom, vision and values to start them at a higher level.

- Multiple states of consciousness

It is possible for an entity (individual, group or organisation) to exist in multiple states of consciousness at the same time. This is particularly true of groups and organisations, given the increasing complexity as more and more systems and sub-systems come into play. Thus, an individual can experience elements of the self-expression phase in one aspect of life, such as career – whilst simultaneously experiencing the fight for survival in another, such as the membership of a work group or an organisation.

4.5 PHASE 2: EXPLORATION OF THE PRE-INVENTIVE IMAGE OF THE STRING

In accordance with the principles for developing a mental model (Pidd, 2003), explored in Chapter 3, the thought experiment continues from the basic pre-inventive image – the String. In the Gestalt of this pre-inventive image, the researcher recognised meaning waiting to be explored. The idea, as suggested by Pidd (2003), is to start simple and to develop the mental model from that point.

The steps described up to this point in this chapter have, together with various other critical concepts, yielded a pre-inventive image (the String), as prescribed by Finke (1990). The image of the String itself appears to be very simple, having been pre-invented using analogies and metaphors from cosmology and quantum physics (Ackoff, 1974; Pidd, 2003). Whilst it is a simple image at this time, however, there appears to be a great deal of promise for stimulating the kind of complex thinking suggested by Pidd (2003), given, inter alia, the discussions in this chapter, of the various ages of human development (the work of Lipnack and Stamps, 1996), which overlay the analogy of the past and future light cones (Hawking, 1988) – arguably, a fair foundation upon which to begin exploring and developing the model.

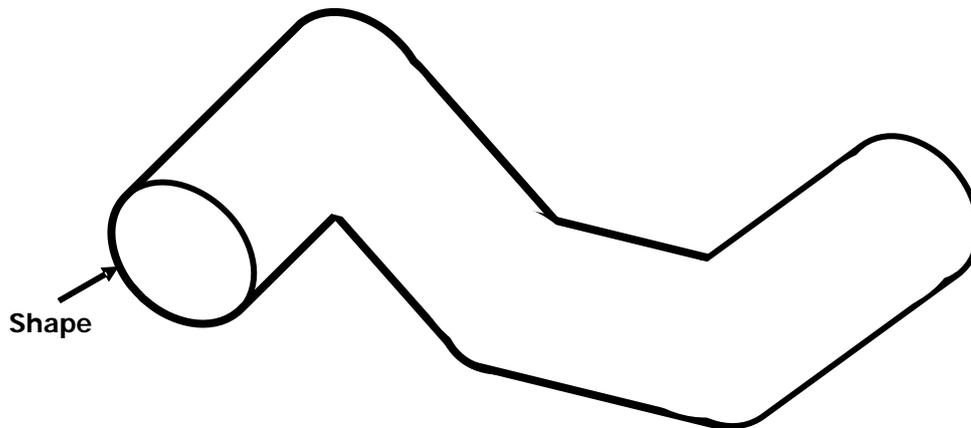
In the next phase of the thought experiment, the creative process continues as per Finke's (1990) Geneplore Model (see Figure 3.2), with the researcher investigating and exploring the pre-inventive image at various levels of resolution in order to discern the elements and dimensions thereof. Use is also made of the implications for the research that were distilled from the reviews of literature conducted in Chapters 2 and 3 in order to begin the process of imposing the external constraints (or what Finke [1990] terms product constraints) of the context of consulting psychology and the intrapsychic factors which impact on the consulting situation. This process continues until the pre-inventive structure has been developed into a mental model at the end of this chapter.

4.5.1 Exploring the String image at the lowest resolution to discern its most basic dimension: Exploring its Shape

In exploring the String image in the imagination, one of the more obvious (yet intriguing) observable characteristics of the String is its Shape. This is depicted in Figure 4.11 below:

Figure 4.11

The Dimension of Shape



The String, conceptualised as a holon, may represent an individual, group or organisation. The Shape of an entity may emerge as the result of the various sub-ordinate components or the super-ordinate components of a holarchy, or it may arise from the individual holon itself, in terms of the reason for its existence. A tentative definition of Shape as a dimension of the String is presented below.

Shape is the inherent, unique form or structure of an entity, which differentiates it from its environment.

Shape is often the most visible dimension of an entity. Outward appearances are related to first impressions and the attribution of characteristics to an entity, for example, the appearance of strength of an individual due to being in good Shape, or the perception of an organisation as bureaucratic in terms of its organisational structure. From a structural perspective, Shape may refer to business structure, such as a holding company, with an operating company and subsidiaries. It may also refer to types of organisational structure, such as a matrix, functional, network or virtual structure.

Shape defines borders between holons and enables us to distinguish one entity from another as an identifiable, complete holon (Koestler, 1980). Groups are holons (made up of individuals) and may also be seen as a collection of individual holons. Groups may be regarded as part of a larger organisation (also a holon). Even when assessing an individual, consulting psychologists must be aware of the Shape of the individual in the context of relevant groups and organisations.

Shape is a major determinant of how effectively the entity can exist within given circumstances. It can have a profound effect on the hardiness of the individual, group or organisation and its ability to survive. According to Mohrman and Cohen, in Howard (1995), organisations continually transform themselves in terms of competitive and strategic requirements. Nadler, Gerstein and Shaw (1992) describe how organisations change their architecture (Shape) to enable new integral mechanisms that help them to deal with changing circumstances. Zennstrom (2005) describes how *lean* organisations can quickly turn good ideas into products, its efficient *structure* making it better suited to the changing demands of consumers all over the world.

The way in which an entity is shaped or structured determines the way in which it will behave. With increasing awareness, it is possible to change the Shape of the entity in line with a required change in functioning. This is one of the principles upon which evolution is based (Koch, 2000).

According to Koestler (1980) holons can survive independently for a limited time and operate with a degree of independence. Regarding an individual, group or organisation as a holon, with a distinct Shape, renders these entities self-reliant to an extent. They are capable of multiple goal seeking and multiple objectives. This may be seen in individuals, groups or organisations, for example, in a case where different departments or leaders have different ideas about what the goal should be, or chasing relatively independent goals.

The inherent stability of holons enables them to survive minor disturbances and renders the overall entity more robust in terms of navigating minor disturbances in the short term. This ensures more rapid evolution. However according to Koestler (1980), subordinate holons always have to be in coordination with superordinate holons for longer term stability and success. Hierarchy may thus be viewed as one of the elements of Shape. Individuals, groups and organisations organise in a certain way which helps them to be more stable and which gives meaning to the relationships between entities. This provides the basis for the interrelationship of entities with one another.

From the perspective of consulting psychology, the Shape of the individual, group or organisation is influenced by the complex interaction with other individuals, groups or organisations. Aspects of Shape are also influenced by external (for example, political, economic, societal, technological, environmental or legal) forces (Porter, 1985).

Current Shape can constrain the ability of the entity to adapt to intra-holonic factors (for example, unconscious drives within an individual), to inter-holonic factors or demands of super-ordinate holons (for example, group norms or organisational goals). In a proactive sense, the Shape of a given entity may actually facilitate its adaptation to the demands of internal and external factors or even act upon these forces and alter their Shape.

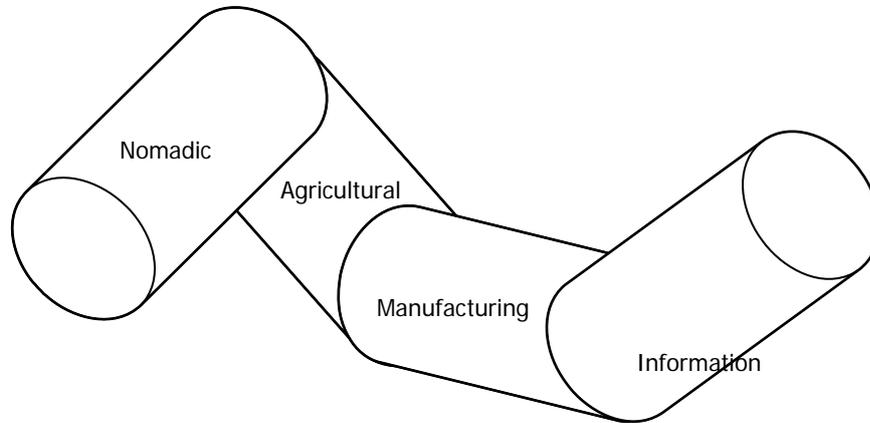
One of the most important tasks for the consulting psychologist is to bring an understanding to the client system of these properties and to ensure that individuals, groups and organisations are considered in terms of their holonic properties. At the same time, it is important to identify those phenomena in the client system that relate to the Gestalt concepts of figure and ground. It is only once this is clearly understood that the dimension of Shape takes on its significance. When consulting, it needs to be clearly understood in terms of unit of analysis whether one is dealing with an individual, group or organisation, without losing sight of the other elements.

4.5.2 Increasing the resolution to discern further dimensions of the String

Increasing the resolution allows the discernment or differentiation (in the imagination) of four co-existing elements of the String. These basic elements correspond to the four ages of human development (Lipnack & Stamps, 1996). The four ages of human development (the Nomadic, Agricultural, Manufacturing and Information Ages) may be regarded as elements that co-exist within any String. Increasing the resolution of exploration yet further enables the researcher to focus, in turn, on each of these four elements. The nature and distinguishing characteristics of the nomadic, agricultural, manufacturing and information ages (Lipnack and Stamps, 1996) were discussed earlier in this chapter. The results of this process are illustrated in Figure 4.12 below.

Figure 4.12

Four Co-Existing Elements of the String



Note: Colours have been omitted from Figures 4.12 to 4.19 in the interests of clarity and readability).

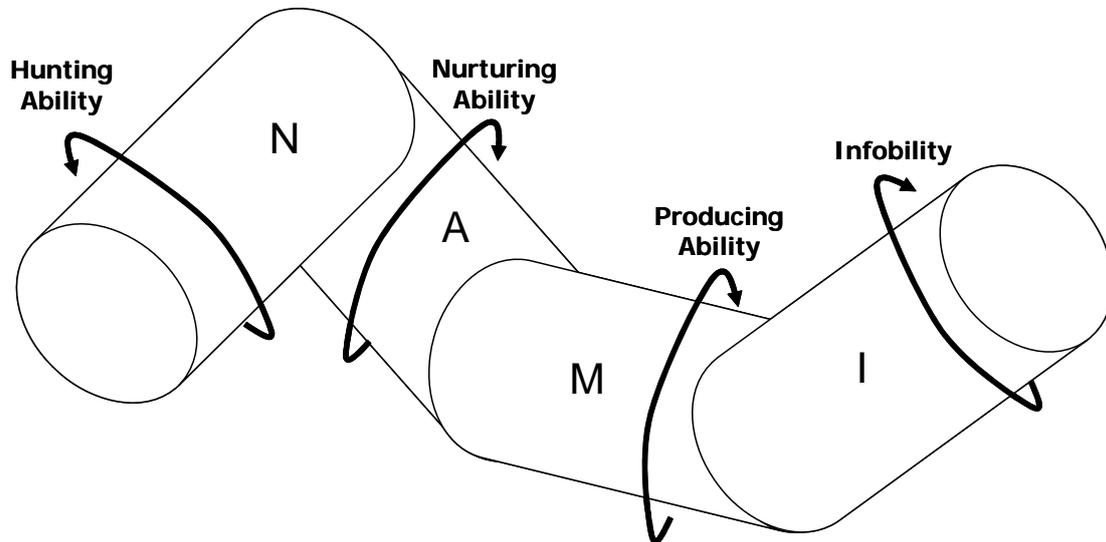
The defining characteristic (in the metaphorical view adopted by the researcher) of each of these ages is presented below:

- In terms of the Nomadic Age, a defining characteristic was that survival was enabled by the ability to search (hunt) for food – Hunting Ability;
- A defining characteristic of the Agricultural Age was that of preparing the ground, planting seeds and nurturing the soil to ensure that a good yield could be harvested – Nurturing Ability;
- The Manufacturing Age was characterised by scientific management which resulted in large scale improvements in the ability to produce goods more effectively and efficiently – Producing Ability; and
- In the Information Age, one of the defining factors that determine the success of individuals, groups and organisations is the ability to managing information efficiently and effectively – informing ability – or Infobility.

These defining characteristics are interpreted as basic dimensions of the String in Figure 4.13 below:

Figure 4.13

The Dimensions of Hunting Ability, Nurturing Ability, Producing Ability and Infobility



Each of the four dimensions identified in Figure 4.13 above is named after the defining characteristic of one of the co-existing elements of the String discussed above. Tentative definitions for these dimensions are presented.

4.5.2.1 Exploring the ability to hunt

The ability to hunt (Hunting Ability) is critical for the future survival of the entity. This is what an individual lives on (food, or at a higher level of Maslow's [1954] hierarchy, what an individual needs in order to achieve a level of self-actualisation). To an individual, group or organisation, Hunting Ability refers to providing the entity with essential resources - opportunities, work, contracts, funding, customers or employees. In a business sense, it may refer to the activities of marketing (one's self, the products of a group or an organisation), exploration (looking for new land to develop), or prospecting (looking for new oil deposits).

Hunting Ability is the ability of an entity to become aware of relevant opportunities in the interactive field, to initiate contact with these and to conclude appropriate transactions of the required scope, standard and frequency.

Hunting Ability is primarily an aggressive function that necessitates interaction with the physical and social worlds. It is one that demands energy in order to mobilise the efforts of the entity to identify opportunities and act to realise them. Optimum Hunting Ability demands that the entity knows what its purpose is, what it needs to hunt in order to survive or thrive and has the ability to secure the required opportunities.

4.5.2.2 Exploring the ability to nurture

The ability to nurture (Nurturing Ability) is related to ensuring the well-being of all systems within the holon. Individuals can nurture themselves (physically, biologically, emotionally, spiritually or intellectually); groups and organisations can nurture themselves, individuals, groups, organisations and external stakeholders such as clients. Nurturing Ability is associated with the long-term well-being of the entity. Two important themes for nurturing from an individual, group and organisational perspective are health in terms of well-being and the specific ways in which an entity's health becomes affected by internal and external conditions.

Nurturing Ability is the ability of an entity to prepare for, foster and support contact with the interactive field, that is appropriate and contributes to its well-being.

Nurturing Ability can relate to the ability to recognise Shape - and to manage, for example, organisational structure, the employment environment and the work performed by individuals and groups in the organisation (Mohrman, Galbraith & Lawler, 1998). Poll (2002) regards the ability to nurture business relationships with clients, customers and co-workers as critically important. Nurturing Ability is part of the way an individual, group or organisation treats itself and others, that is, part of its culture. Carlos Ghosn, the CEO of Nissan and Renault describes the most important asset of any company as its *esprit de corps* –the motivation of its employees – which must

be nurtured and improved or, it may “vaporise overnight”, taking the competitiveness of the entity with it (Ghosn, 2005, p.129).

In the management literature, Mohrman, Cohen and Mohrman (1992) continuously refer to the need to nurture team skills and teamwork. The challenge is to develop team capabilities that transcend specific teams and enable individuals to be anchored as they move between teams and organisations. From an organisational perspective, a key aspect of Nurturing Ability is that of selecting, placing and developing individuals and groups in terms of the appropriate skills set and then ensuring retention.

According to Marshall (1996) the universe contains of both feminine and masculine energies and that neither is superior to the other. However, since the time of the Industrial Revolution, the world of work has been overly polarised to the masculine. All people have both masculine and feminine characteristics such as left and right brain thinking, intuition, physical activities, vulnerability, competitiveness, anger or grief. Denying any of these traits is to not fulfil one’s potential. In terms of becoming and optimising performance, balancing the masculine with so-called more feminine characteristics is essential.

4.5.2.3 Exploring the ability to produce

The ability to produce (Producing Ability) of an entity is very closely related to its primary task. The dimension of Producing Ability includes production processes and systems and is a function of input, process and output.

Producing ability is the ability of an entity to attain or produce meaningful results through its interfaces with the interactive field, according to its reason for existence.

Important elements of the Producing Ability of an entity are – is it producing the right quantity of the right product or service at the right quality and cost on a sustainable basis? In an individual, Producing Ability may refer to the ability of a consulting psychologist to provide a client with a professional proposal for a consulting project in the required timeframe. The Producing Ability of a group may be for a data capture department to ensure that all data from original records is captured and stored accurately the first time, onto digital media within the required timeframe.

For an organisation, Producing Ability may refer to the ability to sell a certain number of cars at the right price for the organisation to be successful. The concepts of effectiveness (producing the right outcomes) and efficiency (producing outcomes of the right quality and cost, on time) are central to Producing Ability. So too is the concept of sustainability of Producing Ability.

The quest to increase the Producing Ability of individuals, groups and organisations lies at the heart of most management and technical literature. Indeed, enabling organisations to bring about improved or desired results is even mentioned by Boyce (2004) as being fundamental to what consulting psychologists do. As can be seen in terms of the String Model, Producing Ability cannot be viewed as the only dimension of performance of the relevant entity if consulting psychologist and client together seek a truly integrated and powerful solution. Optimal effectiveness and efficiency can only be attained if the various dimensions of the entity focus on the same issues and contact with them effectively to mobilise resources and carry out the task.

4.5.2.4 Exploring the ability to communicate

In exploring the ability to communicate, the researcher adopted the term *Infobility* (a contraction of the term *information* ability) may be viewed as the status of what Milgram (1977, p.226) described as a communicative web – or network of individual, group and organisational sources and receptors interacting. Information receptors have to make available appropriate data to the individual, group or organisation for effective decision-making and transmit the results of such decisions to the relevant action areas. (The decision-making function is explored in terms of the next dimension).

Infobility is the ability of an entity to discern appropriate information from the interactive field, to render it usable in terms of medium and format and to channel this information accurately and timeously to the relevant receptors.

According to Milgram (1977) every sociopsychological phenomenon is rooted in communication and every message of whatever type must pass from source to target. Infobility requires the detection and transmission of data or information from receptors to the correct areas or entities where they can be interpreted, as well transmitting data from the decision-making processes to the appropriate areas or entities for action.

This requires sensors to detect stimuli (receivers), transmitters to pass on what is sensed and channels to pass data along. The quality of receivers, transmitters and channels is essential in order to ensure quick and accurate transmission of data. Infobility is also a function of communications infrastructure and systems, such as what Mohrman, Cohen and Mohrman (1992) refer to as sharing databases, using common languages and computer connectedness.

In the digital world, there is an overwhelming amount of data and information available (Friedman, 2005). Carr (2005) describes the impact that technology is having on financial markets, where it is now possible to have the appropriate information instantly available to make decisions on any financial instruments in any market in the world, rather than on one bourse, in one city. This makes it exceedingly difficult for individuals, groups and organisations to develop the clear, unified and appropriate Gestalt that is required, not only for survival, but for growth and development and to clearly differentiate the figure from the apparent *chaos* in the background.

Harry (1996, p.1) defines the concept of a neural network as “a web of densely interconnected processing elements, or neurons, modelled on the architecture of an animal brain. Through the interaction of individual neurons, a neural network is able to improve its performance through experience”. The brain interprets this information in different ways, depending on the intrapsychic nature of the individual and may transmit an impulse to some part of the body to act or react in a certain way. This applies to individuals, groups and organisations, which have to be able to identify what information they need from the environment and ensure that they filter what is available to prevent unnecessary overload and ambiguity. In individuals, the sense organs are the receptors that pass data to the brain via neural pathways.

Individuals, groups and organisations deal with a wide variety of internal and external data, much of which may be considered noise to the extent that it distracts them from attending to the information that truly matters in terms of the goals of the entity. According to Zennstrom (2005, p.115) a trend in terms of individual and organisational communication the world over will be toward wireless internet access that allows “anyone to be connected” at any time, in any place, without being “tethered to any fixed network”. In this type of world, Infobility must be of vital importance.

Fuqua and Newman (2002) highlight that many problems in complex human systems originate from either too much, too little, or restricted information between people. The reasons for the dysfunctional passage of information from source to recipient may originate in human systems, processes, structures and dynamics or they may be found in physical systems, processes or structures.

One of the major tasks of leaders is to convince and educate people to share a vision of, for example, the future direction of an organisation. Infobility is of the utmost importance in creating shared vision. Physical systems, processes and structures (such as information technology) must be capable of delivering the correct amount of information to the required recipient effectively and efficiently as a minimum requirement. Leaders must ensure that human systems, processes, structures and dynamics allow for the optimal transmission of appropriate information to and from source and receptor.

The organisation, groups and individuals should be involved in dialogue, conversation and discussion as suggested by Morhman (1989) in order to develop a shared understanding of what information is important, for whom and why it is important. It is, however, likely to be easier to address the challenges of physical communications systems and processes than it is to address the human variables, such as power, politics, culture, trust, motivation, conflict, relationships, time management and self-discipline.

4.5.3 Focusing on specific aspects of the String to identify further dimensions

This section focuses on further increasing the resolution (in the imagination) with which the researcher studies the pre-inventive image. Five more dimensions are identified. In terms of the scope of this research, a basic discussion of each of these dimensions, together with a tentative definition is provided below:

4.5.3.1 Exploring the intellect of the String

The volume of literature available regarding the subject of intellect is overwhelming and can only be addressed here in terms of the goal of this research. The theory of a general factor of intelligence is now a century old (Spearman, 1904). Thurstone (1938) introduced the concept of primary mental abilities, considering intelligence as a function of six discrete, but related primary abilities. Gardner (1993) introduced the concept of multiple intelligences,

which include linguistic, logical-mathematical, spatial, musical, bodily-kinaesthetic, interpersonal and inter-personal intelligences. Perspectives on intelligence also include the theories of spiritual intelligence (Zohar and Marshall, 2000; Buzan, 2002b), emotional intelligence (Goleman, 1998); physical intelligence (Buzan, 2003), creative intelligence (Buzan, 2001) and social intelligence (Buzan, 2002a).

From an output perspective, measures of the relative ability of, for example, individuals to produce results in terms of the purpose of an organisation (Producing Ability) have been one of the major focus areas of applied areas of psychology since Francis Galton and Charles Spearman in their studies of individual differences, for example ranking individuals from highest to lowest according to their performance on a specific test (Cattell, 1971).

Irrespective of which particular approach to intelligence is preferred by the consulting psychologist, the basic dimension of an Organic Intellect is present in every entity, although Wolff, Kutash and Nattland (1993) disagree that human characteristics (such as intelligence) should be attributed to groups or organisations.

Besides the purely biological and the physical, Organic Intellect provides the main source of energy for the individual, group or organisation and drives the existential desire to become. The intellect is, from the perspective of the perceptual, cognitive, emotional, dispositional and self intrapsychic subsystems at least, one of the most crucial dimensions in order for an entity to understand and adapt to (or be proactive in) the environment.

It is a crucial mechanism by which individuals, groups and organisations become able to adopt new perspectives of interactions and skills for Hunting Ability, Nurturing Ability, Infobility or changing Shape. It is the intellect of individuals, groups and organisations that enables the entity to deal with ambiguity and uncertainty and to exercise judgement on the basis of conscious or unconscious perspectives.

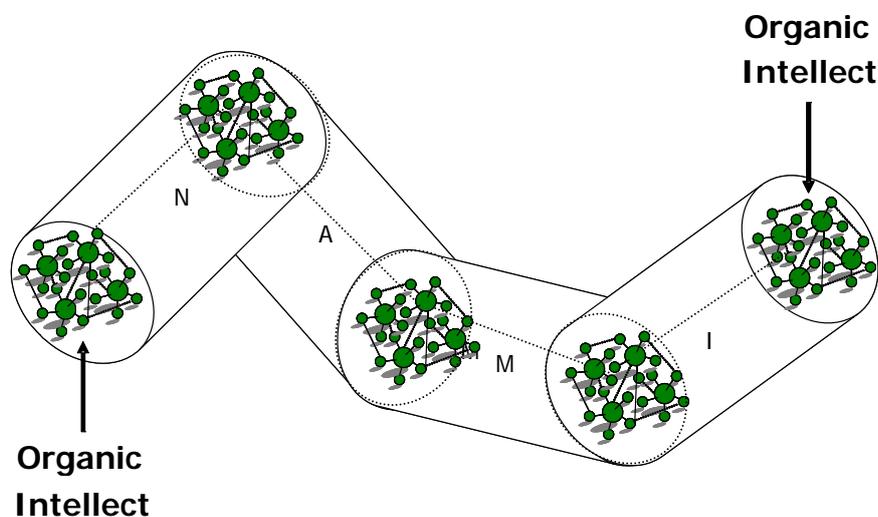
Davidson (2002, p.16) adopts the perspective that individuals and organisations that are intelligent have sharper perceptive abilities, can spot patterns and make insightful inferences and can learn quickly from their own and from others' successes and failures. Intelligence is viewed as providing the entity with a competitive advantage.

According to Mohrman, Cohen and Mohrman (1992) individuals (as collectives) are required to produce complex, multi-dimensional information and make complex trade-offs. There is a premium on the ability to handle ambiguity and complexity. These cognitive abilities need to be developed. Career paths need to systematically expand cognition.

In terms of enhancing intelligence to harness competitive ability, Davidson (2002) suggests that organisations may be directed at finding strengths, weaknesses and leverage points, either internal or external and developing and implementing targeted interventions to optimise the opportunity. Results must be continuously evaluated to ensure effectiveness. These concepts may be applied to the individual and to groups, both of which are also faced with the quest for survival and leveraging their relative competitive edge.

The dimension of Organic Intellect, which is an integral part of the String, is illustrated in Figure 4.14 below:

Figure 4.14
The Dimension of Organic Intellect



The term *organic* is added to the concept of *intellect*, in order to bring to bear the concept of a neural network (illustrated in Figure 4.14). Harry (1996, p.1) defines the concept of a neural network as "a web of densely interconnected processing elements, or neurons, modelled on the architecture of an animal brain. Through the interaction of individual neurons, a neural network is able to improve its performance through experience".

Organic Intellect is therefore viewed in terms of the concept of an (organic) neural network on the basis that the intellect of an individual, group or organisation can only be maximised if it can be integrated, for example, linking the abilities of individuals with one another in a synergistic manner. As illustrated in Figure 4.14, the emerging String Model presumes the intellect of the entity to be present, organically, within each of the basic elements of the String's structure.

Organic Intellect is present throughout the entity and must be integrated with the other dimensions that make up the String. For example, the relative strength of the dimensions Infobility and Organic Intellect of an entity must be in balance, or the entity will suffer from a lack of information, the requisite information may not get to the appropriate intellect when it should or, conversely, there may be too much information in a system for the intellect system to cope with. A tentative definition of Organic Intellect is proposed below:

Organic Intellect refers to the structure, functioning and dynamics of the various types of intelligence of an entity and the application of these to aspects that are meaningful to it.

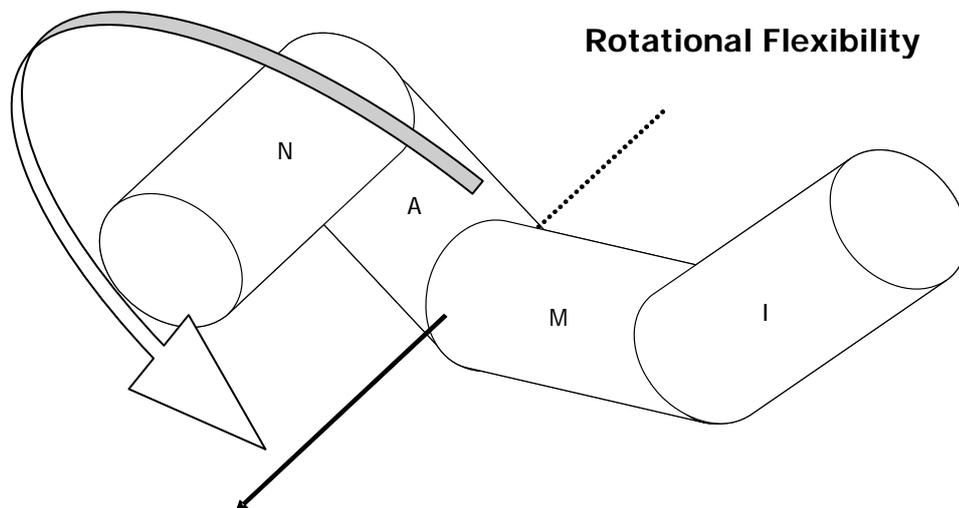
One of the greatest challenges for any individual, group or organisation is to manage the intellect in a focused, yet creative manner. Organic Intellect must be healthy, integrated and nurtured. The definition of Organic Intellect provided above has significant implications for the roles that managers and leaders can or should play (versus the roles that they do play) within groups and organisations if the Organic Intellect of the entity is to be evaluated and considered healthy.

Leahy (2005, p.50) states that "our capacity to store information is limitless, and our ability to use it to understand our customers is limited only by our imagination". This statement illustrates the power of at least two of the dimensions of the String Model, that of Infobility (getting the right information about the right customers to the right individual, group or organisation at the right time) and Organic Intellect (the understanding of customers and what they want is limited by our imagination - an intrapsychic process that can draw on our perceptive, cognitive, emotional, dispositional and self sub-systems).

4.5.3.2 Exploring adaptability in the face of change

Management and industrial psychology literature abounds with publications on the subject of change and how to manage it at all three consulting levels, whilst managing undesired fallout thereof (Jordaan & Jordaan, 1998; Collins & Porras, 1998; Kotter, 1978; Crainer, 1998; Howard, 1995). An implication of this is that change and the ability to cope with it effectively, whilst managing the resulting fallout at the individual, group and organisational levels is of paramount importance (Beck & Cowan, 1996; Beisser, 1970; Collins, 2001; Handy, 1994).

Figure 4.15
The Dimension of Rotational Flexibility



Reflection upon the concept of change and upon the image of the String gives rise to the consideration of how a String adapts to change. This led to imagining how a String might rotate around its own (hypothetical) axis, much as the earth rotates on its axis. The thought experiment involved performing this rotation of the String image in the imagination and deducing relevant characteristics or factors from this, as well as searching the literature to stimulate thinking in with regard to this dimension. The results of this are depicted in Figure 4.15.

According to the literature, Rotational Flexibility is a term used in sports science, and refers to the ability of a person to achieve the full range of motion required to perform a physical action by rotating the trunk and lower back (Walsh, 2003). It is also used in agricultural science to describe the desirable state of having the flexibility of planting various types of crop on the same land, on a rotational basis – depending on factors such as seed prices or weather patterns (Currin, 2002).

In a slightly different sense, Rotational Flexibility also brings with it the connotation of understanding the entity's current position (here interacting, *inter alia*, with the dimensions of Organic Intellect and Infobility) to perceive accurate information on current position and to make sense of this in an effective manner. This will be useful in determining the readiness of an entity to adapt to imminent changes.

Consideration of the above contributed to the formulation of a tentative definition for a dimension of the String Model, called Rotational Flexibility. This tentative definition is stated below.

Rotational Flexibility is the degree to which an entity is able to adapt to changes in the interactive field and to constructively manage the energy liberated in the adaptation process.

As per this definition, the Rotational Flexibility of an individual, group or organisation will be a major factor in its ability to adapt to current and future opportunities and challenges. Facilitating clients to build into their plans or assessments the concept of Rotational Flexibility brings a consideration of evolution, as well as recognition of the dynamic nature of the interactive field in which the entity operates.

One of the major implications of the definition of this dimension is that of managing the energy liberated by the processes of adaptation. It is almost inevitable that, when changes are required, individuals, groups and organisations will manifest resistance to elements thereof (Yontef, 2005). This resistance may manifest in anxiety about moving to a new office, changing the organisational structure or working for a new boss, or in many other ways, some of which may be effective and some of which may be ineffective (Perls, Hefferline & Goodman, 1951).

Effective Rotational Flexibility requires that the holon be able to become aware of such resistances, get them into the open arena and deal with them in the appropriate fashion. The extent to which an entity has Rotational Flexibility is therefore related to the degree to which it can make these resistances conscious and deal with them effectively. Careful thought must be given as to potential strategies, in order to realise the client's purpose.

4.5.3.3 Exploring the interaction between Strings

As discussed in Chapter 2, studying the interaction of individuals, groups and organisations is a major aspect of consulting psychology. The thought experiment turns to exploring an aspect of how Strings (individuals, groups and organisations) relate. The exploration once again returns to the realms of physics, to consider how basic elements (for example, atoms) relate according to the laws of physics.

According to Kerrod (1983), the term *Valence* refers to the combining power of an element (physics), or how attractive an entity is to another. In physics, this determines how easily the elements combine. In the field of consulting psychology, Valence may refer to the attractiveness of organisations to shareholders and the community, the attractiveness of a group to the individual group members and to other groups within an organisations and individuals to their employers, groups or organisations, on the basis of a wide variety of criteria. Therefore, in this research, the attractiveness of the entity to other entities is referred to as its Valence.

As in the physical combining of atoms, where one element may lose an electron to another in order to make one or both more stable, the consequences for the entity of gain and loss must be taken into account (Kerrod, 1983). The metaphor of Valence is applied to the String. This is depicted in Figure 4.16.

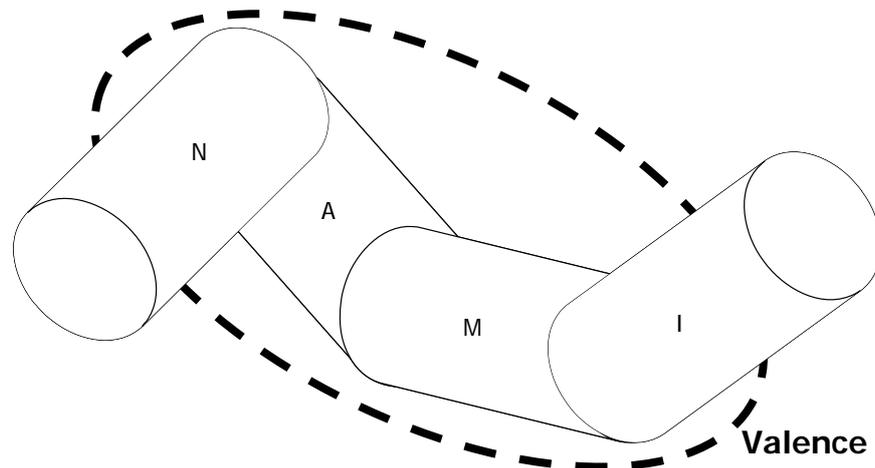
Whilst Hunting Ability may be seen as an aggressive dimension (which may be associated with the *male* aspect of the entity), Valence may be regarded as the opposite thereof, a seductive, stereotypically more *female* quality, which is related to rendering the entity as attractive as possible to the desired elements in the interactive field.

A tentative definition of the String dimension Valence is provided below:

Valence refers to the attractiveness of an entity to other entities in the interactive field, at a particular time.

Figure 4.16

The Dimension of Valence



According to Lane (2005), a major trend in 2006 will be the acceleration of organisations buying others or merging on a global scale. There may or may not be an element of choice for the entity in such combining decisions (for example, a single mother may have to work; or a merger may be hostile). The researcher attributes some element of power to the relevant entity to influence decisions about combining with other entities. In the positive sense, individuals have the option of demonstrating excellent results in the workplace in order to make themselves more valent to an organisation. Similarly, an organisation may focus on improving its share price in order to render it more valent to potential investors or it may embark on capital expenditure to make it less valent to a potential takeover at a certain moment in time.

Valence may be the result of managing other String Model dimensions in a particular way, but Valence may also be manipulated and used independently (in terms, for example, of trying to portray a positive image). The achievement of a more balanced state may be attained by means of, for example, managing relations with other role-players as individuals, groups or organisations and this has major implications for the traditional ideas of image management, marketing or client service.

In addition to combining power, the concept of Valence implies the consideration of consequences. This applies to the individual (for example, when making a choice to join a group); to a group (for example, when making a decision as to whether to give up a member of the group to another group); and to an organisation (for example, whether to merge with another or not). Such decisions may be positive for the entity or may, at worst, lead to it ceasing to exist.

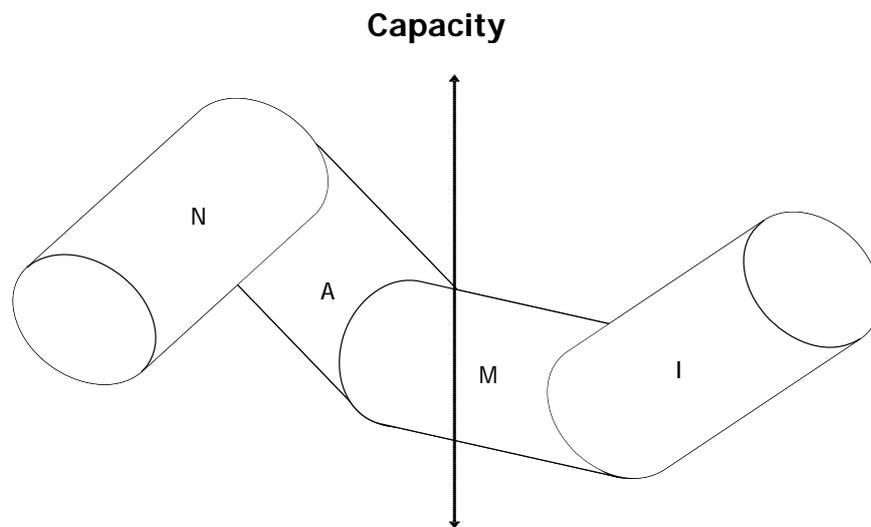
4.5.3.4 Exploring the four physics dimensions

The exploration of the String image in the context of the thought experiment led to the consideration of the traditional, observable four dimensions described by Hawking (1988). Three of these dimensions, length, breadth and height together describe the volume of a vessel (Kerrod, 1983). Bringing time into the picture yields the volume of the entity at a given time. This is the maximum amount of a substance that a vessel can contain at a particular time – its Capacity.

It is worth exploring the concept of an *ability* in the context of some of the other dimensions of the String identified so far. Suzuki (1973) states that an ability is a cognitive-physiological factor that is gained through experience of life. For example, the ability to speak a language is developed through the daily use of remembered words which augment the learning of additional words (increases Capacity). Through daily practice the ability to speak is nurtured and strengthened. In addition, the ability to augment words in the vocabulary is strengthened (the rate at which capability can be increased). This has tremendous implications for individuals, groups and organisations. The various abilities must be employed as part of the system. This will increase the entity's adaptation to the demands of the environment and will increase the various entities' ability to learn and adapt (improving the Organic Intellect and Rotational Flexibility), and thus increase Capacity.

The dimension of Capacity is particularly useful when considering an activity such as strategic planning for an individual, group or organisation. Elements of Capacity must be considered in the strategic planning process (Hopkins, 1994). This involves understanding the current status of the entity, its mission or vision for the future, its strategies for realising the desired future position and how to ensure that it remains in the desired state. The String dimension of Capacity is illustrated in Figure 4.17.

Figure 4.17
The Dimension of Capacity



Capacity is viewed by the Bureau for Policy Development of the United Nations Development Programme (UNDP, 1997) as the abilities of individuals, groups or organisations (individually or collectively) to perform functions, solve problems and to set and achieve objectives. The Capacity of a group or organisation is more than the sum of the capacities of the various holons (individuals) that make up the entity.

Capacity is the energy that is present in the entity at a particular time (contained in the entity's Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility).

Hopkins (1996) describes the following aspects of Capacity, which are relevant in expanding upon the tentative definition provided above:

- Financial and budgetary support that allows the entity to carry out particular tasks;
- Policies and procedures in effect that constrain or facilitate the achievement of tasks;
- Laws and regulations defining responsibilities and power relationships among entities and the informal power relationships that exist;

- The availability of primary, secondary and supporting entities that have a role to play in facilitating the achievement of tasks; and
- The extent to which the entity can establish goals and can marshal the resources (including human resources) to achieve tasks.

It is important for consulting psychologists, as inextricable parts of the client system, to realise that they will bring a presence into the client system and that they can inject energy, excitement and potential into the system, by means of their own knowledge, skills and experience. The nature of the approaches, methods, instruments and techniques that they use can either liberate energy (thereby increasing the Capacity of the system) in a positive sense, using the self as an instrument or catalyst for awareness, growth and development.

For example, the consulting psychologist can improve the Capacity of an organisation to become aware of the conflicts among its directors by focusing on the String and, for example, Nurturing Ability, and encouraging them to describe their perceptions of these dimensions in the here and now. This has the potential to release pent up frustrations among the directors (which will liberate energy) and place these issues into open, conscious awareness.

Conversely, consulting psychologists need to ensure that they are well prepared for entry into the client system. When added to the existing Capacity of the client system, the total energy available in the client system can be increased. It could also be decreased if the consulting psychologist *saps* the energy of the system, by not being skilled enough, not being trusted enough by participants, or by attempting inappropriate interventions.

4.5.3.5 Exploring the String for balance

In biology, maintaining the constancy of the internal environment of an organism is referred to as homeostasis (Abercrombie, Hickman & Johnson, 1973). According to Indge (2003) homeostasis also refers to the tendency towards a relatively stable equilibrium between interdependent elements. In the String the ability to maintain equilibrium within the holon, whether individual, group or organisation, is governed by the extent to which the various dimensions of the String or integrated.

Disruptions in equilibrium, such as conflict situations, arise when blocks occur in the ability of the entity to carry out tasks. According to Perls, Hefferline and Goodman (1951), this is always the result of conflict between various parts or dimensions of the entity. These blocks divert the flow of energy in the entity and throw the system out of balance. People are often unaware of these blocks or resisting forces or, through the various individual, group or organisational defence mechanisms, they may be perceived to be externally imposed by the environment, rather than internal.

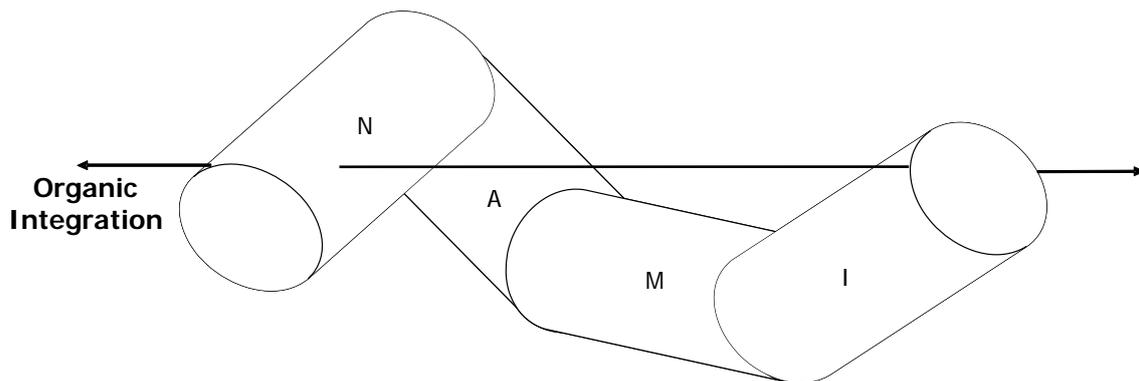
The maintenance of successful balance or equilibrium requires in the entity the ability to distinguish or detect changes in the interactive field and act upon these, for example, new corporate governance legislation may demand that segregation of duties be enforced in a different manner. This may demand a change in the Shape of some parts of the system, where reporting lines are changed. In order for this change to take place in an effective manner and for the entity to remain in equilibrium with the environment, a number of events must occur.

Firstly, the stimulus for this change (the change in legislation) must be detected by the appropriate receptors. Then, this stimulus must be transmitted to the appropriate part of the entity and must rise up out of the background into the foreground so that it becomes the object of active, conscious attention (Infobility). Then, the Organic Intellect of the entity must be applied to the stimulus, to interpret it and make a decision about what has to be done. The decision must then be transmitted to the relevant areas of the entity in order to mobilise them to the required action, such as altering Shape.

Various other aspects may also be brought into play. In making the decision to alter Shape (a logical, intellectual one), the entity may also apply the emotional component of its Organic Intellect and realise that, where specific individuals or groups are concerned, there may be some energy liberated (if individuals are unlikely to be comfortable with working for someone else and resist the change). In addition to the required changes in Shape, the entity may decide that some nurturing action is required in order to redirect some of the energy into a more positive channel by, for example, coaching or guiding some of the individuals involved to approach the change in a certain way (Nurturing Ability). The extent to which the entity is able to cope with the required changes and the effects thereof and adapt successfully and optimally is a factor of its Rotational Flexibility.

The impact of dimensions on one another may be observable either immediately or the impact may be delayed. A graphic depiction of the dimension of Organic Integration in the context of this research is provided in Figure 4.18 below:

Figure 4.18
The Dimension of Organic Integration



The dimension Organic Integration has considerable implications for diagnosing, explaining, predicting and intervening. In terms of diagnosis, the poor performance of the production department (group level of an organisation) may be due to the lack of integration at various levels with the functioning of the marketing department. The marketing function may understand its task to be that of hunting for new customers to ensure future growth and survival. It will direct its efforts accordingly.

On the other hand, the production function may consider its task to be consolidation of processes to ensure continuous improvement. If the groups are not aligned in terms of, for example, dimensions such as Organic Intellect, Capacity or Valence, the organisation will function in an unintegrated or unbalanced manner. It will be out of balance and lack Rotational Flexibility, Hunting Ability and the ability to nurture customers and suffer from demotivation, internal strife and lack of achievement of objectives.

This gives rise to the definition of Organic Integration presented below:

Organic Integration is the extent to which an entity is in equilibrium within itself and with its interactive field.

When the entity is integrated, integration patterns are required which means that people rely on each other more and need to care and communicate collective responsibility. This places additional requirement on interpersonal skills in terms of, for example, Nurturing Ability, Infobility and Valence.

According to Sherrill (1986), anxiety or tension in the system can cause neurosis, such as compulsivity or paralysis or paranoia in the organisational, group sense. According to Beisser (1970), fragmentation within the system disrupts organisational balance. A lack of Organic Integration between two or more dimensions of an entity will cause the entity to perform below what it is capable of and may even render the entity unhealthy.

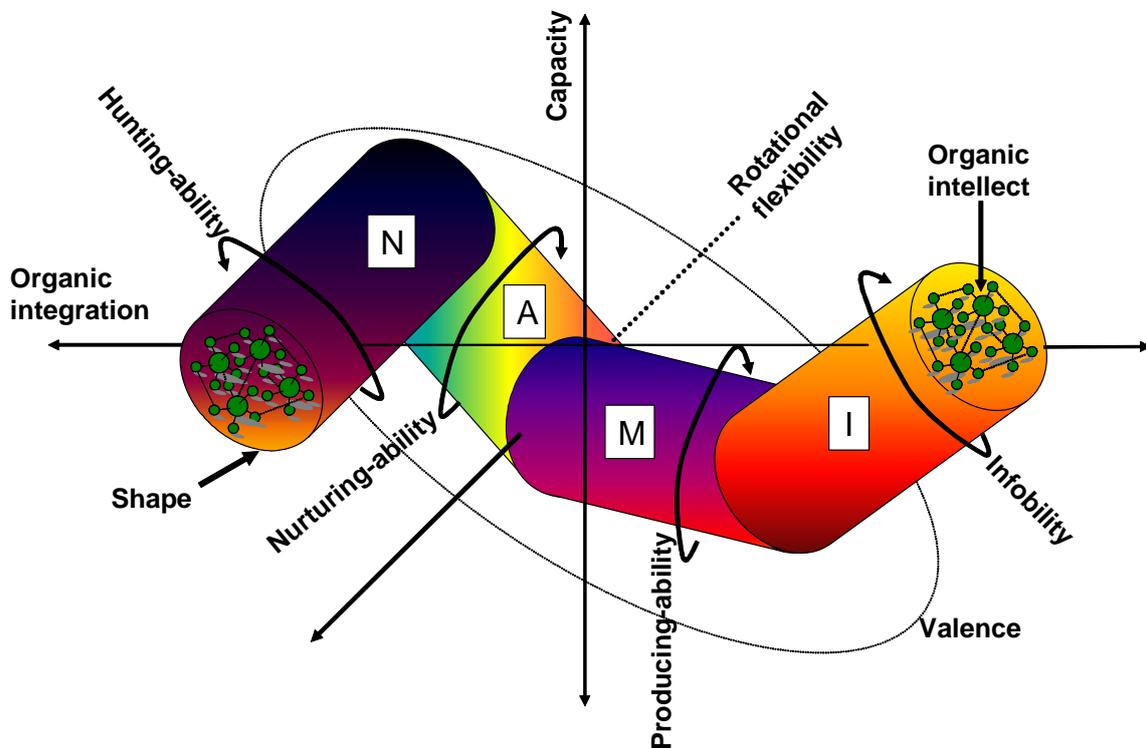
Optimisation occurs when conflicts and resistances among parts or dimensions of the String are resolved and the vitality and energy from the opposed forces (the resistors) is channelled towards effective task completion. This requires the ability to manage resistance and to translate it from resistance to assistance (Perls, Hefferline & Goodman, 1951). There is an integration into wholeness and the entity is in equilibrium.

4.6 THE COMPLETE STRING MODEL

The String Model is a representation of an individual, a group or an organisation. Powell (1995) terms such a representation a *heuristic*, or an approach or strategy (such as visualisation) by means of which an external representation of an entity is easier to work with than the real entity, as it is much simpler.

In Figure 4.19, the complete String Model is presented as Gestalt for the first time (at least, in the researcher's mind). The complete String Model is explored below in a holistic manner, in terms of various characteristics that explain the structure, dynamics and development of the String Model. The String Model may be a representation of an individual, group or organisation and constitutes a metaphor for thinking about various phenomena within the domain of consulting psychology at these three levels of consulting.

Figure 4.19
The Complete String Model



The String Model conforms to Shepherd's (1977) idea of first-order isomorphism (discussed in Chapter 3), in that it represents an internal image that represents an individual, group or organisation, although not in a concrete way. The ten dimensions of the String that were identified in the previous section are depicted in Figure 4.19. Together, these dimensions are the basic components of the String Model.

4.7 RELATING STRING MODEL DIMENSIONS TO THE THREE LEVELS OF CONSULTING

The discussions below represent the exploration of the basic String Model presented in this chapter in terms of the individual, group and organisational levels of consulting. Given the tremendous potential of the String Model ascertained during this exploration of the basic String Model, the scope of the current research precludes more than a very limited

discussion here, although three detailed case studies that describe the application of the String Model in the practical consulting situation are provided in Chapter 6.

In Table 4.11, each of the ten String Model dimensions is explored in terms of relevant phenomena in the domain of consulting psychology at the individual, group and organisational levels.

Table 4.1

Relating the String Dimensions to the Three Consulting Levels

	Individual	Group	Organisation
Shape	<ul style="list-style-type: none"> • Individual identity • Physical or biographical characteristics • Boundaries (such as time, space, task, roles, authority levels) • Holonic properties 	<ul style="list-style-type: none"> • Group identity • Group physical or biographical characteristics • Group structure • Boundaries (such as time, space, task, roles, authority levels) • Holonic properties 	<ul style="list-style-type: none"> • Organisational identity • Organisation physical or biographic characteristics • Business structure • Organisational structure • Boundaries (such as time, space, task, roles, authority levels) • Holonic properties
Hunting Ability	<ul style="list-style-type: none"> • Discerning suitable opportunities in the environment for survival and growth • Mobilising the individual to action, such as prospecting for a job or negotiating a contract of employment • Dealing with resistance in the interactive field 	<ul style="list-style-type: none"> • Discerning suitable opportunities in the environment for survival and growth • Mobilising the group to action, such as prospecting for a suitable opportunity to present group 's work • Dealing with resistance in the interactive field 	<ul style="list-style-type: none"> • Discerning suitable opportunities in the environment for survival and growth • Mobilising the group to action, such as prospecting for new service offerings • Dealing with resistance in the interactive field
Nurturing Ability	<ul style="list-style-type: none"> • Caring for and developing the self and others • Fostering relationships with important role-players • Showing empathy, sensitivity, compassion • Engaging in contact with the interactive field • Creating an enabling environment 	<ul style="list-style-type: none"> • Caring for and developing the group and other entities • Fostering relationships with important role-players • Showing empathy, sensitivity and compassion • Engaging in contact with the interactive field • Creating an enabling environment 	<ul style="list-style-type: none"> • Caring for and developing the organisation and other entities (including aspects such as retaining talent, succession planning) • Fostering relationships with important role-players • Showing empathy, sensitivity and compassion • Engaging in contact with the interactive field • Creating an enabling environment
Producing ability	<ul style="list-style-type: none"> • Directing and focusing energy and other resources in order for the individual to produce • Generating valued outcomes in terms of self and other stakeholders 	<ul style="list-style-type: none"> • Directing and focusing energy and other resources in order for the individual to produce • Generating valued outcomes in terms of group and other stakeholders 	<ul style="list-style-type: none"> • Directing and focusing energy and other resources in order for the individual to produce • Generating valued outcomes in terms of organisation and other stakeholders

Table 4.1 (Continued)

Relating the String Dimensions to the Three Consulting Levels

Level Dimension	Individual	Group	Organisation
Infobility	<ul style="list-style-type: none"> Discerning appropriate data and information Rendering data and information suitable for purpose (context, content, media, channel etc.) Verbal or written communication with appropriate stakeholders Rendering of the personal knowledge base 	<ul style="list-style-type: none"> Discerning appropriate data and information Rendering data and information suitable for purpose (context, content, media, channel etc.) Verbal or written communication with appropriate stakeholders Knowledge management 	<ul style="list-style-type: none"> Discerning appropriate data and information Rendering data and information suitable for purpose (context, content, media, channel etc.) Verbal or written communication with appropriate stakeholders Knowledge management
Organic Intellect	<ul style="list-style-type: none"> Physical intelligence Emotional intelligence Spiritual intelligence Cognitive intelligence 	<ul style="list-style-type: none"> Physical intelligence Emotional intelligence Spiritual intelligence Cognitive intelligence 	<ul style="list-style-type: none"> Physical intelligence Emotional intelligence Spiritual intelligence Cognitive intelligence
Rotational Flexibility	<ul style="list-style-type: none"> Adaptability of individual to new environment Understanding of career stages and ability to adapt to requirements Flexibility to cope (for example, mentally, emotionally) with job re-assignments 	<ul style="list-style-type: none"> Adaptability of group to changing environmental conditions Flexibility of the group to cope (for example, mentally and emotionally) with loss of a team member whilst maintaining Producing Ability 	<ul style="list-style-type: none"> Adaptability of organisation to changing environmental conditions Commencing with product diversification instead of a single product in terms of strategic orientation
Valence	<ul style="list-style-type: none"> Demonstrating very high levels of motivation make individual more attractive to employer Self-study to acquire new skills that render individual more attractive to employer 	<ul style="list-style-type: none"> Building credibility renders a group more attractive to potential buyers Group of experts learning interpersonal skills to increase the extent to which other groups want to work with them 	<ul style="list-style-type: none"> Demonstrating very high standards of product quality increases attractiveness of organisation's products in market Embarking on a merger to avoid a hostile takeover (changing Shape to render the organisation less 'attractive')
Capacity	<ul style="list-style-type: none"> Current financial, people, technological, infrastructural Capacity Amount of energy available to the individual throughout the various String Dimensions 	<ul style="list-style-type: none"> Current financial, people, technological, infrastructural Capacity Amount of energy available to the group throughout the various String Dimensions 	<ul style="list-style-type: none"> Current financial, people, technological, infrastructural Capacity Amount of energy available to the organisation throughout the various String Dimensions
Organic Integration	<ul style="list-style-type: none"> String dimensions of the individual are clearly integrated and distinguishable from the ground Mental, physical, spiritual and emotional health of the individual Balance (the various String dimensions of the individual are in equilibrium in the interactive field) 	<ul style="list-style-type: none"> String dimensions of the group are clearly integrated and distinguishable from the ground Mental, physical, spiritual and emotional health of the group Balance (the various String dimensions of the group are in equilibrium in the interactive field) 	<ul style="list-style-type: none"> String dimensions of the organisation are clearly integrated and distinguishable from the ground Mental, physical, spiritual and emotional health of the organisation Balance (the various String dimensions of the organisation are in equilibrium in the interactive field)

4.8 CHAPTER SUMMARY

This chapter described a thought experiment that made use of metaphors and analogies from cosmology and quantum physics to stimulate creative thinking. The concepts of thought styles and thought experiments (Rusbult, 2000) were explored as they relate to theoretical-methodological convictions of the research. A thought experiment was embarked upon in two phases, corresponding to the two phases of Finke's (1990) Geneplore Model. The first phase was to create a pre-inventive image that appealed to the researcher in terms of its Gestalt nature and properties – completeness, simplicity and the potential for representing individuals, groups or organisations as entities. The second phase was directed at exploring the pre-inventive image and, through interpretation, developing it into a mental model.

The thought experiment required using the researcher's imagination as a telescope to look into the past light cone (Hawking, 1988) of the field of consulting psychology. Ackoff (1979) reasons that exploring the past allows us to predict the future. In an attempt to predict the future of consulting psychology, the Nomadic, Agricultural, Industrial and Network Ages (described by Lipnack and Stamps, 1996) as sequential stages in the development of work were superimposed upon the past light cone of consulting psychology. Each of these ages brought with it different developments and challenges in the world of work.

This provided additional insights into the future of consulting psychology and it was possible to combine clues from the past with our understanding of the present to produce a proactive picture of the future. The Network Age will continue, but then progress rather than regress into new Industrial, Agricultural and Nomadic Ages. At this stage, the thought experiment appeared to have stalled. The researcher turned once again to open, undirected thinking by reflecting upon literature in the world of quantum physics.

At the cutting edge of quantum physics is Superstring theory (Kaku, 2000). Superstring theory posits that the fundamental structures of the universe are little Strings (like violin strings) that vibrate in a ten dimensional space. The thought experiment suggested that an individual, a group or an organisation may also be conceptualised as a String such as a violin string. The image of the String (a Gestalt) thus formed the pre-inventive structure of the mental model. The *Gestalt* String image was conceptualised as a holon, with holonic properties. In terms of Koestler's (1980) definition of a holon, each String is thus an

identifiable unit of organisation, such as an individual, that is composed of more basic unit, whilst at the same time, forming part of a larger whole, such as a group. The String image was posited to represent a system, whose elements hang together because they continually affect each other over time and operate toward a common purpose. Every String is regarded as an open system, with boundaries in its own right. The systems laws of dynamic equilibrium, equivalence and entropy apply to each String. In terms of dynamic characteristics, the issues of energy, progression and regression were discussed. So too were its developmental characteristics. The exploration of the structural, dynamic and developmental characteristics summarised above is worthy of an entire thesis in its own right. They received only the briefest of initial exploration in the context of this research.

In the next step of the thought experiment, the pre-inventive image of the String was explored in the researcher's imagination. The first dimension of the String image that may be discerned is that of its Shape. At increased levels of resolution, four additional dimensions of the String were identified. These dimensions were Hunting Ability, Nurturing Ability, Producing Ability and Infobility, each with unique but interrelated characteristics. At the final level of resolution adopted in this research, five final dimensions were identified. These were named Organic Intellect, Rotational Flexibility, Valence, Organic Integration and Capacity, respectively. Each of these dimensions was briefly explored, defined and related to the individual, group and organisation, in order to assess whether the String Model is indeed relevant to consultation projects at the individual, group and organisational levels of consultation. This yielded the basic String Model and completed the thought experiment for the purposes of this research.

Having completed the initial development and exploration of the String Model in this chapter, the following chapter turns to the development of an appropriate methodological framework that will enable the String Model to be used in the consulting situation, at the individual, group and organisational levels of consulting. This step requires the translation of the theoretical-conceptual String Model to a practical, tool that can be usefully deployed in the practical consulting world and a series of steps to guide this process.

CHAPTER 5 DEVELOPMENT OF THE METHODOLOGICAL FRAMEWORK

5.1 INTRODUCTION

This chapter reflects the process of developing a methodological framework to apply the String Model, developed in Chapter 4, in the context of consulting psychology. In this chapter, the researcher addresses the task of how to render the String Model usable in practice. The methodological framework consists of a process, described by (Babbie, 2005) as a series of actions directed towards a particular aim, usually that of producing change or development and a procedure, described by (Babbie, 2005) as an established method of doing something.

Based on the requirements identified in the previous chapters in the research, a generic process and procedure are developed to accommodate the need to consult over a wide variety of industries, clients, issues and levels of consulting. Various potential challenges that the researcher considered in the quest to deploy the String Model effectively and which influenced the methodological framework are presented.

The methodological framework is then presented in terms of the process and procedure thereof. The activities and outcomes required to conduct the Initiation Phase, the Orientation Phase, the Preparation Phase, the Intervention Phase and the Evaluation Phase are described.

Having derived the methodological framework, the researcher identified three consulting projects to serve as case studies. These three consulting projects were at the individual, group and organisational levels of consulting respectively. As part of the consulting plan for these three case studies, the researcher worked through the methodological framework step by step and applied the framework accordingly. This process included the preparation of several new instruments and methods for using them.

The procedure for the planned Intervention Phase of each consulting project is described. This provides a blueprint or framework for using the String Model as a tool for consulting, the results of which are described in Chapter 6. The chapter is concluded with a summary of the most important points in this chapter.

5.2 CHALLENGES TO DEVELOPING THE METHODOLOGICAL FRAMEWORK

The task of developing a methodological framework for the application of the String Model was couched in many challenges. These challenges were related to both the joint and the several complexity of the individual, group and organisational variables and the wide variety of potential applications in the realm of consulting psychology (Lowman, 2002a; Schein, 1988).

Arising from the researcher's experience and preferences, the following challenges were specifically considered in determining the most appropriate and suitable methodological framework.

- It is unlikely that consulting psychologists will be *au fait* with all of the technical and business aspects of the client's domain. This implied that the researcher should focus on process, rather than content. It also implied that the researcher should be mature enough to be comfortable with the fact that the knowledge power (in terms of content) lies mostly with the client. It also implied that the client must be involved in all steps of the consulting project;
- All appropriate data may not always be accessible and some data that would be helpful (and may even be critical), may not be appropriate;
- Neither the client, nor the consulting psychologist could be expected to have the resources (time, money, equipment and other resources) to attempt to optimise every aspect of every variable within the realm of the consulting project. Interventions have to be prioritised and scheduled;
- Client preferences may dictate that particular problem issues were dealt with – even though other, more critical issues may be clear to the researcher, who may advise the client accordingly, but would still be required to adhere to the scope of work prescribed by the client;
- In a methodological sense, the researcher would be conducting the consulting project in real-world conditions (field research) rather than in an environment where all variables can be systematically dealt with (such as in a laboratory);

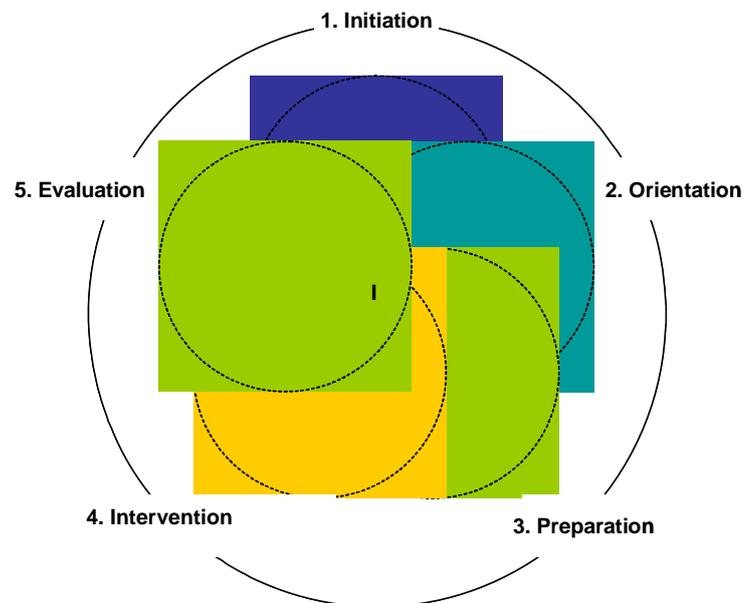
- Each facilitation session would provide a unique situation, with different goals and a different set of expectations and domain phenomena. It would be important to calibrate the String Model in every consulting situation;
- Some types of interventions would not be suitable in the prevailing circumstances, or depending on the client and participants. The researcher would have to allow for this in terms of methodology and participants would be encouraged to co-create the process;
- The researcher would be inextricably involved in the process, during all the steps (bringing in intrapersonal and interpersonal biases), using the self as an instrument for interpreting events and phenomena;
- The involvement and participation of key role-players would be vital in terms of their owning the intervention and the results thereof. If not, the results obtained may not be sustainable;
- The case studies are directed at testing the String Model in the practical situation (of interest to the researcher) and the String Model is introduced as the predominant conceptual model in each of the case studies. The *what* (has to be done) is contracted with the client. The *how* (it is achieved) is predominantly the professional responsibility of the consulting psychologist; and,
- The researcher would be required to deliver results within a relatively short timeframe. Clients in these examples have relatively little interest in the academic value of what they are doing, but rather in the perceived value-added (the results) generated by the consulting projects.

These challenges supported the decision to utilise process consulting methodology, as the most appropriate methodology for applying the String Model in the three consulting projects. Although this rationale may seem somewhat unsatisfactory from a pure research perspective, it is congruent with what consulting psychologists will find in practice. Consulting psychologists are always challenged to attain the greatest possible value for the client, by utilising their personal knowledge bases and drawing on the various approaches, methodologies, techniques and instruments at the most appropriate level of scientific rigour.

5.3 STEPS IN THE CONSULTING PROCESS

In keeping with the use of mental imagery in this research, the steps in conducting a typical consulting project, the researcher visualised the consulting process as a three-dimensional molecule, with five individual atoms bonded together. The five individual atoms represent the steps that make up the consulting process and illustrate the extent to which each step is inextricably part of and dependent upon, the other steps. This conceptualisation does not imply a rigid sequence of steps. Each of the steps is described separately below, but the interrelationship among the steps must be constantly borne in mind.

Figure 5.1
Steps in the Consulting Process



The five steps in the consultation process follow one another in sequence (from step 1 to step 5 in Figure 5.1), although there may be times when the consulting psychologist is compelled by circumstances within the consulting project, to return to a previous step. These steps are inextricably related. For example, formal and informal evaluation may take place continuously throughout the process. It should also be noted that the process represented in Figure 5.1 may very well be iterative. Once a particular intervention with a client has been completed, a new project may be initiated or a change may be made to the scope of the project.

In order to successfully manage a consulting project from the process perspective, the consulting psychologist must manage each of the individual steps in an integrated, seamless fashion (indicated by the letter / in the centre of the atom). This is done in a back and forth manner, with constant feedback and interaction between the consulting psychologist and the client system. The relationship between consulting psychologist and client must be nurtured and the credibility of the process and the consulting psychologist developed. The consulting psychologist must at all times attempt to remain congruent in terms of his or her own approach (Nevis, 1987; Satir, 2000).

These five steps of the consulting process are described in more detail below.

5.3.1 Step 1: Initiation

The initiation step commences with an approach by the client in respect of a potential consulting project. It continues through a series of initial briefings by the project sponsor and the consulting psychologist's initial responses to the sponsor's requirements, to the submission of a formal written proposal by the consulting psychologist in terms of the consulting project to be undertaken. This step concludes with the acceptance of this proposal by the sponsor.

In terms of process consultation, the consulting psychologist may attain congruence by offering immediate and responsive service to the client (Satir, 2000), by for example, providing an initial diagnosis of presenting a hypothesis about the problem and its potential solution. Schein (1988) states that consulting psychologists should try and give immediate value add and show that they clearly understand the situation – there must be congruence between what the client expects and the response of the consulting psychologist.

5.3.2 Step 2: Orientation

According to Kilburg (2000), the consulting psychologist must first form an accurate picture of the client system (including the unit of analysis) and what is happening within the system in terms of strategies, structures, processes and content. This picture should be discussed with the appropriate role-players in the organisation and decisions made as to how, where and when to intervene.

During this step of the consulting process, the consulting psychologist becomes orientated to the various aspects of the consulting project. The focus is to allow the consulting psychologist an opportunity to gain a rich understanding of the various context, content and process issues that are relevant to the consulting project. This may include structural and dynamic aspects of the environment in which the individual, group or organisation operates. Consulting psychologists have to rely on themselves as instruments for data gathering at many levels, supported by various techniques, methods and instruments, such as interviews, focus groups and studying documentation. It is particularly important for the consulting psychologist to begin the process of developing the professional relationship with clients.

5.3.3 Step 3: Preparation

Having progressed through the initiation and orientation steps, the consulting psychologist now commences with the detailed planning of the relevant intervention, continually bearing in mind the information gleaned during the preceding steps. Often, it may be necessary to prioritise the needs of the client and then to ensure that the most these are dealt with on a prioritised basis. Detailed objectives are then developed for the intervention following the specifications of Fritz Perls, taken from Rowan (2001), and presented in section 3.2. The most appropriate methodology is determined and relevant instruments and methods are decided upon.

5.3.4 Step 4: Intervention

According to Latner (1992), it is essential that the Gestalt-oriented psychologist create an adequate container or environment within which to address the selected unit of work. This container may be in the form of a workshop session which takes members of the client system, together with the consulting psychologist out of the client's normal working environment, to an appropriate venue. This not only makes it easier for participants to focus on the here and now without external interruption, but it also enlarges the area (time, space and boundaries) and creates greater opportunity for contact amongst the participants.

The facilitated intervention commences with the appropriate participants. The consulting psychologist attempts to create the optimal environment in which learning can take place. This involves attention to the physical environment and to task and process issues as planned in the preparation step. The consulting psychologist attempts to guide the

participants through the process of deconstructing the sedimented views of the participants and to encourage them to think about domain phenomena in a way that builds capacity and shared learning. This enables participants to design their own plans of action that can be implemented in order to meet the objectives of the consulting project.

5.3.5 Step 5: Evaluation

Within the context of this research, the consulting projects are evaluated in terms of the participants' experiences, using the researcher as an instrument. The researcher's observations and evaluations of the case studies are based on the Gestalt contention that evaluation can only be conducted, based on an understanding of figure formation, observing where the good figures are created and where important elements of the field are being avoided and in an understanding of the nature and principles of contact and free functioning (Latner, 1992; Perls, Hefferline & Goodman, 1951; Yontef, 2005).

5.4 PHASES IN GESTALT-ORIENTED CONSULTING

Regardless of the steps that a consulting psychologist is working through in order to take a consulting project from start to finish, Nevis (1987) suggests that there are five basic steps that Gestalt-oriented consultants should facilitate clients through.

These steps are:

- Assessing *what is* by heightening awareness of what appears to be happening;
- Choosing what to attend to by defining patterns or themes that exist;
- Acting on that choice by creating awareness of the pattern;
- Suggesting an experiment that tests alternatives, and;
- Closing out the particular activity by acknowledging the new *what is* that has evolved from the experiment.

Throughout these steps, consulting psychologists must continually observe content and process issues as well as paying careful attention to the dynamics unfolding in the client system.

5.5 NAVIGATING THE CONSULTATION PROCESS

Just as a consulting project cannot be truly successful if all the steps in the consulting process (from initiation through to evaluation) are not successfully completed, it can also not be successfully completed if the client is not taken through the five phases required for Gestalt-oriented consulting.

In terms of the first three steps in the consulting process (initiation, orientation and preparation), the consulting psychologist is primarily concerned with understanding and assessing the current situation. Much of the consulting psychologist's time and effort are spent on these activities on the assumption that they will enable the client to be understood in a rich, multidimensional, contextually relevant manner. Levinson (2002) provides fairly detailed guidelines for the preliminary stages of a consultation, emphasising the vital importance of this phase. This understanding, coupled with the development of relationships with the client, is essential in terms of the Gestalt perspective and it increases the probability that consulting psychologists will be able to facilitate the awareness and insight of the client in a powerful, relatively quick manner.

The first transition, which normally occurs at some juncture during the initiation or orientation steps (Nevis, 1987), allows consulting psychologists to identify or develop an understanding of what aspects of the field should be attended to and in what order. This type of choice as to the scope of the unit of work to be addressed is normally made by the consulting psychologist together with the project sponsor and other key role-players.

The middle stage involves acting on the choices made at the end of the first transition. The consulting psychologist articulates themes developed through the various activities of the initiation and orientation steps to the members of the client system and attempts, particularly, to elaborate on themes that include energy for change and energy for the status quo (Nevis, 1987). The highlighting of these opposing views brings underlying and overt forces tensions and conflicts into the *here and now* presence of the members of the client system (Perls, Hefferline & Goodman, 1951).

Debate and discussion of these issues are actively encouraged by the consulting psychologist. This process reveals whether the nature of the issues to be addressed lie in content (e.g. a problem to solve), or in a polarity to manage (e.g. in terms of relationships between members of the client system). If this process does not lead to clarity, the consulting psychologist may employ experimental techniques to develop awareness and insight (e.g. by encouraging members to develop a shared perspective of the purpose of an organisation).

The second transition occurs when the client has reached new insights and awareness. The task now becomes one of sustaining this awareness and reinforcing the action (work to be done) by seeking agreement from the various members. Considerable time should be spent on ensuring understanding and buy-in from all the members of the client system. Once this has occurred, the consulting psychologist is ready to facilitate the end of the process.

In the closing the intervention, consulting psychologists should further clarify the understanding of *what is*, i.e. the new Gestalt that has developed. In terms of the principle that people cannot be forced to learn but have to come to new insights and awareness on their own (Mezirow, 1997), one of the methods of reinforcing this learning within the client system is to have the members each express their own, personal perspectives of the process and of the new what is. This leads to greater shared meaning, cooperation and commitment.

5.6 A PROCESS CONSULTING METHODOLOGY FOR APPLYING THE STRING MODEL

This section details the process consulting methodological framework designed to facilitate the application of the String Model that was applied to actual consulting psychology projects at the individual, group and organisational levels. The framework is described in terms of the various steps of the consulting process that were discussed in section 5.3.

5.6.1 Initiation of the consulting projects

The initiation step commenced with approaches from the clients in respect of potential consulting projects and concluded with the formal presentation of a written proposal, by the researcher, to the sponsor of the potential project. This step signified the beginning of what

Nevis (1987) refers to as the process of becoming aware of what appears to be happening in the client system. At this stage, this raising of awareness is primarily confined to the researcher and the project sponsor. The steps in this procedure are described below.

5.6.1.1 Approaches by the clients

The sponsors of the three consulting projects, respectively, initiated contact with the researcher. In each case, the initial contact constituted a brief telephone call and an agreement to meet with each sponsor at his premises to discuss a specific consulting intervention, face-to-face.

5.6.1.2 Initial briefings by the project sponsors

In order to begin gathering data about the consulting project, the consulting psychologist is normally briefed by the project sponsor (this was the case in this research). The project sponsor is the person who is accountable for the project within the client system. In this research, the project sponsor and the researcher met face-to-face at the project sponsor's office.

Issues that led up to the consulting request are normally gleaned during the initial contact with the project sponsor, providing an indication of the background to, and rationale for the consulting project, the importance and urgency thereof and the desired outcomes.

5.6.1.3 Initial responses by the researcher

Following the initial briefing by the sponsor, the researcher responded to the sponsor in two ways. The researcher paraphrased the desired outcomes of the consulting project to the sponsor and outlined, briefly, the proposed process to be followed. The principal objectives of this were to:

- Reflect a clear understanding of the sponsor's needs;
- Demonstrate to the sponsor the willingness to proceed (or not to proceed) with the consulting project;

- Assure the project sponsor of the researcher's competence and experience in this area, especially if the consulting psychologist was not previously known to the project sponsor;
- Assure the sponsor that the researcher has a way forward in respect of the potential project that can meet the sponsor's objectives. Schein (1992) regards this type of immediate return on investment to the sponsor as a critical step in process consultation; and to
- Determine the appropriate timeframes.

It was important, during this process, that the researcher be soundly familiar with the String Model and be able to visualise the Model in the mind's eye, whilst conducting the interview. To this end, the researcher prepared a single-page *aide-memoir* that was kept visible to the researcher throughout the interface with the sponsor. This *aide memoir* is presented in Annexure 1.

5.6.1.4 Written proposals to the clients

The written proposal serves as part of what Nevis (1987) refers to as choosing what to attend to in the client system and should reflect the priorities and actions agreed to, or to be agreed to, between the consulting psychologist and the client. Acceptance of the researcher's proposal would indicate congruence between the choices as to what to attend to. As part of the relationship between the client and the consulting psychologist, it is important that boundaries are set in terms of time, space and task.

The researcher specified the following in the formal written proposal:

- The researcher's understanding of the client's needs;
- Clear objectives of the consulting project;
- Outline of the suggested process;
- Clear timeframes;
- Specific outputs; and
- Cost framework.

The String Model was not described, but was referred to briefly as a conceptual model that would be used to assist the process of holistic, integrated, creative thinking that deconstructs (as far as possible) the sedimented perspectives of the participants and to raise awareness and insight into phenomena in the client system. The researcher also stated in all the proposals that the proposal was made based on initial information available at the time and that it could change given new information and insight. Upon notification of acceptance of the project proposal by the sponsor or client, the researcher proceeded to the next step, i.e., that of orienting himself to the general context and specific requirements of the consulting project.

5.6.2 Orientation to the consulting projects

During this step of the research, the researcher orientated himself to gain a rich understanding of the various context, content and process issues that were relevant to the consulting projects. This includes structural and dynamic aspects of the environment in which the individual, group or organisation operated. The researcher had to rely on himself as the instrument for data gathering at many levels, supported by various techniques, methods and instruments. The orientation step was a continuation of the process described by Nevis (1987) of heightening the researcher's awareness of what appeared to be happening in the client system. The formal entry of the researcher into the client system also commenced the process of raising the awareness of participants and non-participants in the client system of the fact that a consulting project was being undertaken.

In this research, three applications of the String Model in the consulting situation were conducted, one each at the individual, group and organisational levels of consulting. As such, the units of analysis differ in each case, as described in Table 5.1 below.

Table 5.1*Description of Units of Analysis, by Consulting Project*

Primary unit of analysis		
Individual	Group	Organisation
<p>Peter is a 32 year old male, who is a Historically Disadvantaged South African (HDSA). He has a four-year electronic engineering degree, obtained in 1993, and a Master's Degree in Electronic Engineering, completed in 1998. Peter has worked in the public sector for his whole career to date. Peter has an impressive track record of technical performance in electronic engineering and good interpersonal skills. He is being fast-tracked to a management position in a parastatal organisation. Organisational policy requires that each individual on the fast track programme be taken through a comprehensive process to develop his or her own Individual Development Plan (IDP).</p>	<p>The group concerned is the Board of Directors of the company. The Board is composed of four executive directors (the Chief Executive Officer is a medical doctor) and eight non-executive directors (all medical doctors in private practice throughout the country).</p>	<p>The gold mine has more than 5,000 employees ranging from semi-skilled, illiterate workers to professionals and highly-skilled technical personnel. The Mine is structured in traditional functional fashion and managed by the General Manager.</p> <p>The major functional disciplines are Mining, Engineering, Mineral Resource Management, Human Resources, Finance, Safety, Health and Environment, and Asset Protection, each headed by a member of the Executive Committee (EXCO) of the Mine. Each member of the EXCO manages a functionally oriented department and all employees on the mine belong to one of the functions or departments.</p>

5.6.2.1 Individual interviews

Individual interviews were held with key role-players. These were broad orientation interviews of approximately one hour duration. The following key role-players were interviewed in each of the consulting projects; in the sequence in which they are listed (this list excludes the interfaces with the sponsor discussed in the Initiation Step). The people to be interviewed were identified by the researcher and the sponsor of each project (during the Initiation Step) and confirmed in the proposal to the sponsor.

Table 5.2*Individual Interviews Conducted, by Consulting Project*

Consulting Project		
Individual	Group	Organisation
<ul style="list-style-type: none"> • The individual for whom the development plan was to be established; • Members of the Executive Management team (7 individuals - the Executive Manager and heads of each of the functional departments); • Appointed Programme Managers (7 individuals, each representing a separate programme or line of products); and the • Chief Human Resources Officer (responsible for Human Resource Development), individually (1 individual). 	<ul style="list-style-type: none"> • Members of the Board of Directors, individually (12 individuals); • Members of the Executive Management team, individually (10 individuals, representing the heads of department of Finance, New Business, Marketing, IT, Human Resources, Networks, Medical, Operations); and • A sample of shareholders (Medical Doctors in private practice), individually (14 individuals, elected by the other shareholders to each represent a particular geographical constituency). 	<ul style="list-style-type: none"> • Members of the Executive Management team, individually (8 individuals); and • Members of the Operations Management team, individually (14 individuals, including 3 Section Managers, 4 Section Engineers, and Managers: Geology, Rock Engineering, Evaluation, Survey, Finance, Human Resources, Health and Safety).

The objective of these interviews was to clarify expectations, search for data and information related to the consulting project. The interviews were conducted with each individual on a one-to-one basis. This was done to encourage individuals to provide their honest perspectives, without fear of any potential adverse consequences thereof for the individual concerned.

Data and information gathered during this step was recorded by the researcher and is utilised as input to the orientation step (e.g. to identify other important sources of information); the preparation step (e.g. to assist the researcher in calibrating the String Model for the project); the intervention step (e.g. to serve as the basis for the presentation of thematic feedback from the researcher); and the evaluation step (e.g. to determine whether or not the problems identified were or could be resolved as a result of the consulting intervention).

5.6.2.2 Collection and analysis of pre-existing data

In addition to the data collected during the individual interviews, the following pre-existing data was analysed by the researcher:

Table 5.3
Pre-Existing Data Collected and Analysed, by Consulting Project

Consulting Project		
Individual	Group	Organisation
<ul style="list-style-type: none"> • Human Resources Development policy • Job analysis report for the Facility Manager • Examples of the organisation's Individual Development Plans • The individual's curriculum vitae • Copies of the individual's performance appraisal for the past two years 	<ul style="list-style-type: none"> • Company brochure • Letters and other correspondence between members of the Board of Directors • Company Business Plan • Various articles on Corporate Governance 	<ul style="list-style-type: none"> • Company Strategic Plan • Mine Business Plan

5.6.2.3 Integration and interpretation of data collected to date

The processes of data gathering and analysis in String Model terms required that various techniques be used when working with the String Model. These included *reflecting* on the data collected in terms of the String Model dimensions, *accessing language* to analyse the meaning of the concepts and to relate what was observed to the relevant aspects of the String Model. The researcher interpreted the data gathered in the initiation and orientation steps, in String Model terms. These interpretations (which constituted a diagnosis of the client system) guided the formulation of tentative objectives for each of the consulting projects and decisions were made in terms of the modus operandi for the intervention steps. These decisions related to the participants in the process, the duration of the intervention, the instruments to be used and the steps to be followed.

5.6.2.4 Finalisation of formal objectives

Formal objectives for the consulting project were finalised. The stages of human experience proposed by Frits Perls (Rowan, 2001) were used to guide the formulation of these objectives as they provide a guideline as to how to take an individual, group or organisation from a state of undifferentiated awareness of an issue in the environment, through dealing with the issue and mobilising (or not mobilising), to contact with the experience, to internalising the experience and moving on into a new cycle. These objectives had been proposed, amended and honed throughout the initiation and orientation steps of the project and guide the specific preparation that the researcher had to conduct in anticipation of the implementation process. The formal objectives were also checked with the project sponsor to ensure that delivery on these objectives would meet the sponsor's requirements.

5.6.2.5 Confirmation of researcher's understanding

At the end of the orientation step of the consulting project, the researcher met with the project sponsor, for a face-to-face meeting, with the express purpose of ensuring that the work being undertaken was aligned with the sponsor's expectations. This meeting essentially took the form of a review of progress and a discussion of the way forward. In keeping with Schein's (1988) guideline that the client should be provided with new, helpful insights or information at each interface, any problem issues and challenges or any aspects about which the researcher was unclear were dealt with at this meeting.

Levinson (2002) also emphasises the need to talk the sponsor (and other significant role-players) through preliminary, as well as final findings, of the assessment phase and points out that it is often essential to support these role-players in dealing with this information as it can mean *bad news* to them. Going back to these role-players fairly soon after the first briefing session in order to talk through their further thoughts on the findings of the assessment is essential.

Conversation and discussion with clients in a professional manner does not preclude the duty of the consulting psychologist to enable clients to, as Collins and Porras (1998, p.23) put it "confront the brutal facts" of their situations. This can require telling clients things that they would rather not hear or emphasising things that they are not consciously aware of by, for example, denying that they exist. It is not always a comfortable, easy relationship

for the consulting psychologist or the client – rather it should be one that promotes accurate awareness of domain phenomena and ensures action to minimise threats or capitalise on opportunities.

In the researcher's experience, this is a critical issue that could even lead to a project being cancelled. Sponsors may misunderstand the findings, may regard them as too negative, may feel personally threatened, may over-react to what has been presented or may provide new information or insights to the consultant. Such a follow up meeting often serves to clarify any misunderstandings of the essential facts that the researcher intended. Before embarking on an intervention, the consulting psychologist must be sure that the support of the sponsor will be forthcoming in order to have any realistic chance of success. The larger and more complex the intervention is, the more important the buy-in and support of the project sponsor is.

5.6.3 Preparation for the consulting projects

Having progressed through the initiation and orientation steps of the consulting projects, the researcher commenced with the detailed planning of the facilitative intervention, continually bearing in mind the learning gleaned during the preceding steps. The main steps in the preparation step are discussed below.

5.6.3.1 Confirmation of methodology for the consulting projects

According to Harrison (1994), consultants rely on several sources of knowledge when they decide which intervention techniques are most likely to be appropriate in a given situation. These include evidence gathered during the steps of initiation, orientation, preparation, the consultant's own experience (or the experience of colleagues) and relevant literature. Bearing in mind the specific objectives of the facilitated intervention, as well as the knowledge and understanding gleaned from the initiation and orientation steps, the researcher decided the most appropriate techniques, methods and instruments to use in the intervention.

Various boundary issues were borne in mind at this stage, including the physical boundaries of the venue for the intervention (such as location, size and physical characteristics of the venue), the time available, the media that will be available and psychological boundaries

(such as which techniques, methods and instruments will be appropriate (or not) for the participants).

5.6.3.2 Instruments and methods of use

O’Roark (2005) supports the notion of calibrating the approaches and methods used by the consulting psychologist in the consulting situation to ensure that the interface between the client and the consulting psychologist is contextually relevant. This step involves what Nevis (1987) refers to as conscious acting on the choices made as to what to attend to in the client system and preparing instruments that will be used to create awareness of the right things within the client system during the facilitation step.

Kiel and Lennick (2005) found that executives tend to trust (quantitative) data more than they trust qualitative data and that they often have more faith and trust in the relationship when data is provided to them as a basis for discussion. Using quantitatively-oriented instruments in the consulting situation provides the opportunity for participants to further crystallise figure information and to develop insights and awareness of domain phenomena which can supplement narrative or other qualitative instruments and methods.

Table 5.4 below provides an extensive description of the instruments and methods of using these instruments employed in the individual level, the group level and the organisational level consulting projects, respectively.

Table 5.4*Instruments/Methods Used to Apply the String Model*

Instrument/Method	Purpose	Method of Use
Guideline to String Model (See Annexure 1)	An <i>aide memoir</i> for the consulting psychologist, this document contains the definitions of the dimensions of the String Model.	The researcher utilises this form as a guideline for thinking in String Model terms, asking questions and making notes during the initiation step.
Interview Guideline (See Annexure 2)	An aid to describing phenomena in the consulting situation in String Model terms, recording observations during the orientation step and as an <i>aide memoir</i> and reference document.	The researcher records notes on this form during the orientation and preparation steps.
Integration Form (See populated examples in Chapter 6)	Allows the consulting psychologist to integrate perspectives and phenomena gleaned by means of interviews and other data collecting techniques from the consulting environment and to analyse and interpret these, in String Model terms.	During the orientation and the preparation steps, the researcher analyses notes taken from all the individual orientation interviews as well as from the documentation reviewed and notes tentative findings in terms of the String Model.
Project Calibration Guideline (See populated examples in Chapter 6)	Building on the interpretations made on the Integration Form, this guideline allows the consulting psychologist to calibrate the String Model in terms of the specific requirements of the relevant consulting project.	During the preparation step, the researcher analyses the interpretations made during the initiation and orientation steps, combines this with personal knowledge and calibrates the String Model, by describing the consulting situation in String Model terms.
Guideline Presentation (This is a summary of Figures 4.9 to 4.19 and the narrative in Chapter 4)	A visual aid for the consulting psychologist to introduce and explain the String Model to participants.	In the facilitation step, the consulting psychologist presents a slide show on a data projector. Participants are encouraged to ask questions and to debate issues which come to mind.

Table 5.4 (Continued)*Instruments/Methods Used to Apply the String Model*

Instrument/Method	Purpose	Method of Use
Assessment of Current Performance Questionnaire (See populated examples in Chapter 6)	An aid for participants to describe relevant phenomena terms of an envisaged future or ideal state, in terms of the String Model, as a means of gaining understanding and insight into these phenomena in the process and establishing a desired future state or vision of the future.	In the facilitation step, the consulting psychologist provides instructions, checks understanding and participants complete the form individually. The form is discussed and a final evaluation of the ideal situation is made in a participative manner, relying on debate and consensus as much as possible.
Description of Ideal State Questionnaire (See populated examples in Chapter 6)	An aid for participants to what the ideal state of the entity in question should or could be, in String Model terms.	In the facilitation step, participants describe their perspectives of the ideal state for the entity, both quantitatively and qualitatively. The consulting psychologist calculates the quantitative gap between current and ideal situations and feeds this back to participants. Participants analyse the gap in qualitative terms, providing as much detail as possible in respect of the variances between the current and the ideal state. Debate and interaction is actively encouraged by the consulting psychologist.
Relative Priority Calculation Spreadsheet (See populated examples in Chapter 6)	An analytical aid for participants to explore the variances between the current and ideal states of the entity and to begin the process of prioritisation of key action imperatives.	Following directly after the analysis of the ideal state and the relative differences on each String Dimension, the consulting psychologist presents to participants the Relative Priority Rating, which is determined programmatically by subtracting the current performance rating from the ideal performance rating and multiplying the subtrahend by the ideal rating. Thus, the Relative Priority Rating is a function of ideal performance versus the size of the development gap.

5.6.4 Intervention in consulting projects

Lewin (1952) hypothesised that tense psychological systems must be encapsulated so that tensions could be systematically discharged in an orderly manner and that highly encapsulated subsystems could be pathological. Tensions are regarded as a discrepancy between the current reality and a potential new reality, irrespective whether these tensions are regarded as dysfunctional or constructive. Thus, any intervention represents an attempt to encapsulate a particular subsystem and to deal with tensions in a particular unit of work in an orderly manner.

The interventions commenced with the appropriate participants at a mutually acceptable date, time and venue. In terms of the three consulting projects undertaken by the researcher, the facilitation step was embarked upon with the following logistical arrangements:

- In the case of the individual level consulting project, the intervention was conducted with an individual in a boardroom at the client's premises and consisted of four meetings of approximately two hours' duration each, over a period of two weeks;
- The intervention step of the group level consulting was conducted off-site at a conference venue selected by the client. The participants were the twelve members of the Board of Directors of the company. The duration of the intervention was two days; and
- The intervention step of the organisational level consulting project was also conducted off-site at a conference venue, selected by the client. The participants were the eight members of the Executive Management team of the gold mine. The duration of the intervention was two days.

In terms of the prepared intervention plans, the interventions were managed as follows.

5.6.4.1 Sponsor's introduction and endorsement

The sponsor (or his designate) was requested to open the facilitated intervention and to ensure that participants were assured as to the reasons for the intervention, the goals

thereof and how these related to the participants. In all cases, the project sponsor personally attended the facilitated session as a participant. The sponsor ensured that it was clear that he supported the process personally.

5.6.4.2 Creating rapport with participants

The researcher introduced himself and attempted to break the ice with non-threatening, fun activities that were appropriate to the task at hand and to the participants. The goal of this was to reduce anxiety and to start building relationships. This was an ongoing task, managed throughout the process.

5.6.4.3 Presentation of objectives and agenda

The objectives of the facilitated intervention were presented to participants for their ratification. Even at this stage, the input of participants was actively encouraged. (This did make it somewhat difficult for the researcher, as there was always some uncertainty as to what suggestions would be made by participants in this regard and required flexibility and a fairly large repertoire of facilitation skills and tools.)

5.6.4.4 Feedback in terms of String Model dimensions

The researcher presented feedback to participants in terms of the relevant themes identified during the initiation, orientation and preparation steps of the project. This was done in as de-personalised a manner as possible, so as to identify important issues, but not to expose individuals or break their confidence. Active participation and debate around the issues highlighted by the researcher was encouraged during this presentation. It was cardinal to the process to ensure that as many important themes as possible were placed on the table at the start of the facilitated intervention and the researcher took responsibility for presenting these perspectives to the participants.

5.6.4.5 Anchoring in terms of purpose

According to Stevenson (2004), changes in performance are most effectively employed by supporting the individual, group or organisational performance on a task by increasing congruence with the purpose of the entity.

A baseline framework was created in terms of the individual, group or organisation's purpose. The purpose (fundamental reason for existence) of the entity encapsulates what the entity exists, or strives, to accomplish, how it does this and for whom it does this (Porter, 1985). This was necessary to provide a *coat hanger* (or framework) upon which the work that followed could be hung. It provided the opportunity for the participants to develop what Senge (2002) referred to as a shared perspective of the purpose, as well as what Latner (1992) refers to as shared understanding of the parts and of the whole and learning to differentiate and appreciate the whole against the context of each of the participants' background needs. Every thought and every action that followed was to be considered in terms of its relevance to the purpose of the entity.

This step in the procedure was important, as it required participants to begin on their *home turf* and work from the known to the unknown. It thus laid the foundation for moving into the unknown in the next step. The desired minimum outcome of the next part of the process is that participants develop what Perls, Hefferline & Goodman (1951, p.54) refer to as "creative pre-commitment", the situation that exists when the interest is piqued and an individual begins to focus on the stimulus, without necessarily having committed full attention.

5.6.4.6 Introduction to the String Model

Introducing the String Model signified what Nevis (1987) refers to as suggesting an experiment that explores *what is* in the client system. As such, the introduction of the String Model is intended to take away or put off balance current perceptual organisation of the participants. This has the effect of triggering participants' orienting responses (Yontef, 2005), as they try to make sense of the very new and unexpected stimuli with which they are presented. The assumption is that this will engage the intrapsychic processes to search for meaning and stimulate the interest and attention.

The String Model was introduced to participants by means of a presentation by the researcher. This presentation was based on Chapter 4. The dimensions of the String Model were presented and explained in the order in which they appear in Chapter 4 (which is also the order in which they were identified in the thought experiment. The idea was to present the String Model to the participants dimension by dimension, slowly focusing on the String figure (as opposed to the ground). The next dimensions were presented at increasing levels

of resolution, so that the String Model (figure) could become progressively brighter, more dynamic, more differentiated and, of course, more whole to the participants – a Gestalt.

An open, relatively undirected discussion in respect of each of the dimensions of the String Model was facilitated. Participants were encouraged to discuss and debate issues that arose from the presentation and to ask questions. The uniqueness, novelty and unexpected nature of the String Model and its dimensions was used to elicit conscious and unconscious conflicts, blockages and resistances amongst participants and to make the participants aware of these issues. These were manifested by verbal agreements and disagreements and differing perspectives as well as in terms of non-verbal gestures and behaviour amongst the participants. The researcher asked questions and elaborated on discussions and observations, using the self as an instrument. Depending on the particular circumstances, the researcher's input was sometimes in terms of content, sometimes in terms of what was happening in the here and now dynamics of the situation and sometimes in terms of process.

5.6.4.7 Review of current performance in String Model terms

The next step was for the participants to review the current performance of the entity in String Model terms. This process allowed participants to explore multiple versions of reality, in the *here and now*, providing depth and breadth of understanding of the current situation. Describing the current situation that participants are in allows not only to develop awareness of the issues with which they are presently faced, but also prepares them for later exploration of the relationship between the past, the present and the future (Perls, Hefferline & Goodman, 1951).

The underlying anticipation of the researcher, was based on the idea of emergent reality, described by Duncan and Miller (in Stevenson, 2002). Emergent reality assumes that sheer awareness of the expanded or enhanced definition of the current state, (in this case, in String Model terms), would lead to new insights and, ultimately, to the consideration of alternatives and actions that had not been available to the client system previously. According to the guidelines of Nevis (1987), it is important that the participants conduct this evaluation themselves as it affords them the opportunity to bring their perceptions of the interactive field and their conscious and unconscious drives, motives, fantasies, projections etcetera to the fore.

Awareness and insight into resistance, barriers and conflict is seldom realised by deliberate decision to do so (Perls, Hefferline & Goodman, 1951). Experiments and tools are required for clients to become aware of their perceptions, their efforts to understand and their reactions to what is occurring, as well as for sensing opposing and balancing forces.

The String Model provides a useful substrate for a relatively aggressive deconstruction and reconstruction of different aspects of the client's interactive field as a means of encouraging increasing differentiation of figure from ground and promoting what Perls, Hefferline & Goodman (1951, p.72) refer to as "differentiated unity". This involves taking the String Model as a representation of the relevant individual, group or organisation and breaking it down into the different dimensions in the here and now (without devaluing them).

The Participant Assessment of Current Performance Questionnaire (See Figure 6.2) was distributed to participants. The consulting psychologist explained the purpose of this questionnaire and instructions for completion thereof to participants, who then individually assessed the relative impact of the contextualised definitions (in terms of String Model dimensions) on a five-point scale, ranging from a rating of *Poor* to *Excellent* on each dimension, for the relevant unit of analysis.

The consulting psychologist recorded and summarised these ratings and produced two graphs for discussion in a plenary session. These two graphs described the average rating given by participants on each of the String Dimensions and the range of ratings received. The graphs were presented to participants and the implications thereof are discussed in detail.

5.6.4.8 Development of ideal state in String Model terms

Following on from the deconstruction and analysis of the entity in String Model terms in the previous step, the researcher now encouraged participants to recombine them in a manner that would be regarded by them as positive growth and development. This represented a further continuation of the experimental step. In plenary session, the researcher guided participants in establishing and describing the ideal state of the unit of analysis in terms of the String Model dimensions (the format of Figure 6.7 was used, with the exception of altering the heading and instructions thereof to address the desired or ideal state of the relevant unit of analysis [individual, group or organisation] on the same five-point scale).

Debate and discussion was encouraged among participants to promote close contact and excited discovery, which are pre-requisites for awareness, insight and change. The idea was not so much to derive an absolutely accurate picture of the future in quantitative terms, but rather to engender creative tension between the current and the ideal or desired situation. Conducting this step in this way was intended to assist the participants to develop a more closely aligned understanding of domain phenomena, the relationship between these phenomena, how individuals, groups or organisations can influence these phenomena and to nurture a situation that is fertile for positive growth and development and that meets the needs of the client.

Participants were encouraged to visualise an ideal state in terms of each of the String dimensions as well as in terms of the relationships (or contact) amongst and between them. Memories, daydreams and fantasies of the future state of the entity in the context of its environment were encouraged as participants described what it could be like. The juxtaposition of the ideal state of the entity with the current assessment provided an opportunity for participants to move the events that had led up to the current moment in time to the past (hopefully having prepared them to let it go in a sense) and to reflect on the past from their position in the here and now.

The current and ideal states could be compared with one another in terms of the dimensions of the String Model, which provided an opportunity for participants to consider the gaps or differences in their conception of the Gestalt. Perls, Hefferline and Goodman (1951) often experimented with the use of opposites to create awareness and to improve figure formation.

5.6.4.9 Assessment of relative priorities

The Relative Priority Rating was determined programmatically by subtracting the current performance rating from the ideal performance rating and multiplying the subtrahend by the ideal rating. Thus, the Relative Priority Rating is a function of ideal performance versus the size of the development gap.

The assessment of relative priorities offered participants the opportunity to further explore figure phenomena and to develop a shared understanding of where the most important issues in the interactive field lay. The process allowed for discussion and debate to highlight

differences and incongruencies amongst the perspectives of the participants. This encouraged them to maintain contact with one another and with domain phenomena in a constructive manner.

5.6.4.10 Identification and development of key imperatives

Using the results of the previous steps, participants identified the gap between current and ideal performance. This was done by comparing the ratings of current performance to the specification of ideal performance.

Once again, debate and discussion was encouraged among participants to nurture a situation that was fertile for the entity to grow and develop towards the ideal state. The researcher introduced the results of the Assessment of Relative Impact conducted previously in order to develop a sense of relative priorities and the identification of which gaps are most important.

On the basis of these discussions, various key action imperatives were identified and explored. As described in Chapter 2, it is an important part of the procedure that participants are afforded the opportunity to generate the required alternatives and make the decisions as to key action imperatives, based on the awareness and insight gained during the intervention, coupled with the knowledge and understanding of their own personal knowledge bases (Ivey, Ivey & Simeck-Morgan, 1997; Nevis, 1987; Stevenson, 2003).

People, according to Gestalt therapy, are responsible (response-able); that is, they are the primary agents in determining their own behavior. When people confuse responsibility with *blaming* and *shoulds*, they pressure and manipulate themselves; they try and are not integrated and spontaneous. In such instances their true wants, needs and responses to the environment and choices in the situation are ignored and they overcomply or rebel against *shoulds* (Yontef, 2005).

Gestalt therapists believe in the importance of a clear distinction between what one chooses and what is given. People are responsible for what they choose to do. For example, people are responsible for their actions on behalf of the environment. Blaming outside forces (e.g., genetics or parents) for what one chooses is self-deception. Taking responsibility for what one did not choose, a typical shame reaction, is also a deception.

5.6.4.11 Identification of proactive strategies and tactics

Experientially, the ego functions give the individual a sense of being instrumental in the figure's forming. You feel yourself to be the one who is making things happen. In this phase, you approach the environment aggressively, using and mastering the elements of the field rather than merely cooperating with them. Phenomenologically, this gives you a sense that you make the figure, whereas at other times you are less instrumental, more a partner in the enterprise, participating along with other elements in its formation. Because of this, there is in the ego functions a feeling of being separate and different from the elements you are controlling and ordering. The contact boundary's role as divider is clearly felt; differentiation is foremost; joining is less noticed.

Participants were divided into sub-groups. Each sub-group was assigned one of the action imperatives derived above and spent approximately thirty minutes generating as many potential actions as possible, in order to achieve the specified expected outcome. After thirty minutes, the groups rotated and spent a further twenty minutes adding to the alternatives proposed by the initial sub-group. This was repeated until each sub-group had the opportunity to review the proposed alternatives for each of the specified action imperatives.

When the process of generating potential alternatives was complete, the group evaluated each suggestion in a plenary session. In this session, each suggested action was defined and participants asked questions for clarity. Then, participants evaluated whether or not the suggested action would contribute to the achievement of the expected result. A list of agreed actions (or action projects) was agreed.

5.6.4.12 Action planning

A detailed action plan was developed by the participants, which indicated the desired outcome, the required action to be taken, who would be responsible for ensuring that the action was taken and specific milestones for completion. (Responsibilities were allocated only to participants present at the facilitated intervention, but participants were free to enlist the assistance of various resources in order to ensure that the required work is done). Encouraging participants to develop their own plans of action for realising new figure concepts in the client system is an integral part of making the new figure owned by them.

5.6.4.13 Closure of facilitated intervention

According to Nevis (1987) it is important that any particular intervention is closed out by acknowledging the *new* that has evolved from *what was* through the processes of experimentation and discussion. At the end of the facilitated sessions, the researcher summarised the progress of each and related these back to the objectives of the overall consulting project. Each individual was asked to make closing comments in respect of the facilitation step.

The researcher was responsible for the provision of a post-facilitation intervention report to participants and to the sponsor. This included a comprehensive report, containing all relevant documentation and, especially, the agreed action plans.

5.6.5 Evaluation of the consulting projects

“Gestaltists are singularly unimpressed with formal psychodiagnostic evaluation and nomothetic research methodology. No statistical approach can tell the client what works for him or her. What is shown to work for most does not always work for a particular individual, group or organisation” (Perls, Hefflerine & Goodman, 1951).

In terms of evaluating the three consulting projects, clients were asked to relate their phenomenological experience of the intervention, of the String Model and the methodological framework. These observations were recorded and are reported in the case studies in Chapter 6. The process of relating experiences offers not only an opportunity for the researcher to obtain feedback in respect of the intervention, but also for participants to verbalise their own experiences and to cement their new growth and development. Yontef (2005) describes this as an essential step in concluding the process of Gestalt intervention.

5.7 CHAPTER SUMMARY

This chapter described the process of determining an appropriate methodological framework for the application of the String Model that was developed in the preceding chapters. It also represented the first attempt at applying the newly developed conceptual model as an aid to the researcher, to perceive phenomena in the consulting domain in a comprehensive, holistic, integrated manner, to think and make connections between domain phenomena

that were not accessible without the use of the String Model. The appropriate methodology had to be determined in order to allow the successful completion of the three consulting projects.

At the start of this chapter, various scientific and practical challenges to developing the methodological framework were considered. These considerations represented the thinking process typically required of a consulting psychologist at the commencement of a consulting project, where they must balance the requirements of science and practice. Based upon these considerations and in the context of consulting psychology, it was concluded that process consultation methodology (Schein, 1988) would be most appropriate.

A model describing the various steps in the consulting process was developed to guide the researcher in developing the methodological framework. This model consists of five interrelated steps – initiation, orientation, preparation, facilitation and evaluation, respectively. The initiation step commences with the first contact with the client in respect of a potential consulting project and the subsequent steps through which consulting psychologists proceed to orientate themselves to the specific requirements of the project, to prepare for the intervention and then to facilitate and evaluate the intervention. The methodology for applying the String Model is described in terms of each of these steps. The actions required by the researcher in each of the steps of the consulting process were described in detail.

As the String Model had never before been applied in practice, several instruments had to be created in order to enable the researcher to utilise this model effectively. Furthermore, the methodology upon which the researcher decided demanded that not only the researcher but also the participants (clients) be able to utilise the String Model effectively. This placed additional practical requirements upon the researcher as it meant that the means had to be found to introduce String Model concepts to participants in a simple, understandable manner and to render these workable within the prescriptions of each consulting project. Given all these challenges, the final process consulting methodology was described.

The Initiation step was designed to cater for the discrete steps of an initial briefing by the project sponsor and an initial response thereto by the researcher (with insights aided by the use of an *aide memoir* containing the dimensions of the String Model).

The next step was anticipated to be the preparation of a written proposal to the sponsor, outlining the researcher's understanding of the client's needs and proposing clear objectives, an outline of the suggested process and timeframes, specific outputs and costs for the consulting projects. This step would be concluded with the notification of acceptance of the researcher's proposal by the project sponsor.

During the Orientation step, it was anticipated that the researcher would become more familiar with the requirements of the project. This was planned to be accomplished by conducting interviews with key role-players identified by the researcher and the project sponsor. The interviews, conducted on an individual basis, had the objective of gaining as much information about task and relationship variables in the consulting context as was practically possible.

Additional data was also collected from other sources, such as company records and documents. The information collected was integrated by the researcher and analysed and interpreted in String Model terms using various instruments developed by the researcher for this purpose.

A diagnosis of the consulting problem was made by the researcher and a tentative *modus operandi* was developed as to how to deal with the particular problem in process consulting terms. At this stage, the researcher returned to the project sponsor to discuss these issues and ensure that the sponsor's expectations would be met by the suggested methodology.

In the Preparation step, the researcher developed objectives for the facilitation step to come. On this basis, a detailed methodology for the facilitated intervention was prepared, including decisions as to the agenda (process) and the instruments and techniques to be used to bring the String Model to bear. The method of using these instruments and techniques was also planned in order to chart a way through the facilitated session and to ensure that the objectives of the consulting projects were achieved. These processes were described in detail in the chapter and examples of the instruments to be used were provided.

In Chapter 6, the results of the first attempts to deploy the Gestalt approach to consulting psychology, comprising a mental model (created and developed in Chapter 4) and a congruent methodological framework (derived in this chapter) are presented.

Chapter 6 describes the Intervention step of the consulting projects, presenting the results obtained by applying the newly developed approach in three separate consulting projects, at the individual, group and organisational levels respectively. In terms of the Evaluation step, the researcher discusses the results in terms of the String Model, the methodological framework and feedback from clients.

CHAPTER 6 RESULTS

6.1 INTRODUCTION

This chapter presents the results of the first attempts to apply the Gestalt approach that was developed in the preceding chapters, to consulting projects at the individual, group and organisational levels of consulting, respectively. This approach comprises a mental model, the String Model, which was designed taking Gestalt principles into account, to allow the consulting psychologist and his clients to perceive phenomena in the consulting domain and the relationships amongst these phenomena in a substantially different way to their conventional means of doing so.

Three case studies are presented, each structured in terms of the congruent methodological framework that was developed in Chapter 5. The first case study concerns the development of an individual development plan for a young executive in the aerospace industry who has been identified as having the potential for executive office in the company. The second case study addresses the requirement of the Board of Directors of a medium-sized healthcare company to improve its own performance. This group found itself being criticised in the press and by the management and employees of the company to the extent that company survival was being threatened. The third case study involves working with the executive team of a large gold mining company to derive an operational plan for the organisation for the next three years. This team was already operating at a relatively high level of performance in terms of its directly comparable competitors.

The results of each case study are presented and discussed in detail, together with relevant examples. Each case study also recounts the researcher's experience of using the mental model and the methodological framework during the deployment of the String Model in terms of the relevant phase of the consulting project.

After the case studies, various conceptual observations and practical considerations arising from the researcher's experience of using the Gestalt approach developed in the preceding chapters in the consulting situation are summarised and the implications thereof are explored in terms of both the String Model itself and the methodological framework. Informal feedback obtained from clients during and after the various phases is discussed. The chapter is concluded with a summary of the results.

6.2 RESULTS OF INDIVIDUAL LEVEL CONSULTING PROJECT

The first case study presented describes the results obtained by using the String Model and accompanying methodological framework to consult at the individual level. The context for the consulting project is the Missiles Division of a large company in the Aerospace Industry, owned fully by the South African government.

6.2.1 Initiation of individual level consulting project

This section describes the initiation phase of the individual level consulting project, detailing the approach by the client, the initial briefing by the project sponsor, the researcher's initial response to the project sponsor. It also describes the preparation, by the researcher, of a written proposal for an intervention to address the sponsor's needs and concludes with the acceptance thereof by the sponsor.

6.2.1.1 Approach by the client

The approach was made by the Executive Manager of the largest division of the company, the Missiles Division. The researcher had worked with the client on various organisational level consulting projects over the preceding eighteen months and the request to become involved in this individual level consulting project was made by telephone some two months after the previous consulting projects had been concluded.

6.2.1.2 Initial briefing by the project sponsor

The initial briefing between the project sponsor and the researcher is summarised below.

- Project sponsor

The sponsor of the project was the Executive Manager of the Missiles Division. According to the Executive Manager, the scope of the project was to develop a comprehensive, integrated Individual Development Programme (IDP) for an individual by the name of Peter, that would facilitate his development over the next two years and ensure that he would be able to take his place on the management team of the division (and ultimately within the larger organisation) with the greatest probability of success.

- Issues that led up to the consultation request

The project sponsor described various issues that led up to the consultation request. Firstly, given that the organisation is wholly owned by the government, there is tremendous pressure to transform the workforce of the organisation at all levels until it is representative of the demographics of the country. At that stage, the management team of the company was composed entirely of white managers.

The company has taken the issue of transformation very seriously and has several initiatives in place to identify, develop and promote the development of HDSA talent within the organisation and to supplement this with bursary schemes at universities and technikons to secure a flow of talent into the organisation from the lower levels. These initiatives are required by a plethora of interconnected South African legislation, such as the Employment Equity Act and the Skills Development Act.

The project sponsor stated that such initiatives alone will not produce the short-term transformation results required by government and the company has recruited a number of well-qualified and experienced HDSA individuals who are to be fast-tracked within the organisation and who will be groomed to take up senior management positions within the company within twelve months. At the same time, the business imperative of remaining competitive in a highly complex and competitive market that relies heavily on leading edge technology and intellectual capital was being driven by the organisation's owners. The Chief Executive Officer of the company had been removed from office for not being able to ensure the profitability of all the divisions and consultants appointed to audit the various divisions for the purposes of identifying those which could be sustainable business and those that could not.

The Executive Manager added that the division had a very poor record of developing historically disadvantaged to management positions. Several reasons for this were proposed, including passive resistance of some managers within the organisation, the lack of development candidates with the required potential, the constant loss of candidates with potential because they were marketable and lack of credibility on the part of the organisation's human resource development function. Peter was to be developed for the position of the Facilities Manager of the Missiles Division. (Further background details in respect of Peter were presented in Table 5.1.)

6.2.1.3 Initial responses by the researcher

During the initial meeting, the researcher listened to the project sponsor, asked questions for clarity and made notes in terms of the String Model on Annexure 1. This required the researcher to think and interpret the information that the project sponsor was providing in terms of the String Model and its dimensions. These notes were then used to ask *String-related* questions, to make observations and to serve as information for later analysis by the researcher.

Table 6.1

Examples of String-Related Questions Asked During Individual level Project Briefing.

String Dimension	Related Question
Shape	Do any competency profiles, job profiles or job descriptions exist for the position of Facilities Manager?
Nurturing Ability	Are there any IDP's currently in place?; Do you regard them as appropriate?
Infobility	What are the most important sources of information for a Facilities Manager?
Organic Intellect	What are the most critical areas of knowledge and skills
Rotational Flexibility	How ready is Peter to embark on this project? How amenable is he to the idea?
Valence	Who are the most important or powerful individuals or groups that a Facilities Manager has to relate with?

During the interview, it was neither possible, nor appropriate to think of (or ask) questions in terms of all the dimensions of the String Model. The dimensions of the String Model were used to guide the researcher in thinking about relevant aspects that could be enquired about in a diagnostic sense. The researcher recorded observations and made notes on an Interview Form. Further information resulting from this initial briefing session is presented in Table 6.2.

The researcher's attempts to interpret the project sponsor's responses and to respond in String Model terms in the moment proved to be quite difficult. This was due to the researcher's relative inexperience in using the String Model for this type of interview and on this type of consulting project, i.e. for the development of an individual development programme, as well as the relative difficulty in forcing oneself to focus on the situation using the String Model, rather than a more familiar approach, such as asking what the concerns, strengths, challenges, people, etcetera were, in a general sense.

The researcher experienced some difficulty in differentiating observations and questions related to the individual from (in this particular case) contextual phenomena related to the group and organisation, as separate entities. All three entities could be described in String Model terms. For example, in this case, Nurturing Ability may be considered in the context of the individual (Peter's ability to nurture relationships with important role-players), group (ability of the management team, of which Peter is a member, to nurture relationships among the members) and organisational (ability of the organisation itself to nurture relationships with employees).

The researcher decided, during the interview, to collect information in respect of all three levels and to reflect upon the value thereof after the meeting. Hence, organisational-level questions such as those related to Infobility (see Table 6.1 above) were asked because they seemed very relevant to the ability of the individual to perform his job and thus, for consideration in terms of inclusion in the IDP. Since, however, individual, group and organisational level phenomena were important in this case, the researcher found that the String Model dimensions did provide very useful prompts for thinking about the consulting project in terms of phenomena and their potential interrelationships, at all three levels of the client system.

At the conclusion of this meeting, it was agreed that the researcher would prepare and submit a formal proposal for the consulting project to the project sponsor. Using the String Model as a guideline focused the discussion on important dimensions, such as Infobility, Producing Ability, Valence and Organic Intellect. Upon reflection on the discussion with the project sponsor, the researcher thought that the need for an IDP to be created was perhaps a means for the organisation to deflect the contact boundary and the responsibility for the recognition and development of Peter to an external party (the researcher) and to a location outside of the organisation (a consultant), rather than contacting with the issue themselves.

6.2.1.4 Written proposal to the client

The researcher then prepared and submitted a written proposal to the project sponsor in respect of the consulting project according to the framework specified in Chapter 5. The proposal outlined the steps in the process of developing the IDP but did not provide specific details as to the procedure and instruments to be used. Accordingly, the String Model was not mentioned in the proposal, but was referred to briefly as a conceptual model that would be used to facilitate the process of holistic, integrated, creative thinking that deconstructs (as far as possible) any sedimented perspectives of the individuals in terms of the job of a Facilities Manager and the process of developing Peter's IDP.

The researcher received confirmation of acceptance of the written proposal from the sponsor approximately one week after it was submitted. The project sponsor stated his approval for the commencement of the project and suggested logistical arrangements in terms of the availability of members of the management team.

6.2.2 Orientation to individual level consulting project

Relatively little general orientation was required by the researcher for two reasons. Firstly, the researcher had been exposed to the sponsoring company for approximately two years, having assisted in the facilitation, development and implementation of business strategy for the management teams of several of the operating divisions of the company as well as the design and implementation of a human resources strategy and plan flowing from the overall business strategy. Peter (and the various members of the management team referred to in this case study) had been exposed to the researcher on several occasions, in terms of both business strategy and the various human resources management initiatives. Some project specific orientation was, however, undertaken.

The project sponsor and the researcher met with Peter and the project sponsor and researcher briefed him about the consulting project. Previous exposure to one another eased the process of interacting with Peter considerably. There was no need for the establishment of either party's credibility as would have been necessary with a first contact. Peter was very positive about developments and about the process suggested by the researcher. By this time, the researcher had reflected on the consulting situation in String Model terms and explained each of the dimensions in the context of Peter's environment.

6.2.2.1 Individual interviews

The researcher then met with Peter in his office on a one-on-one basis and presented to him the researcher's understanding of the goals of the project as specified by the project sponsor. This was done in an open, transparent manner. The researcher presented the suggested process and procedure to Peter, who accepted the process and the dimensions of the String Model at face value, but expressed an interest in being taken through the process by which the model was developed.

Interviews were also conducted with members of the organisation's management team. The following is an integration of their perspectives with regard to the development of an IDP for Peter.

- Most respondents regarded Peter as having a very realistic view of the company and the fact that he needed to fast-track his own experience and learning in order to succeed at the management level. He is confident and sure of himself. He is eager to develop and to accept the challenges that will be presented to him. There are several areas that will require attention that is not normally accorded to a relatively young individual with a technical background in a company such as this. (From the managers' perspective, Peter had positive Valence for them.)
- Peter has a technical engineering background (Shape) that will enable him to understand most of the technical issues in the company (Organic Intellect), many of the aspects required for the design of, for example, unmanned aerial vehicles, radar-systems or electro-optical-systems, are not to be found in formal qualifications anywhere but are only developed by ultra-specialists in this cutting edge technological environment.
- Although he has had several years of working experience behind him, Peter has not yet functioned at the managerial level within an organisation such as this. The challenges of management in this exceptionally technical environment are great, particularly for a transformation candidate in a very conservative culture. Questions arose about Peter's Rotational Flexibility (his ability to adapt to changing demands and continue to perform at a high level, constructively managing the consequences of being a young, HDSA individual on a fast track in a conservative organisation).

- A further set of challenges is posed by the breadth of knowledge required of an individual on this company's management team. In addition to technical and managerial knowledge, there is a commercial orientation and awareness required in terms of making the business successful on a technical basis. Members of the management team have a strategic planning function, are required to participate in marketing and sales teams to close contracts with overseas clients and to be responsible for establishing and managing budgets, quality assurance and other interdisciplinary functions. Until now, Peter has been predominantly technically (Engineering) focused. (Organic Intellect, Organic Integration, Infobility, Rotational Flexibility, Capacity.)
- Kilburg (in Lowman, 2002a:120) states that there "is causal connectivity between the individual, group and organisational levels". Kilburg (2000, p.21) emphasises the importance of "diagnostic acumen", meaning that the consulting psychologist must be able to watch and listen to structures, processes and content of individuals, groups and organisations and deconstruct in terms of the various levels and the impact that these variables have upon one another. According to Kulas et. al. (in Lowman, 2002a), consulting psychologists must be able to function so as to span the individual, group and organisational levels of consulting effectively.
- Thus, the cause of problems in an organisation may lie in problems manifested by important individuals, groups or the overall culture of the organisation. Attempts to fast track individuals such as Peter had failed previously. The question of the Valence of the organisation toward HDSA individuals and the Nurturing Ability (in terms of the individual) were issues that the researcher considered and mentioned to participants who did not disagree that it would be very difficult for the IDP process to succeed if they, themselves, did not drive the process.

6.2.2.2 Collection and analysis of pre-existing data

The following documentary sources of relevant data were identified by the researcher and collected during the preceding steps in the orientation phase:

- Human Resources Development policy;
- Job analysis report prepared for the job of Facilities Manager;

- Examples of the organisation's existing Individual Development Plan format;
- The individual's curriculum vitae; and
- Copies of the individual's performance appraisal report for the past two years.

Further comment in terms of the information yielded by these documents is provided in Table 6.2.

6.2.2.3 Integration and interpretation of data collected

In order to facilitate the transition from the Orientation Phase of the consulting project to the Preparation Phase, the researcher integrated his notes from the Orientation Phase of the consulting project as reflected in Table 6.2 below.

Although formal organisational policy supported transformation through the development of HDSA candidates, the climate and culture within the organisation was not yet conducive to the rapid development of a HDSA candidate for such a senior position because, although everyone in the organisation had heard about the drive towards HDSA representation, very few such candidates had been appointed to any senior position. HDSA candidates were perceived to be "somewhere out there" – at technikon or university somewhere – in the background, not in the foreground.

The researcher tentatively planned to identify and establish contact with key individuals on the management team who could leverage the project in the required direction and inject the required momentum (Rotational Flexibility). This would be in an attempt to clearly bring Peter (and his IDP) clearly into the foreground, at least in these key individuals' minds. They would have to recognise and differentiate Peter as an entity and understand and contact with him. The real challenge of the project would be to garner the support of, particularly the members of the management team, by enlisting their aid and getting their involvement and support in designing and actualising a suitable development plan. Their support of Peter and the IDP would also lend credibility, both to Peter and to the IDP.

Table 6.2*Integration and Interpretation of Researcher's Notes from the Orientation Phase of Individual Level Consulting Project*

DIMENSION	DEFINITION	INTERPRETATION
Shape	The inherent, unique form or structure of an entity, which differentiates it from its environment.	<ul style="list-style-type: none"> • The organisation is really part of (wholly owned by) the government and subject to its prescriptions in terms of shape) • Given that Peter is an HDSA candidate, he has some of the elements of the right shape for the client system • Peter is striving to take on the profile of a senior manager in the organisation
Hunting Ability	The ability of an entity to become aware of relevant opportunities in the interactive field, to initiate contact with these and to conclude appropriate transactions of the required scope, standard and frequency.	<ul style="list-style-type: none"> • Peter has recognized the potential for growth, development and the attainment of his personal goals. He has initiated contact with the opportunity to become a senior manager and is phenomenologically engaged in
Nurturing Ability	The ability of an entity to prepare for, foster and support contact with the interactive field, that is appropriate and contributes to its well-being.	<ul style="list-style-type: none"> • The super-ordinate system (government) is actively nurturing the development of HDSA candidates • Conservative individuals in the client system do not engage in contact with Peter and he gets little visible, felt nurturing from them • There are individuals in the client system who can coach, guide and mentor Peter, from the technical, managerial and personal growth perspectives • Peter has actively sought out a number of amenable individuals whom he says can nurture his development
Producing Ability	The ability of an entity to attain or produce meaningful results through its interfaces with the interactive field, according to its reason for existence.	<ul style="list-style-type: none"> • Is it possible that any HDSA candidate can produce in this environment if the others in the system resist recognising or making contact with him as an entity in his own right, who is there legitimately and is not just part of the background? • In terms of his Shape, Organic Intellect and Infobility, Peter certainly has the potential to produce meaningful results
Infobility	The ability of an entity to discern appropriate information from the interactive field, to render it usable in terms of medium and format and to channel this information accurately and timeously to the relevant receptors.	<ul style="list-style-type: none"> • Peter has slotted into his current position and established relationships with a number of key people from whom he can glean appropriate information • Peter has good communication skills and can use these to foster relationships and collect information • There is a danger that some individuals may restrict or block information to or from Peter • Peter is also a member of the Executive Committee which will further enhance his ability to detect appropriate information

Table 6.2 (Continued)*Integration and Interpretation of Researcher's Notes from the Orientation Phase of Individual Level Consulting Project*

DIMENSION	DEFINITION	INTERPRETATION
Organic Intellect	The structure, functioning and dynamics of the various types of intelligence of an entity and the application of these to aspects that are meaningful to it.	<ul style="list-style-type: none"> • By all accounts, Peter has the necessary intellectual ability to be able to develop into the job. He requires more technical and managerial experience and skills. • Observation of his behaviour indicates that he is able to utilise emotional intelligence in his contact with people in his interactive field
Rotational Flexibility	The degree to which an entity is able to adapt to changes in the interactive field and to constructively manage the energy liberated in the adaptation process.	<ul style="list-style-type: none"> • The environment is staffed by conservative people who traditionally resist this type of change • There is fear and anxiety related to the potential for being ejected from the system to make space for HDSA candidates, which increases the resistance greatly. Many barriers are placed in the way of any HDSA candidate • Peter himself is mobilised for the challenge and is ready to grow, despite some expressed need to hold back somewhat
Valence	The attractiveness of an entity to other entities in the interactive field, at a particular time.	<ul style="list-style-type: none"> • Peter has made himself attractive to the company – he has been noticed and his potential for development has been recognized • Peter enjoys working in the industry, in the company and aspires to be a Facilities Manager, despite the barriers that he is aware of and acknowledges – it is attractive to him • There are undoubtedly elements in the client system that will attempt to block Peter, probably in a passive-aggressive sense or by blaming him (or the government) for their own lack of career progression
Capacity	The energy that is present in the entity at a particular time (contained in the entity's Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility).	<ul style="list-style-type: none"> • There is substantial energy present in the super-ordinate system and in the Missiles Division, although much of it is being directed in opposition to the desired changes • The depression, anxiety and neurosis present in the Missiles Division makes it unlikely that this division can perform optimally as energy is being diverted to, for example, hunting for new jobs outside the system
Organic Integration	The extent to which an entity is in equilibrium within itself and with its interactive field.	<ul style="list-style-type: none"> • The larger organisation is not in equilibrium as it struggles to make itself representative of the demographics of the country. • The Missiles Division is not in equilibrium because various individuals and groups are opposed to the idea of HDSA candidates – which they believe to be externally imposed reverse racism

6.2.2.4 Finalisation of formal objectives

Based on the initial briefing from the project sponsor and the information gathered by the researcher during the orientation phase, the researcher developed the following formal objectives to guide the process of developing the individual's IDP.

- To assist Peter in formulating and understanding the purpose of the job of Facilities Manager in the context of current developments in the company and in the aerospace industry;
- To assist Peter to define the ideal profile of an excellent Facilities Manager, in accordance with the stated purpose of the job (its reason for existence);
- On the basis of the outputs of the abovementioned, to facilitate an evaluation of Peter's current profile, against the ideal profile;
- In the light of Peter's current profile and the ideal profile, to determine strategic priorities for Peter's development; and
- To define and describe the action required from Peter and from the organisation, in order to drive forward the identified strategic priorities, with key milestones and responsibilities.

6.2.2.5 Confirmation of the researcher's understanding

The researcher met with the project sponsor, by appointment, to discuss the interpretations presented above and the tentative way forward in the development and implementation of the IDP. The project sponsor reacted to the researcher's presentation by approving the objectives of the project and the proposed process of developing the IDP. He stated that it seemed to be a very intensive process and expressed the hope that the resulting IDP would be practical and implementable. The project sponsor accepted the interpretations presented to him by the researcher and agreed with them, but seemed to be somewhat disheartened by the amount of work that the process seemed to forecast. He also seemed somewhat sceptical of any type of intervention being able to change the perceptual fields of some individuals and bring any HDSA candidate into constructive contact with them.

The project sponsor assisted in identifying four of members of the management team, who were judged to be the most influential and most likely to drive such a project forward. The project sponsor concluded by reinforcing the importance of this project and the fact that both the individual and the organisation would have a great deal to lose if the project failed to develop Peter into a competent Facilities Manager. His perspective may be summarised in the quotation "We just cannot afford to get this one wrong".

6.2.3 Preparation for individual level intervention

The researcher's preparation focused on how to meet the formal objectives of the consulting project, as approved by the project sponsor. This preparation involved the first formal application of the String Model in practice, using the methodological framework that was developed in Chapter 5. This included the following activities:

6.2.3.1 Confirmation of methodology

Given the objectives described in the preceding section, the following methodology was confirmed for this specific consulting project.

6.2.3.2 Instruments and methods of use

The following instruments, which had been developed by the researcher, were selected or prepared for use on this specific consulting project.

The researcher set about calibrating the String Model in terms of the expected demands of Peter's future position on the management team. The definitions of the String Model dimensions that were presented in Chapter 4 were used as the entry point for discussions.

The calibrated form of the String Model dimensions was aimed at creating a specific description (or figure) of, for example, of what the dimension Valence meant for a Facilities Manager in this particular organisation. The researcher engaged with Peter to encourage him to work through the calibration process and to be an active participant in it, in terms of his buy-in and to utilise his knowledge of the organisational environment and the job of a Facilities Manager.

Table 6.3*Instruments Selected And Prepared For Individual Level Project*

Instruments	Remarks
Guideline to String Model (See Annexure 1)	Used as described in Section 6.2.4.6, but referred to throughout the consulting project.
Interview Guideline (See Annexure 2)	Used as described in Sections 6.2.1.3 and 6.2.2.1.
Integration Form (See Table 6.2)	Used as described in Section 6.2.2.3 but referred to throughout the rest of the consulting project.
Project Calibration Guideline (See Table 6.4)	Used as described in Sections 6.2.4.7 and 6.2.4.8, but constantly referred to by the researcher throughout the Intervention Phase.
Guideline Presentation (Based on the outputs of Chapter 4)	Used as described in Section 6.2.4.6.
Description of Ideal State Questionnaire (See Figure 6.1)	Used as described in Sections 6.2.4.7 and 6.2.4.8.
Assessment of Current Performance Questionnaire (See Figures 6.1 and 6.2)	Used as described in Sections 6.2.4.7 and 6.2.4.8.
Relative Priority Calculation Spreadsheet (See Table 6.5)	Used as described in Section 6.2.4.9.

Peter then approached the project sponsor to review the operational definitions of each of the String Dimensions. Several additions were made, mostly based on the sponsor's strategic and experienced view of the type of development that Peter would require in order to have the greatest probability of being a successful member of the management team. The calibrated form was finalised for presentation to the management team. The final, calibration of the String Model for the development of Peter's IDP is presented in Table 6.4.

Table 6.4
Calibration of the String Model for Individual Level Project

DIMENSION	CONTEXTUAL DEFINITION
Shape	The biographical details of the individual, seen in terms of the purpose of the job.
Hunting Ability	The ability of the Facilities Manager to identify relevant and appropriate opportunities and to conclude appropriate transactions of the required scope, standard and frequency to optimise the results of such opportunities, according to the purpose.
Nurturing Ability	The ability of the Facilities Manager to prepare for, foster and support relationships with all stakeholders that are appropriate and that contribute to the overall well-being of stakeholders.
Producing Ability	The ability of the Facilities Manager to cause or bring about results (products or services) according to its reason for existence and in terms of appropriate standards of quality, quantity, cost and sustainability.
Infobility	The ability of the Facilities Manager to discern appropriate information from the environment and to render it usable in terms of medium and format and to channel this information accurately and timeously to the appropriate receptors.
Organic Intellect	The inherent structure and state of the various types of intellect and the application of this to appropriate and relevant problems in terms of the purpose of the Facilities Manager, the Programme and the Company.
Rotational Flexibility	The ability of the Facilities Manager to adapt to changing demands and to continue to perform at the required level, whilst constructively managing the energy liberated in the process
Valence	The combining power of the Facilities Manager at a particular time, in a manner that is congruent with the purpose of the job.
Organic Integration	The manner in which the Facilities Manager is organised, systematized and coordinated.
Capacity	The maximum amount of Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility that the Facilities Manager has at his disposal at a given moment in time.

6.2.4 Intervention in individual level consulting project

The following sections outline the results obtained during the intervention phase of the project. The identified members of the management team, the project sponsor, Peter and the researcher were present at the first session, which lasted approximately three hours.

6.2.4.1 Sponsor's introduction and endorsement

The project sponsor introduced the researcher to the participants and outlined his expectations of the consulting project. These included the importance of this process in the eyes of the owner of the organisation and the management team of the Missiles Division. It was emphasised that such developmental processes had failed to yield the desired outcomes in the past, but that failure was no longer an option as the organisation needed to become legitimate (of more acceptable Shape) in the eyes of the owner. The researcher wondered to what extent the sponsor was introjecting the need to appoint senior HDSA candidates and putting the responsibility for the IDP outside of the Missiles division.

The sponsor stated that the organisation needed to nurture the additional skills required to bolster its intellectual capital in an increasingly complex and competitive business environment. The sponsor concluded that he would personally take responsibility for the success of this project. Here, the project sponsor verbalised that he was personally making contact with the IDP process. It was interesting to note his vocabulary changing to introduce specific String Model words like Nurturing and Producing Ability.

6.2.4.2 Creating rapport with participants

The researcher greeted the members of the management team, introduced himself and proceeded to make the following presentation utilising pre-prepared slides.

6.2.4.3 Presentation of objectives and agenda

The researcher presented the objectives of the consulting project (as per Section 6.2.2.5). There was virtually no response to the objectives from the audience and no questions were asked. The researcher wondered whether this was because they agreed with the objectives,

whether the researcher had not yet become differentiated from the background or whether the participants were resisting making contact with the researcher or the issue at hand.

6.2.4.4 Feedback in terms of String Model dimensions

The researcher presented feedback to the participants, based on the interpretations made in Figure 6.2. The feedback from the researcher was discussed. The reaction of the participants was generally positive and constructive. Peter and the project sponsor were actively involved in the discussion and one of the participants even asked Peter how he felt about the feedback and how he saw the process going forward. Positive contact was being made between Peter and the other participants.

It was agreed that process should be continued and even accelerated. It was also agreed that the final product be presented to the full management team for comment, prior to implementation. It would be essential to expand the recognition of Peter as a unique figure in the foreground of the organisation's interactive field to the whole management team (and then also further to other individuals and groups in the organisation over time).

6.2.4.5 Anchoring in terms of purpose

Peter presented his understanding of the purpose of the job of a Facilities Manager to the members of the steering committee.

“The purpose of the job of the Facilities Manager is the strategic, tactical and operational business management of all facilities and specialised employees within the organisation, the contracting of suitable aerospace programmes, and the management of their development, production and product support. This is done in pursuit of sustainable excellence and profitability.”

There was much constructive debate about the job of the Facilities Manager and there was general agreement amongst participants in the above regard. The purpose of the job was accepted as a guiding principle for the discussions that followed. The researcher experienced this part of the process as the beginning of constructive contact between the managers with the job of a Facilities Manager and with Peter as an individual.

6.2.4.6 Introduction to the String Model

The researcher then presented the dimensions of the String Model to the management team, utilising a pre-prepared form (See Annexure 1). The actual String Model (such as it is presented in Chapter 4 was not presented at this forum).

6.2.4.7 Development of ideal state in String Model terms

The researcher worked with the group to define the ideal state in terms of performance of the job of a (hypothetical) successful Facilities Manager in String Model terms in the organisation over the next five years. The researcher attempted to harness some of the intellect of the managers and to link and integrate this (Organic Intellect). Participants also took into account the organisation's strategic intent and core competencies, taking these vital elements from the background and bringing them into the foreground in a meaningful manner. This debate was most useful in that it liberated a significant amount of knowledge that was contained within the individuals.

The contact between the participants and with the subject matter was being positively experienced. The value added by this process was discussed for several minutes, raised spontaneously by the project sponsor, who stated that he doubted whether such latent knowledge had ever been made explicit in the history of the company. Another participant said, "I've never thought of any position this clearly before" – an indication of strong figure formation.

From a systems perspective, this liberation of knowledge could have an effect at the individual level (on the individual participants, especially Peter), whose awareness and insight into the job of a Facilities Manager was being facilitated (nurtured) in a unique way; on the group of key managers in terms of the interaction amongst them, using the String Model to help them to focus on figure phenomena and making latent knowledge real; and for the organisation, making latent knowledge real and influencing the way in which this type of work could be extended in the future.

The four managers provided an assessment of the ideal level of performance on each of the String Model dimensions for a successful Facilities Manager. This was done using the Description of Ideal State Questionnaire, projected onto a screen with a data projector. At

this stage, Peter observed quietly still maintaining attentive concentration on the process. Much debate ensued around each of the dimensions, but finally, consensus was achieved on a numerical assessment.

6.2.4.8 Review of current performance in String Model terms

The four management participants and the project sponsor were asked to rate Peter individually in terms of pre-prepared Assessment of Current Performance Questionnaire which had been developed on the basis of calibration of the String Model. Each of the four managers provided their own perceptions of his performance on each of the dimensions of the String Model. Peter also provided a rating of his own current level of development on each of the String Model dimensions. The researcher input the data into a pre-prepared spreadsheet and presented the results to the participants for discussion.

The researcher spoke to Peter during a short break and he confirmed that he would like to proceed with the process, making even his own assessments known to the managers. The researcher was satisfied with this, as it maintained the unity of experience and contact created by the process and indicated Peter's trust in the other participants. The results of the review of Peter's current performance by the four managers and of Peter's own assessment of his current readiness to operate as a Facilities Manager are presented in Figures 6.1 and 6.2 below.

From their position at this particular point in time, the managers had developed a String Model profile for the ideal Facilities Manager (in the context of Peter's IDP) on each of the String Model dimensions as follows. Shape, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Organic Integration were required to be strengths, whilst Hunting Ability, Rotational Flexibility, Valence and Capacity were required to be at least reasonable.

As illustrated in Figure 6.1, the managers assessed Peter's current status in terms of Nurturing Ability, Infobility, Organic Intellect and Organic Integration as reasonable, with Shape, Hunting Ability, Producing Ability, Rotational Flexibility and Valence identified as relative concerns at this stage of his development. The researcher presented this feedback to the participants.

Figure 6.1

Assessments of Current State versus Ideal State in terms of Peter's Readiness to Operate as a Facilities Manager

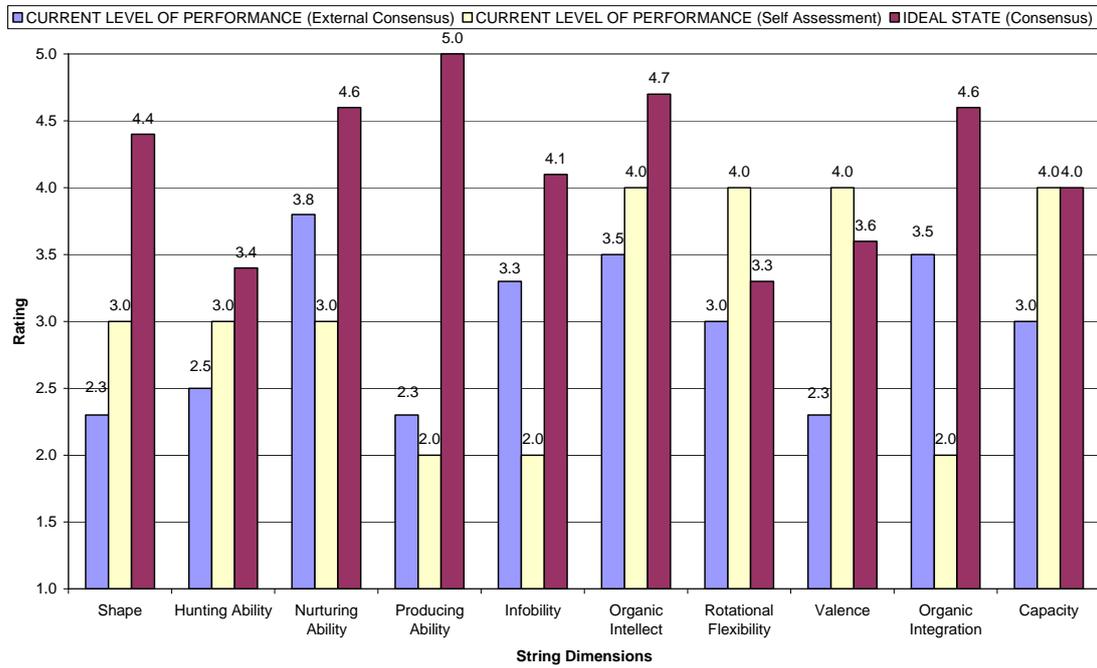
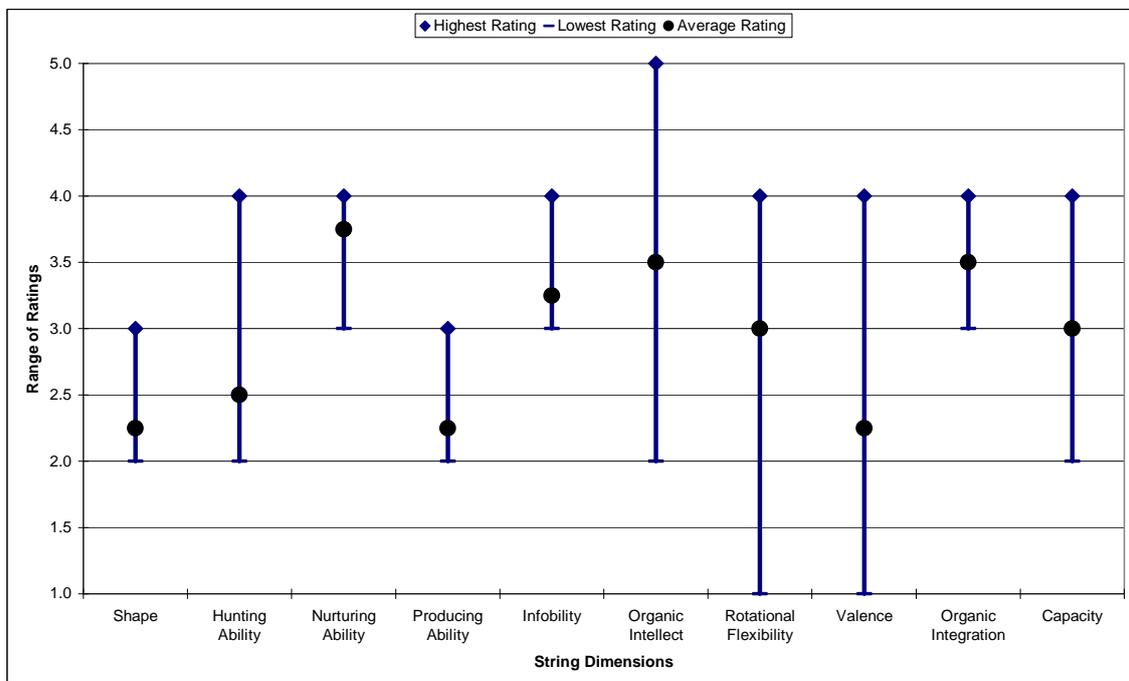


Figure 6.2

Range of Ratings in respect of Peter's Current Readiness to Operate as a Facilities Manager



In most cases, raters were able to justify their ratings in terms of an aspect of the String Dimension that had not been considered by the other raters. In some cases, there had been disparate interpretations of the meaning of the String Dimensions in the context of the IDP and what should be included or excluded and these were resolved during the discussion. The researcher indicated to the participants that the discussions about the job of a Facilities Manager and about Peter's development in this context were more important than the quantitative assessments on the String Model dimensions. He reminded them that the String Model dimensions were there to provide a substrate or tool to guide and structure the discussion.

The wide range of ratings on many of the String Dimensions indicates different perspectives and levels of awareness on the part of the raters – what Latner (1992) refers to as contact difference. Raters were consistent in terms of their ratings of Peter on Shape, Nurturing Ability, Producing Ability, Infobility and Organic Integration. A wide range of ratings was recorded in terms of Hunting Ability and Capacity, with a very wide range of ratings in terms of Organic Intellect, Rotational Flexibility and Valence.

The following specific comments are made regarding the ratings in Figures 6.1 and 6.2 above.

- Raters said that there was some work to do in terms of relationships (Nurturing Ability) with key role-players (also improving Infobility), establishing peer relationships and credibility. Peter will have to demonstrate more Producing Ability which would improve his attractiveness (Valence) to some key roleplayers.
- Peter's relative lack of experience (Shape associated with a Facilities Manager) renders him less than optimally flexible in terms of the different roles that a Facilities Manager has to fulfil. There was general acknowledgement amongst the raters that Peter himself has the Rotational Flexibility to develop into these roles in a fairly short period of time. At this stage, Peter (as figure) had clearly become distinguished from the background. All participants seemed to be interested in the here and now task and were contributing in a constructive manner.
- The raters have a healthy respect for Peter's intellect (the individual aspect of Organic Intellect), and there was general agreement that his basic competencies

(Shape) provides a solid foundation from which to launch his management career. He needs to develop a great deal of organisation specific and aerospace industry related knowledge and skills (further differentiate himself from the background in terms of Shape).

- Peter has had no real opportunity to identify new business opportunities and to contract these to the benefit of the organisation (Hunting Ability). This is a traditional shortcoming amongst predominantly technically oriented engineers in the organisation. In this case, this will have to be overcome. As Peter develops the appropriate Shape and nurtures relevant Infobility, he will be able to more easily discern relevant opportunities and contact with these. One of the managers responded to a question by the researcher, indicating that Peter had noticeably been making use of the opportunity to become a senior manager in the organisation (also Hunting Ability), by demonstrating his willingness to learn and engage with the work.

At this stage, the researcher thought that it was time to move to the next step in the process in an attempt to further clarify the participants perceptions of Peter and his developmental programme.

6.2.4.9 Assessment of relative priorities

Further analysis of this assessment yielded the relative priorities reflected in Table 6.5. The Relative Priority Rating was determined programmatically by subtracting the current performance rating from the ideal performance rating and multiplying the subtrahend by the ideal rating. Thus, the Relative Priority Rating is a function of ideal performance versus the size of the development gap.

These ratings were presented to the participants and discussed by them. The managers concurred as to the relative priority ratings, in the context of Peter's development. The following aspects were emphasised in terms of the top priorities for development. The researcher specifically attempted to ensure that participants translated their new understanding and awareness of Peter and of the job of a Facilities Manager into terminology with which they felt comfortable. This allowed them to integrate the new figure with their existing intrapsychic conceptualisations of their interactive field.

- **Shape:** Peter's ability to adopt the profile of, and operate like, a facilities manager in the context of the company.
- **Producing Ability:** the ability to deliver the desired results from the facilities under his leadership and management control.
- **Organic Integration:** a strong *helicopter perspective*, seeing the relationship between the various subsystems of the organisation and integrate and regulate the balance among these appropriately.
- **Organic Intellect:** technical, business knowledge as well as leadership and management skills, a thorough knowledge of the industry and linkages with the intellect appropriate individuals, groups and organisations.
- **Valence:** good visibility, credibility and interpersonal relationships with peers, superiors, subordinates and clients.

Table 6.5

Relative Priority Rating of String Model Dimensions on Individual Level Project

Relative Priority	String Dimension	Priority Rating
1	Shape	8,8
2	Producing Ability	5,5
3	Organic Integration	5,5
4	Organic Intellect	5,2
5	Valence	4,3
6	Capacity	4,0
7	Nurturing Ability	3,7
8	Infobility	3,3
9	Hunting Ability	2,7
10	Rotational Flexibility	2,3

6.2.4.10 Identification and development of key action imperatives

The identification and development of key imperatives began with a discussion of Figures 6.1 and 6.2 and Table 6.5. It was considered important to transform the action imperatives into terminology that was understood within the client system. This process renders the outcomes of the intervention more acceptable and easily understood in the client system. This debate and interpretation yielded the key action imperatives that are presented in Table 6.6, together with the ideal, future state.

6.2.4.11 Identification of proactive strategies and tactics

This process was focused on translating the Key Action Imperatives identified in Table 6.6 into specific action. In essence, the Key Action Imperatives specify *what* Peter would have to do to become a competent Facilities Manager, while the strategies and tactics specify the *how* action required to make Peter competent.

Table 6.6
Key Action Imperatives Identified for Peter

No.	Action Imperative	Ideal State
1	Leadership Development	Peter demonstrates the requisite strategic, tactical and operational leadership skills to fulfil the role of Facilities Manager
2	Managerial Development	Peter demonstrates the requisite strategic, tactical and operational managerial skills to fulfil the role of Facilities Manager
3	Business Skills Development	Peter demonstrates the requisite strategic, tactical and operational business skills to fulfil the role of Facilities Manager
4	Technical Skills Development	Peter demonstrates the requisite strategic, tactical and operational technical skills to fulfil the role of Facilities Manager
5	Personal Development	Peter has the requisite personal skills, as well as external and internal support required to manage his own life and career

6.2.4.12 Action planning

The process was rounded off by completing the *who*, *when* and *where* issues related to the implementation and monitoring of the IDP. A comprehensive IDP was finalised by the researcher and presented to Peter and the steering committee for their editing and comments. The end product was a complete IDP plan with outcome statements, prioritised projects and milestones for their achievement. An extract of the IDP which was developed for Peter is presented in Table 6.7.

6.2.4.13 Closure of facilitated intervention

An interim report, summarising progress up to this stage was completed by the researcher and Peter presented this to the project sponsor in order to obtain his input and approval to proceed to the step of formalising the actual IDP. The final IDP was presented to the project sponsor for final approval by Peter. This approval was forthcoming and the IDP has been implemented. The duration of the entire process was approximately three weeks.

6.2.5 Evaluation of individual level consulting project

The evaluation of the individual level consulting project was done in accordance with the methodological beliefs of the Gestalt approach that were presented in section 5.6.5. In terms of the stated objectives for the consulting project, the researcher and the participants' evaluations were that:

- Peter and the other participants had formulated and clearly understood the purpose of the job of Facilities Manager in the context of current developments in the company and in the aerospace industry. This had initiated the process of growth and development, not only for Peter, but for the other participants and the organisation (as shall be explained later on).
- Peter and the other participants had defined the ideal profile of an excellent Facilities Manager, in accordance with the stated purpose of the job (its reason for existence). This process was found to be very beneficial for all the participants and had placed Peter at an advantage in the organisation because he was one of the few who had contributed to deriving the ideal profile, something which had never been done in

the organisation's history. This served to distinguish Peter (as figure) from the background of other candidates in the organisation, in a positive light. It served to begin to change Peter's Shape. Participants applied themselves to this task in a positive and excited manner. They explored the job of a Facilities Manager in String Model terms and this process clarified the figure (Facilities Manager) in their minds, quite differentiated from any other job in the organisation and in terms of significant detail in terms of the ten dimensions.

- On the basis of the outputs of the abovementioned, Peter and the other participants evaluated Peter's current profile, against the ideal profile for a Facilities Manager. Although Peter's perspectives of his own developmental areas differed from those of the other participants, these incongruencies were managed in a constructive manner. Most of the incongruencies were due to differing depths of understanding and insight into the job of Facilities Manager amongst the participants. These were clarified and constructively resolved through contact with the issues and discussing them in a non-confrontational environment. One of the respondents stated that, "This is nothing new – but it just allowed us to put it all together". This *putting together phenomena* in the clients' interactive field, crystallising the phenomena (in this case, the figure of the Facilities Manager) into a figure in the foreground is one of the most important outcomes.
- The researcher and the participants were satisfied that, in the light of Peter's current profile and the ideal profile, the participants had determined the appropriate priorities for Peter's development and that they had obtained commitment from some very senior roleplayers to nurture the process of Peter's development by working with him in creating the figure of a Facilities Manager and contacting with him as a competent individual (correct Shape). Participants had defined and described the actions required from Peter and from the organisation, in order to drive forward the identified strategic priorities, with key milestones and responsibilities.

In terms of content, the IDP that was yielded by the process was holistic and complete. The IDP was developed with the input of key roleplayers in the client system, including the individual for whom the IDP was developed. In the post-intervention scenario, the researcher made contact with Peter and the other participants on a number of occasions,

both planned and informal (due to involvement in other consulting projects). One participant stated that, "This will allow us to work with any Facilities Manager more constructively and more productively in the future...we should look at all jobs like this".

Peter's IDP has now become the standard for the Missiles Division and may even become best practice in the broader organisation. The IDP (and the process of involving key roleplayers) in developing it, have been widely applauded in the organisation. These key roleplayers are actively nurturing Peter and the position of Facilities Manager.

Peter has been asked to present his IDP and the learning points from his experience of the process to the Employment Equity Sub-Committee of the Board of Directors of the organisation.

In terms of Peter's progress in terms of the IDP, two months later, three of the four managers involved in developing the IDP reported that the Peter was developing according to the plan and that the important roleplayers all knew and had bought into the plan. According to Peter, he had spent some time scheduling out the activities specified in the IDP and was "on track" with the action specified in the plan.

Peter reported that the organisation was being highly supportive of the plan and that it had gone from being something that he had to carry on his own to something that many senior people (even those who had not been involved in developing the IDP) were asking about and wanting to be involved in. Peter also stated, "I have been told that I may have a better understanding of what a Facilities Manager should be doing than many of our current Facilities Managers and that is due to thinking about the job in the way that we did".

The researcher remains in contact with Peter and with the project sponsor in an informal manner. Working formally with individuals, groups or with the organisation is strictly governed by the principles of procurement and corporate governance and the researcher has to keep the involvement informal unless approached to do so.

Table 6.7*Extract Of Individual Development Programme*

NO.	ACTION IMPERATIVE	ACTION
1.	Leadership development	
1.1	Strategic leadership	Develop scenarios for the future of the international aerospace industry over the next 20 years Secure XXXXX (Corporate-level executive) as mentor to Peter Attend Strategic Leadership Development Programme at XXXXXXXX
1.2	Exposure to leaders	Participate in local marketing tour to XXXXXXXXX Participate in international marketing tour to XXXXXXXX Represent the organisation at Corporate Business Planning meetings (as assistant to Executive Manager)
1.3	Organisational transformation	Considering Strategic Business Plan developments, identify and make recommendations in terms of specific Capacity requirements for every resource over time Define the current and desired organisational climate and culture and implement specific initiatives to transform the climate and culture to the ideal Design and implement a communication strategy for the organisation
1.4	People development	Act as mentor for P Ncgobo, T van der Nest and P Sherriff
2.	Management development	
2.1	Departmental orientation	Develop a suitable understanding of the functioning of each department in the organisation
2.2	Corporate-level orientation	Develop a suitable understanding of the functioning of each department in the corporate environment, especially in terms of structure and financing or funding processes
2.3	Corporate governance	Review organisational systems, processes, policies and procedures in terms of the provisions of good corporate governance and make recommendations for remediation Attend XXXX Corporate Governance training course
2.4	Conflict management and negotiation skills	Attend XXXX Conflict Management and Negotiation Skills training course
2.5	Product Support Manager	Assume full responsibility for this function
2.6	Programme Manager	Assume full responsibility for this function on the XXXX programme
2.7	Facilities Manager	Assume full responsibility for this function

Table 6.7 (Continued)*Extract of Individual Development Programme*

3.	Business skills	
3.1	Business processes	Define the value chain and value add of each process and make recommendations for improvement (particular attention to integration)
3.2	Industry interaction and network development	Represent organisation as member of corporate level team at international aerospace show (technical and business presentations)
3.3	Exposure to partners and suppliers	As Product Support Manager, evaluate efficacy of the supply chain and recommend improvements in terms of strategic developments in production requirements
3.4	Marketing strategy	Participate in the development of Marketing Strategy in the light of developments in XXXXXXXX
3.5	Flexibility in product range	Conduct market research to investigate requirements to create the necessary flexibility in the product range
3.6	Marketing	Accompany Executive Marketing team on campaigns to XXXXXXXXX
3.7	Business planning	Participate in the development of the organisation's 3-year business plan (in position of assistant to Executive Manager)
4.	Technical skills	
4.1	Custodian of technology innovation	Design and implement a formal plan for the development of strategic technology within the organisation
4.2	Industry interaction and network development	In accordance with anticipated product development strategy, keep abreast of key strategic developments in technology and establish appropriate network of contacts
5.	Personal skills	
5.1	Emotional intelligence	Attend XXXX Emotional Intelligence course
5.2	Executive coaching	Appoint external Executive Coach for regular interaction with Peter in terms of guidance and monitoring of development

6.3 RESULTS OF GROUP LEVEL CONSULTING PROJECT

This case study describes a consulting project conducted at the group level (a group of twelve directors) in the context of a medium-sized organisation in the Healthcare Industry.

6.3.1 Initiation of group level consulting project

The results obtained during the initiation phase of the organisational level consulting project are presented below in terms of the methodological framework specified in Chapter 5.

6.3.1.1 Approach by the client

The approach was made by the Human Resources Manager of the client company. The researcher had not worked with the client prior to this contact, but had completed various group level consulting projects for the Human Resources Manager whilst she was employed with a previous organisation in the healthcare industry.

6.3.1.2 Initial briefing by the project sponsor

The following sections summarise the initial briefing meeting between the project sponsor and the researcher.

- Project sponsor

The sponsor of the project was the Chief Executive Officer of the company concerned. The researcher was appointed to the consulting project at the verbal recommendation of another client in the same industry and after the submission of a written proposal to and a subsequent meeting with the sponsor.

- Issues that led up to the consultation request

The project sponsor described various issues that led up to the consultation request, including the observation that the functioning of the Board of Directors (BOD) was characterised by conflict, frustration and perceptions of non-delivery on the part of the Board by the members of the Board, as well as by management.

The survival of the organisation depended on the ability of the members of the BOD to secure appropriate deals with healthcare funders (such as medical aid companies and health insurance companies) and to increase the membership of medical doctors who utilise the network created by the company.

Current interaction between members of the BOD was characterised by strained relationships between group members and a great deal of infighting. There were sub-groupings with clearly different perspectives on which way the organisation should be heading and on what the task of the BOD was. The sponsor described the prevailing climate of the group as one in which everyone was being attacked or blamed for something.

The situation was taking its toll on individual directors and on the credibility of the BOD in the eyes of employees of the organisation, clients and the market. The situation was so bad that individual directors were resorting to slugging it out with one another in the national press.

6.3.1.3 Initial responses by the researcher

The researcher responded with a number of questions and comments that were directed at developing an initial diagnosis of why the BOD was experiencing this unhappy state and what could potentially be done about it. The researcher and the project sponsor discussed the following issues.

The researcher wondered if the members of the BOD had developed a clear, holistic picture in their experience, of what exactly the BOD was, what it existed for and whether this picture enabled it to be differentiated from other entities in their interactive field. The project sponsor agreed that members of the BOD probably understood the purpose (reason for existence) of the BOD differently and that this point of departure led to differing perspectives on what the BOD should do and how it should function.

Given the Shape of the individual members of the BOD (mostly medical doctors with little business training or experience), it was possible that, to many of them, the BOD constituted a rather nebulous and unclear experiential picture – it was not perceived as a Gestalt in its own right, with its own characteristic Shape, clearly distinguishable from the background which contained the management of their own private practices, the professional

management of the company as performed by senior management and the role to be played by shareholders (which most of the members of the BOD were). During the discussion, the researcher asked general String Model related questions, such as those in Table 6.8 below.

Table 6.8

Examples of String-Related Questions Asked During Group Level Project Briefing

DIMENSION	CONTEXTUAL DEFINITION
Shape	How is the BOD constituted? How is the BOD structured? How many members are there? Who are the members?
Hunting Ability	What opportunities exist for the BOD? What are the BOD's chances of realising these opportunities?
Nurturing Ability	How do the members of the BOD treat each other? How do the members of the BOD treat management and employees? How do the members of the BOD treat the healthcare healthcare funders?
Producing Ability	What significant achievements has the BOD made recently? Do the members of the BOD know what specifically the BOD must deliver?
Infobility	What is the state of communication between the members of the BOD? How do they obtain their information?
Organic Intellect	Do any synergies result from the interaction of the members of the BOD? In what areas does the BOD lack skills, knowledge or attitude?
Rotational Flexibility	How effectively is the BOD positioned to deal with the demands of the changing healthcare environment?
Valence	What is the image of the BOD in terms of the market, the BOD itself, management, employees and healthcare funders?
Organic integration	How well are the activities of the BOD systematised and coordinated?
Capacity	What is the current Capacity of the BOD in terms of time and other resources?

The researcher and the sponsor also discussed that it was probable that the current dysfunctional nature of the BOD had been exacerbated by structural issues of the BOD (Shape) potentially too many members (Shape) and people issues, such as the conflicting

priorities and perspectives created by the lack of differentiation of the BOD (lack of a meaningful Shape) in the minds of many BOD members. Many BOD members therefore avoided constructive contact with the concept of the BOD, responding in terms of their individual, undifferentiated experiences.

There was effectively no real concept of the BOD on any of the String Model dimensions, such as its Shape, what exactly it was to deliver (Producing Ability), how it would guide and manage itself (Nurturing Ability), what information needed to be channelled from which receptors to which receivers (Infobility), what intellect should be mobilised, what types of decisions it should make (Organic Intellect), or how to make the BOD attractive to other individuals, groups and organisations (Valence).

The responses of the project sponsor to these questions are integrated with the other data gleaned during the orientation phase and presented in the Integration Form (Table 6.9). The researcher stated that the members of the BOD would only be able to move closer together by engaging in facilitated conversation with one another in order to try and develop their awareness of, and insight into, the BOD in terms of the various String Dimensions. This would assist the BOD in becoming a clearly differentiated entity in the experience of these members. This could then be built upon to further develop a common understanding of important issues and how they should be handled. The researcher outlined the process that could be followed to begin to resolve the sponsor's problem and agreed to think further about the situation and to submit a formal proposal to the project sponsor.

6.3.1.4 Written proposal to the client

The researcher would then put in writing a formal proposal, providing an overview of the project as outlined in Chapter 5. The String Model was not described in the proposal, but was referred to briefly as a conceptual model that is used to assist the process of holistic, integrated, creative thinking. The researcher received telephonic confirmation of acceptance of the written proposal from the sponsor, the day after the proposal was submitted to the project sponsor.

6.3.2 Orientation to group level consulting project

The researcher took the following steps to orientate himself to the consulting project.

6.3.2.1 Individual interviews

During the orientation phase of this project, interviews were conducted with the following individuals:

- Members of the Board of Directors, individually (12 individuals);
- Members of the Executive Management team, individually (10 individuals, representing the heads of department of Finance, New Business, Marketing, IT, Human Resources, Networks, Medical, Operations); and
- A sample of shareholders (Medical Doctors in private practice), individually (14 individuals, elected by the other shareholders to each represent a particular geographical constituency).

Given the fragmented mindset of the members of the BOD, it was difficult at this stage, to encourage open and constructive participation by those interviewed. The researcher was conscious of the different factions and the risk of alienating them or being alienated by members of the BOD. The researcher tried to ensure that this did not happen by attempting to reassure the interviewees of his impartiality, the confidentiality of the interviews and by clearly explaining to each individual the researcher's role in the intervention as well as the format and expected outcomes of the facilitated session.

In a sense, the researcher felt that he was being made to seduce these roleplayers into entering into contact with him and with the task at hand. The researcher had to ensure his own Valence to the interviewees, and nurture their confidence in order to progress with the collection of data. The interviewees had to be encouraged to trust the researcher almost at face value, before the work session where the researcher's assurances could be tested. This highlighted to the researcher the observation by Weick (1993) that consultants often have to function effectively in situations where they have to talk before walking and still gain the confidence of their clients, rather than doing this by demonstrating that they walked the talk.

The researcher also experienced the need to consciously force himself to remain objective and impartial during these interviews and to respect where the participants were with regard

to many of the issues at hand (their apparent lack of differentiation, not only in respect of the BOD, but also of the company (organisation) and the various other groups (such as senior management). Many of the comments made by individuals were experienced by the researcher as being contrary to his expectations of what motivates medical doctors and, in fact, as discussed in Chapters 2 and 3, specific clashes of these clients' values with the researcher's own had to be very carefully managed by the researcher. For example, when listening to a number of BOD members who are also medical doctors, the researcher felt shocked at what he considered to be their greedy and money oriented approach to their work.

6.3.2.2 Collection and analysis of pre-existing data

The following data and information were reviewed during the orientation phase of this project:

- A Company brochure;
- Letters and other correspondence between members of the Board of Directors; and
- The Company Business Plan.

This data served to create a picture in the researcher's mind of the issues and behaviours that were preventing the BOD from operating effectively.

6.3.2.3 Integration and interpretation of data collected

An integration of the researcher's findings and interpretations in String Model terms, at the conclusion of the orientation phase is presented in Table 6.9.

It was common cause among the directors that the company had excellent prospects and growth potential in terms of the purpose of the organisation – it had the potential to bring them (in words often said to the researcher "a great deal of money"). The dynamic and free-flow nature of relationships amongst phenomena make it difficult to perceive a meaningful, unified Gestalt. According to Yontef (2005), there is a tendency either to focus too much on the *figure*, or not to be able to distinguish the *figure* from the *ground*.

Table 6.9*Integration and Interpretation of Researcher's Notes from the Orientation Phase of the Group Level Project*

DIMENSION	DEFINITION	INTERPRETATION
Shape	The inherent, unique form or structure of an entity, which differentiates it from its environment.	<ul style="list-style-type: none"> • The BOD has not embraced its common group identity – it is a collection of individuals, not a group • Confluence exists – the BOD is not distinguished clearly by members as figure, from the background variables – such as groups of shareholders (shareholders are also members of the BOD) • Many members of BOD are medical doctors and do not currently have the profile of directors of a business – qualifications etc – gaps in the Shape of BOD.
Hunting Ability	The ability of an entity to become aware of relevant opportunities in the interactive field, to initiate contact with these and to conclude appropriate transactions of the required scope, standard and frequency.	<ul style="list-style-type: none"> • Lack of differentiation in terms of role of BOD leading to inability to become aware of and engage in activities to make contact with opportunities and these are passing the BOD by – these opportunities are crucial at this stage
Nurturing Ability	The ability of an entity to prepare for, foster and support contact with the interactive field, that is appropriate and contributes to its well-being.	<ul style="list-style-type: none"> • Interpersonal contact within the group are severely strained – there is much backstabbing, • Zero nurturing directed at the BOD itself in terms of its processes and dynamics – growing and developing the BOD as a healthy work group • Intergroup contact, e.g. between the BOD and EXCO are equally strained – based on avoidance of contact (sending letters of complaint) • The super-ordinate entity (organisation) is suffering negative consequences as a direct result of BOD's behaviour
Producing Ability	The ability of an entity to attain or produce meaningful results through its interfaces with the interactive field, according to its reason for existence.	<ul style="list-style-type: none"> • The BOD is not achieving its primary task. Too much energy is being expended in conflict and anti-task behaviour and very little energy on the primary task of the BOD • Ubiquitous projection where individuals concerned with the non-delivery of results by almost all other groups and individuals • Impact of poor BOD performance impacting negatively on other groups such as EXCO, Senior Management ability to produce in terms of their primary task
Infobility	The ability of an entity to discern appropriate information from the interactive field, to render it usable in terms of medium and format and to channel this information accurately and timeously to the relevant receptors.	<ul style="list-style-type: none"> • BOD members avoid contact with each other and restrict vital information, creating gaps in the understanding and awareness of members

Table 6.9 (Continued)*Integration and Interpretation of Researcher's Notes from the Orientation Phase of the Group Level Project*

DIMENSION	DEFINITION	INTERPRETATION
Organic Intellect	The structure, functioning and dynamics of the various types of intelligence of an entity and the application of these to aspects that are meaningful to it.	<ul style="list-style-type: none"> • The intellect of the BOD is fragmented and directed in different directions. There is no organic linkage of intellect between the members that will facilitate integration and synergy • Members of BOD preoccupied with background issues – Department of Health and ego-centric behaviour, rather than focusing intellect on important aspects and decisions
Rotational Flexibility	The degree to which an entity is able to adapt to changes in the interactive field and to constructively manage the energy liberated in the adaptation process.	<ul style="list-style-type: none"> • Interactive field not well differentiated in many members of BOD's experience, therefore adaptation to changes in the field are ad hoc and haphazard – creates greater resistance and blockages in the functioning of the BOD • Negative energy liberated currently not being managed effectively and converted to positive energy or channeled in a positive manner
Valence	The attractiveness of an entity to other entities in the interactive field, at a particular time.	<ul style="list-style-type: none"> • Membership of BOD becoming unattractive to most members – many experiencing rejection, anxiety, frustration and even boredom • Other individuals, groups and organizations beginning to avoid and even dread contact with BOD – BOD has become unattractive to employees, EXCO, external funders • Unattractiveness of BOD leading to negative consequences for organisation as other groups no longer want to be linked with BOD
Capacity	The energy that is present in the entity at a particular time (contained in the entity's Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility).	<ul style="list-style-type: none"> • High, negative energy levels of BOD are directed at anti-task behaviour, avoidance of contact, projection, introjection, retroflection, splitting reduce capacity of BOD to function adequately
Organic Integration	The extent to which an entity is in equilibrium within itself and with its interactive field.	<ul style="list-style-type: none"> • Factions in BOD splitting off, pairing with others – individuals in conflict with one another – BOD in significant state of disequilibrium • Some members facilitating contact that the rest of BOD cannot cope with also creating disequilibrium in the BOD • BOD not differentiated in the minds of members and cannot become effectively integrated with interactive field – including clients and market

The researcher found a lack of differentiation in terms of the Shape of several important entities. The interactive field was not differentiated and no boundaries existed at the individual, group or organizational levels. While the elements of the field (such as the BOD, senior management, and the organisation) were distinct, the elements related to the BOD did not stand out in front of the rest and there was no contact, no figures and no boundaries. When the boundary does not exist, the elements are confluent.

On the other hand, the CEO was entirely absorbed in the figure of the BOD – as if he were, as Perls, Hefferline & Goodman (1951, p.51) describe, “staring at the figure”, transfixed by it and not aware of what is happening in the interactive field. According to Latner (1992), the absorption in the figure was so significant that the boundary had been dissolved as a function of figure formation.

There was no recognition of a unifying purpose for the Board. This related to the lack of real understanding of what the organisation actually was and how it was unique and distinguishable from other organisations in the field. The same situation existed in terms of the Shape of the BOD. A group of people working together quickly develops a unique life of its own (Koortzen & Cilliers in Lowman, 2002a). The seniority of this particular team and the role that it is expected to fulfil in terms of creating an enabling environment in which the company can flourish makes this requirement even more vital. However, the BOD itself was split into different factions and the executive and non-executive directors were mostly engaged in a struggle for control of the Board so that they could impose their particular perspectives of reality on the other parties. Once again, this implies a lack of differentiation of the interactive field, lack of Organic Integration and of Nurturing Ability.

There was a significant skills deficit in terms of both the executive and non-executive directors (related to Shape and to Organic Intellect). The non-executives are full-time, practising medical practitioners. Although two of these individuals have formal tertiary business qualifications, none of the non-executives have any significant experience of acting as directors. According to Lipnack and Stamps (1986), the team cannot realise the synergies of being a team if each member of the team is not independently competent in their own right. Everyone needs to understand their own roles and what is expected of them. Mechanisms must be in place to ensure that people are provided with the relevant skills where necessary. There was a clear deficiency in the BOD's Capacity.

Latner (1992) describes a group with strong feelings among the members or a task which engages them all, as a good figure, clearly defined, lively, well organized, cohesive. An apathetic group, without much common purpose, is not. At the extreme, an apathetic group is not a group at all, but an aggregate of individuals. They are elements in the field, but constitute no figure (in the sense of a group) at all. The BOD conformed to the latter description, although perhaps initially, they had attempted to act as though they were a group---perhaps because the individuals thought that they should be involved with the BOD, but (by many accounts) did not actually care to be involved with the group. Latner (1992) describes this as a recipe for a bad figure. The BOD's collective eye was not on the ball and certainly not on the same ball.

Resulting from the above, there was a distinct lack of Nurturing Ability in the BOD. The BOD was unable to prepare for, or foster meaningful contact with its primary task, amongst the members of the BOD or with other individuals, groups or organisations in the interactive field. In fact, the extent of psychopathology being manifested in the group was substantial. There were several alliances or splits within the group.

The current state of the BOD and the results (or lack thereof) that it was delivering (the group's Producing Ability) was having negative and demotivating consequences for the attractiveness (Valence) of the BOD amongst other shareholders, senior managers, employees and external groups and organisations, such as their healthcare funders and clients. Given the lack of clear figure differentiation in the BOD and the substantial amount of blocking, resistance and anti-task behaviour in evidence, the BOD could not respond effectively to the demands of the dynamic organisation (the BOD lacked Rotational Flexibility).

A distinguishing feature of successful organisations is voluntary links (Lipnack and Stamps, 1986), where individuals and groups have interactions of focused quality (Yontef, 2005). As the relationships develop, trust strengthens which reduces the cost of doing business and generates new opportunities. In the case of this group, members actively avoided contact with one another, restricting their interactions to Board meetings. Even then, these interactions were more focused on *steam-rolling* the team to achieve their own agendas. They interacted in a state of confluence, not really making contact with each other or their true task.

When a stalemate was reached in terms of contentious issues, these would be avoided at BOD meetings but would become the subject of intense lobbying among the various sub-groups afterwards. The contact boundary was diffused and manipulated by the members and placed in some other space and time. This resulted not only in a lack of effective decision-making but in personal attacks between members of the Board, with electronic mail messages of complaint sent back and forth (once again avoiding contact) and the deliberate sabotage of contentious initiatives. When the researcher mentioned a new contact boundary being created for the contact of the members of the BOD and the important issues, he was warned a number of times that “the shit will really hit the fan there” and “you will have to just maintain control of some of these guys...the sparks are gonna fly”.

Infobility was problematic. The incorrect information was being communicated to the incorrect people at the incorrect time. Blockages were instituted to restrict information flow by, for example, a decision of the CEO not to copy members of the BOD until he had screened all the communications. This had the effect of diffusing and confusing the Organic Intellect of the group and making the efforts of those involved scattered and unfocused (negatively impacting on Producing Ability). The group was unable to make the best of its Capacity to deliver.

Based on these interpretations of the current situation, the researcher proceeded with the project as described below.

6.3.2.4 Finalisation of formal objectives

The overall objective of the consulting project was to determine reasons for the reportedly dysfunctional behaviour of the BOD as a whole, to present an explanation of the underlying causes of the situation and to design and to facilitate an intervention to address these issues so that the Board could begin to function more effectively. Specifically, the following objectives were proposed:

- To facilitate the group to formulate and understand the purpose of the BOD, in the context of current and anticipated future developments in the organisation and in the managed healthcare industry;

- To assist the group to create the ideal profile of the BOD, in accordance with the stated purpose of thereof (its reason for existence);
- On the basis of the outputs of the abovementioned, to facilitate a clear understanding, by the group, of the current position of the BOD against the ideal position;
- To analyse the ideal and current states of the group, in the light of both current reality and future contextual developments in order to determine strategic priorities for the BOD;
- To define and describe the action required from the group in order to drive forward the identified strategic priorities, with key milestones and responsibilities; and
- To obtain the commitment of the members of BOD to performing the agreed upon actions.

These objectives were specifically not stated in in-depth Gestalt psychological terms, but in language and using concepts that the clients were more likely to understand and make contact with.

6.3.2.5 Confirmation of researcher's understanding

The researcher met with the project sponsor with the express purpose of ensuring that the work to be undertaken was aligned with the sponsor's expectations. This meeting essentially provided the researcher with the opportunity to discuss the String Model interpretations and proposed *modus operandi* with the project sponsor.

This meeting provided an opportunity for the researcher to reinforce his relationship with the project sponsor. At the same time, this interaction influenced the sponsor's thinking and action in terms of feedback on the general reactions of the interviewees and the researcher's integrated observations of the client problem. The researcher's comments were very positively received and the sponsor agreed that the project should proceed to the Intervention Phase. The researcher noted that the sponsor had already begun to use the terminology of the String Model and to explore domain phenomena in those terms.

This was an indication that, at some level, a start had been made in terms of injecting new energy into the system and beginning to raise the awareness of important figure and ground issues in the client system.

6.3.3 Preparation for group level intervention

In preparation for the facilitated intervention, the researcher undertook the following activities.

6.3.3.1 Confirmation of methodology

The researcher spent a great deal of preparatory time thinking about how to handle individual, group and organisational variables at the same time. Using the String Model can be very useful because the model can accommodate all three levels, using the same dimensions, but this can lead to confusion, especially if some of the participants are considering different units of analysis at the same time. Care must also be taken to keep the focus on the appropriate figure (in this case the unit of analysis) as opposed to those in the background.

The researcher decided that the best way forward would be to focus on the BOD as the primary entity, bearing in mind the context of organisation, other groups of role-players as well as individuals. The statement of the purpose of the BOD was used to guide the discussion and assist with the group members to maintain their focus on *figure*, rather than *ground*. This formed part of the ground rules for the session.

6.3.3.2 Instruments and methods of use

The instruments identified in Table 6.10 were prepared for the intervention.

The String Model was calibrated by the researcher, based on consideration of the information collected during the preceding steps and the researcher's personal knowledge base.

Table 6.10*Instruments Selected and Prepared For Group Level Project*

Instruments	Remarks
Guideline to String Model (See Annexure 1)	Used as described in Section 6.3.4.6, but referred to throughout the consulting project.
Interview Guideline (See Annexure 2)	Used as described in Sections 6.3.1.3 and 6.3.2.1
Integration Form (See Table 6.9)	Used as described in Sections 6.3.2.3, but referred to throughout the rest of the consulting project.
Project Calibration Guideline (See Table 6.11)	Used as described in Sections 6.3.4.7 and 6.3.4.8, but referred to constantly by the researcher throughout the Intervention Phase.
Guideline Presentation (Based on the outputs of Chapter 4)	Used as described in Section 6.3.4.6.
Description of Ideal State Questionnaire (See Figure 6.3)	Used as described in Sections 6.3.4.7 and 6.3.4.8.
Assessment of Current Performance Questionnaire (See Figures 6.3 and 6.4)	Used as described in Section 6.3.4.8.
Relative Priority Calculation Spreadsheet (See Table 6.12)	Used as described in Section 6.3.4.9

Table 6.11*Calibration of the String Model for Group Level Project*

DIMENSION	CONTEXTUAL DEFINITION
Shape	The inherent form of the BOD that enables it to fulfill its reason for existence.
Hunting Ability	The ability of the BOD to identify relevant and appropriate opportunities to conclude network agreements with health healthcare funders in order to sustain and grow the business in the short, medium and long-term in order to enable the BOD to achieve its purpose.
Nurturing Ability	The ability of the BOD to prepare for, foster and support relationships with all stakeholders that are appropriate and that contribute to the well-being of all stakeholders.
Producing Ability	The ability of the BOD to bring about the required results according to the reason for existence of the right standards of quality, quantity, speed and sustainability.
Infobility	The ability of the BOD to discern appropriate information from the environment (outside of the BOD and within the BOD) and to render it usable in terms of medium and format and to channel this information accurately and timeously to the appropriate role-players for action.
Organic Intellect	The aggregate structure and state of the BOD's combined intellect and the application of this to appropriate and relevant problems in terms of the BOD's reason for existence.
Rotational Flexibility	The ability of the BOD to adapt to changing demands and to continue to perform at the appropriate level, whilst constructively managing the energy liberated in the process.
Valence	The ability of the BOD to combine with other individuals, groups or organisations at a particular time, in a manner that is congruent with its reason for existence.
Organic Intregation	The manner in which the BOD is organised, systematised and coordinated.
Capacity	The maximum amount of Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility that the BOD has at this particular moment in time.

6.3.4 Intervention in group level consulting project

This section outlines the results obtained during the intervention phase of the group level consulting project.

6.3.4.1 Sponsor's introduction and endorsement

The project sponsor spoke about the need for the session and stated that it was time for the BOD to face up to the issues that were detracting from its work. He stated that many of the issues would be painful to deal with, but that he trusted that the session would be beneficial. The researcher interpreted that the project sponsor was expressing his own personal unease with having to make contact with the other participants and the task. In this statement, the project sponsor was also carrying some of the other members' pain and unease across the contact boundary.

6.3.4.2 Creating rapport with participants

The researcher took the time to re-introduce himself to the members of the BOD, in order to once again make himself more valent to them and to put the group members more at ease. At this stage, the researcher was experiencing a fair degree of discomfort himself, having to live with the contact and see where it would take the participants (including the researcher).

The researcher emphasised his role in the session as being one of facilitating the thinking of the group, rather than instructing them as to what they should and should not do. The researcher also emphasised the professional responsibilities of confidentiality, impartiality and honesty. He also stated, however, that at times, it may be necessary to challenge the group in order to ensure that it confronted the necessary issues. The group appeared to accept this.

6.3.4.3 Presentation of objectives and agenda

The researcher formally presented the objectives and agenda for the facilitated intervention to the group. There was an immediate attempt to *hijack the session* by one of the members, who stated that the real problem was that management wanted to tell the BOD what to do, instead of listening to what the BOD told management to do. It took some

effort on the researcher's part to persuade this individual to trust that the process would elicit all the problematic issues and enable them to be dealt with in a constructive manner. Fortunately, many of the participants supported the researcher in this and the individual agreed to participate as long as the researcher was sure that his issues would be addressed.

6.3.4.4 Feedback in terms of String Model dimensions

The researcher presented feedback based on the information gleaned during the preceding phases. The researcher attempted to reflect the essence of the pre-workshop interviews to the group in a straight-forward, unbiased manner and get all the issues out in the open. This feedback seemed to take some of the aggressive posturing out of the group and the intensity of the vocal dissent eased somewhat, perhaps in the knowledge that their perspectives had been heard by the rest of the group. Although the group seemed somewhat shocked at the openness of the feedback and the dysfunctional nature of the themes, the veracity thereof was not denied. The researcher was publicly congratulated by one of the group members for having the courage to discuss these sensitive issues.

At this stage, the researcher felt that the group was ready to begin working together, if not in a constructive frame of mind, then at least not in such a destructive way. The researcher stated that the rest of the workshop would be focused on resolving the problem issues identified.

6.3.4.5 Anchoring in terms of purpose

The researcher attempted to develop some common ground among the group members. This proved to be a difficult and, at times, exasperating process. Approximately two hours were spent clarifying the purpose of the BOD, by answering the questions:

- What do we do?
- How do we do it?
- Who do we do it for?

This proved to be a three hour long, confused and, at times, heated debate with the various sub-groupings at times splitting ranks, pairing with each other and carrying other members. There was much debate related to the primary identity (a Shape concept), such as "we are

doctors" and "no, when you are here, you are supposed to be members of the BOD". Several references were directed at the researcher, such as "we have to carry on until we say what he wants to hear". One, particularly vocal participant, using the body language to support his statement, stated that "everything that is happening is utter chaos – no one knows what is going on and everyone is running around doing their own thing". According to Latner (1992), the experience that the environment is in chaos develops when the ground becomes overloaded and the client is unable to clear it perceptually.

Finally, the following statement was finally agreed upon as representing the purpose of the BOD.

"The purpose of the Board of Directors is to ensure that the company continues to grow profitably and successfully, by creating a suitably enabling environment in which the directors, managers and employees can conduct the company's business".

The researcher was satisfied (although at times concerned) that the participants were making contact with each other and with the primary task.

6.3.4.6 Introduction to the String Model

The String Model was introduced to the group by means of a review of the pre-prepared form (Annexure 1). The researcher explained that any group could be holistically described in terms of the ten dimensions of the String Model. This

6.3.4.7 Review of current performance in String Model terms

In contrast to the sequence followed during this phase in the individual level case study, the researcher decided that it would be more appropriate to address the current situation first in this case, in order to allow further perspectives on problems and concerns with the current status of the BOD to be heard, so that the individuals raising them could get the issues off their chests and hopefully deal with the ideal state in a more constructive manner.

The researcher directed the focus of the participants to the task of describing the BOD in String Model terms. This was an attempt to clarify the BOD as a Gestalt in the minds of the

participants, using the String Model dimensions as a catalyst or substrate which could guide and focus the interaction of the members with each other and with the figure of the BOD. It was emphasised that this process constituted a descriptive assessment of the BOD in the here and now – within the context of the broader organisational system (an element in the background of the interactive field) and always against the framework of the stated purpose of the BOD.

Each member of the group individually assessed the current performance of the BOD on each of the various dimensions of the String Model from his or her personal perspective, using the Participant's Evaluation of Current Performance Questionnaire (see Figures 6.3 and 6.4) prepared by the researcher during the Preparation Phase of the project. This task was very well received by the group and they attended to the completion thereof with much concentration, contacting with the figure issues of the BOD on an individual basis at this stage. Allowing each person to make their input and to feel that they are contributing to the task is an important aspect of the formation of a good figure and quality contact (Yontef, 2005). The individual assessments were captured by the researcher, using a pre-prepared Excel (Microsoft Excel, 2003) spreadsheet.

Many questions about the nature of the String Model dimensions were asked of the researcher during this process. This process of experimentation and exploration was encouraged. When important points were raised by participants, the researcher shared these perspectives with the entire group.

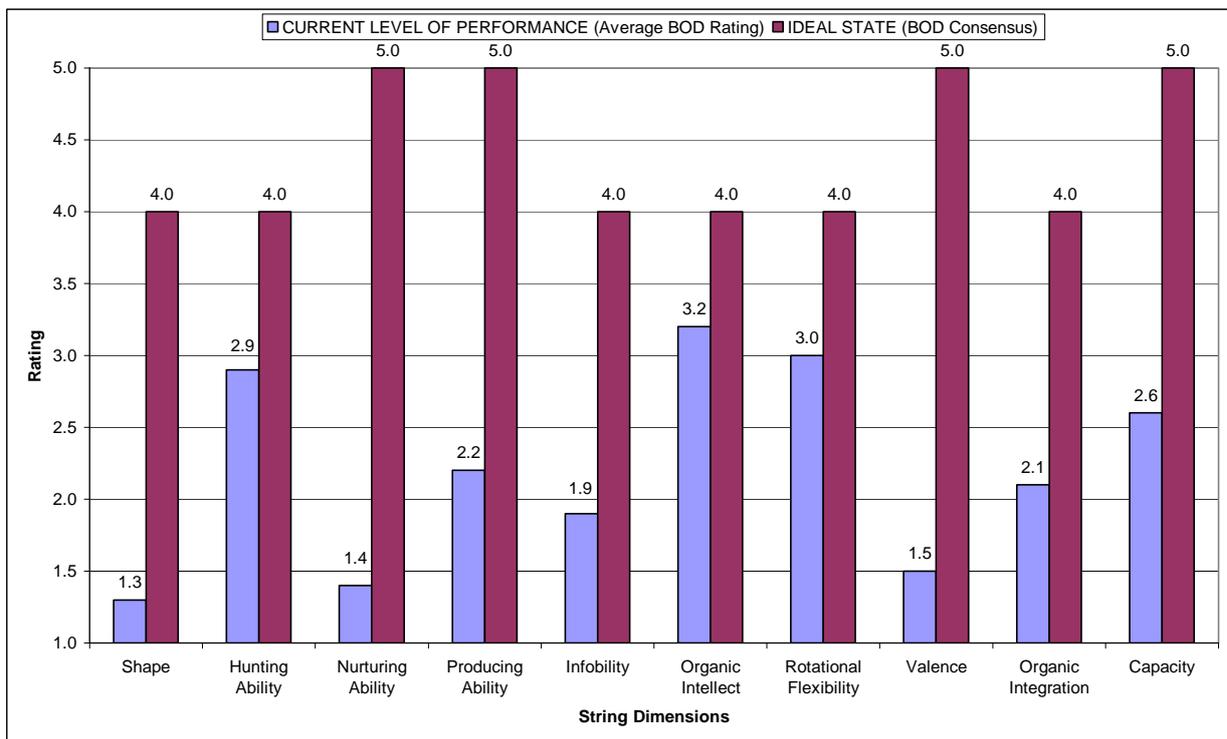
The researcher decided to allow the group space and time to mull over the current status of the BOD and suggested a break for lunch in the hope that this would allow for a breakthrough and for a more positive mindset. During the lunch break, there was much discussion among participants. This allowed the individuals to retain contact with the figure issues and to reflect on them, either personally or in contact with others. Most of the participants were actively discussing the dimensions and their perspectives of the BOD in these terms, rather than only having coffee. The researcher was engaged in conversation a number of times during this period. Over and above content-related questions and individuals seeking validation of their assessments, a number of participants commented that "it's going well", "it's going better than I thought", and significantly "I'm starting to get a better picture of what this is all about".

6.3.4.8 Development of ideal state in String Model terms

After a luncheon break of approximately one hour, the group reconvened and the researcher introduced a discussion on what would be the ideal state of the BOD in terms of the String Model. After lunch, the group seemed far more light-hearted and focused on the work to be done, rather than on problem issues and hurdles.

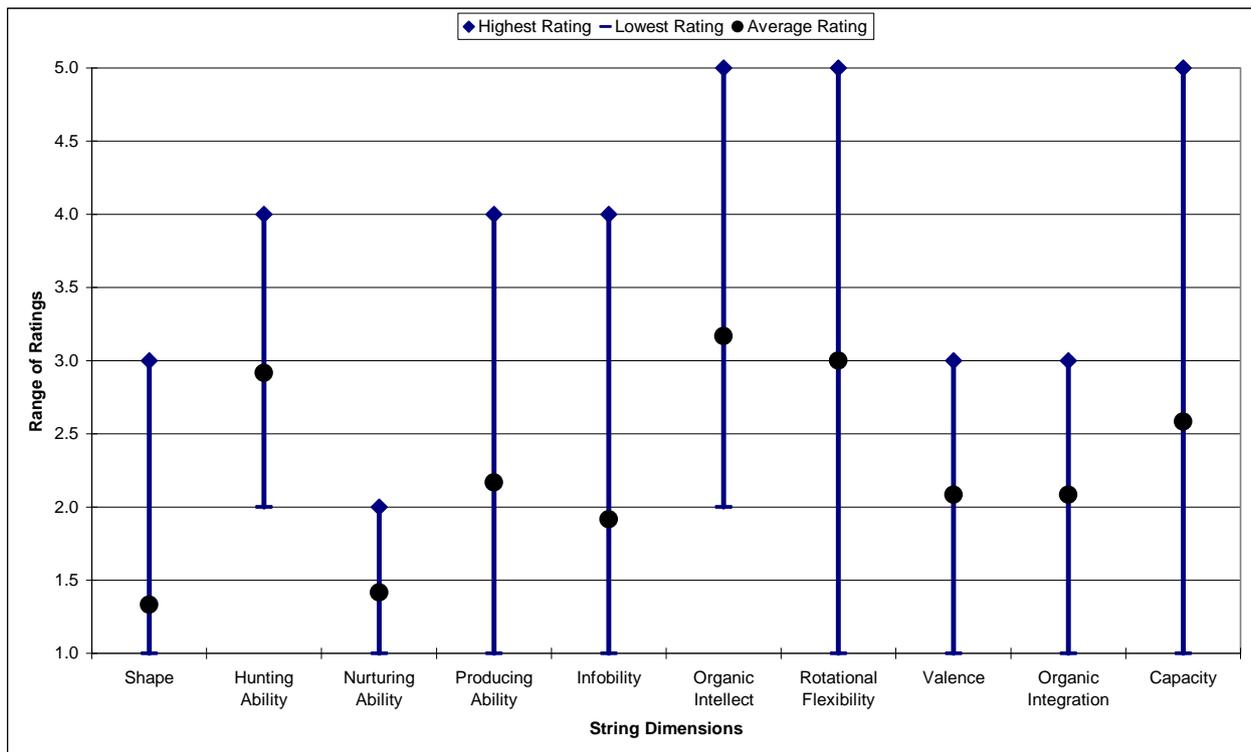
As illustrated in Figure 6.3, the participants assessed the current status of the BOD in terms of Organic Intellect of the BOD as reasonable, with Rotational Flexibility as borderline, Hunting Ability, Producing Ability, Organic Integration and Capacity as concerns. Shape, Nurturing Ability, Infobility and Valence were considered weaknesses.

Figure 6.3
Participants' Assessment of Current Performance and Ideal State of the BOD



From their position at this particular point in time, participants' assessed of the ideal state for the BOD on each of the String Model dimensions as follows. Nurturing Ability, Producing Ability, Valence and Capacity were required to be strengths, whilst Shape, Hunting Ability, Infobility, Organic Intellect, Rotational Flexibility and Organic Integration were required to be at least reasonable.

Figure 6.4
Range of Participants' Perspectives as to Current Performance of the BOD



The researcher presented Figure 6.4 to the participants and facilitated a discussion about the ratings on the dimensions with a wide and a very wide range of ratings. Participants were consistent in terms of their ratings of the BOD only in terms of Nurturing Ability. A very wide range of ratings was given in terms of all the remaining dimensions of the String Model. This debate was almost an anticlimax (the researcher expected the sparks to fly; however, agreement on the ratings was achieved relatively quickly).

The researcher was quite satisfied with this in terms of the way the String Model was used in this context. The awareness of the participants was enhanced by the discussion and new ideas and perspectives emerged continually until there was general agreement. Several comments along the lines of ““It all makes sense” and “This has helped me to clarify many issues and put them in context”, were made by participants during the discussion. One of the participants remarked, ““I can see the big picture now...”, an indication that Gestalt formation had taken place in his experience.

This debate yielded the following String Model related observations from the participants:

- The Shape of the Board is not optimal. This refers to the large number of directors and to the imbalance between the number of Executive and Non-Executive Directors. Various aspects of the Shape of the business (such as the structure of business units) were also identified as requiring urgent attention.
- The Director of New Business was concluding transactions with external partners (Hunting Ability) that were outstripping the ability of the rest of the organisation to keep up in terms of providing these new clients with the services that they require (Producing Ability).
- The lack of shared understanding of the purpose and functioning of the Board led to the driving of individual agendas and a lack of coherent and suitable communications among the members of the group (poor Infobility). This meant that the actions of the Marketing Department and the IT Department, for example, were not synchronised (poor Organic Integration).
- The manner in which the Directors were squabbling with one another and the perception that this was creating in the marketplace was affecting the group's image negatively (both in terms of internal stakeholders (for example, management) and external stakeholders (for example, potential investors). This negatively affected the group's Valence to these stakeholders and ultimately affected the Valence of the entire organisation.
- The inability of the group to instil a culture that encouraged constructive interaction between group members (Nurturing Ability) was having a tremendously negative

impact on the ability of the Board to effectively perform its collective duties (Producing Ability).

- The Capacity of the members of the Board (and thus of the Board as an entity) was not optimal in terms of the Board's purpose. Many of the directors had not been adequately trained or were not adequately experienced to fulfil their roles in terms of various aspects of, for example, corporate governance. This meant that the group suffered from a lack of Capacity and the group was unable to optimally focus its Organic Intellect on the issues at hand.
- The ability of the group to act on the demands of the environment was severely compromised by the lack of Infobility, Capacity and Nurturing Ability. This resulting in sub-optimal Rotational Flexibility of the group as a whole.

These items were raised by the participants and documented for their further consideration and reflection by the researcher. The researcher was satisfied that the group had really made contact with the phenomenon of the BOD. Comments such as, "The process highlighted the different structures and the roles and responsibilities of each one" and "The model has given us a new picture of the company compared to what I had before...the links are quite clear", were made. This indicated that the BOD had become clearly differentiated from other structures in the interactive field, such as the executive management team. Participants had effectively diagnosed their own group and specified group goals for the ideal state of the BOD. What now remained was for the ideal state to be differentiated more clearly and in more, vibrant detail from the current state.

6.3.4.9 Assessment of relative priorities

The Relative Priority Rating is determined programmatically by subtracting the current performance rating from the ideal performance rating and multiplying the subtrahend by the ideal rating. Thus, the Relative Priority Rating is a function of ideal performance versus the size of the development gap. Further analysis of this assessment yielded the relative priorities reflected in Table 6.12.

Table 6.12*Relative Priority Rating of String Model Dimensions on Group Level Project*

Relative Priority	String Dimension	Priority Rating
1	Nurturing Ability	18,0
2	Valence	17,5
3	Producing Ability	14,0
4	Capacity	12,0
5	Shape	10,8
6	Infobility	8,4
7	Organic Integration	7,6
8	Hunting Ability	4,4
9	Rotational Flexibility	4,0
10	Organic Intellect	3,2

The researcher presented the Relative Priority Rating to the group for discussion. The members agreed with the relative priorities, stating that “it makes sense”. One individual stated that it was nothing new but a good confirmation of the issues that had to be dealt with. Another individual stated that all the dimensions had to be dealt with. Other participants stated that the group had to prioritise and focus on the most important issues first and then address the others. The researcher agreed with the latter view and added that once the high priority issues began to improve, the BOD would probably find that other issues were becoming relatively more important. The group would have to monitor these developments.

6.3.4.10 Identification and development of key action imperatives

Based on the preceding discussions, the key imperatives for action (presented in Table 6.13) were identified, to be achieved in this time period. These key imperatives constitute the task of the BOD – the *what* had to be accomplished by the group. The group members defined the action imperatives and the statements of the ideal state themselves. This was

facilitated by breaking the large group into four small groups and tasking them to develop the action imperatives and statements of the ideal state in terms of each action imperative. The smaller groups then gave feedback to the big group and the content of Table 6.13 emerged as the final product of the group.

6.3.4.11 Identification of proactive strategies and tactics

The researcher facilitated the group in the identification of proactive strategies and tactics for the achievement of the ideal state identified by the BOD, for the BOD. These strategies and tactics constitute *how* the BOD would achieve the identified *what* of the key imperatives.

Table 6.13
Key Action Imperatives Identified for the BOD

No.	Action Imperative	Ideal State
1	BOD Strategy and Structure	A comprehensive, holistic business strategy for the company is in place and the BOD is optimal (size, composition and function), in terms of the BOD's purpose.
2	BOD Teamwork and Relationships	Good teamwork and interpersonal relationships exist within the BOD and between members of the BOD, Executive Management and Staff in accordance with the BOD's purpose.
3	Strategic Contracts and Alliances	Contracts with the identified target healthcare funders and strategic alliances with the identified target partners are in place, in terms of the BOD's purpose.
4	BOD Orientation and Development	Individual BOD members are orientated, educated and developed and are able to fulfil their roles and make value adding contributions, in terms of the BOD's purpose.

6.3.4.12 Action planning

These action plans identified for each key imperative and the identified strategies and tactics, the *who* and *when* the *what* had to be accomplished. The potential actions were clustered into projects and the action plan completed. Once again, this was facilitated by breaking the large group into four small groups (different membership to the previous step) and tasking them to develop strategies and tactics to address the key imperatives. The smaller groups then gave feedback to the big group and the content of Table 6.14 emerged as the final product of the group.

6.3.4.13 Closure of facilitated intervention

In closing the facilitation phase of the intervention, the researcher referred the group back to Figures 6.3 and 6.4 and Section 6.3.2.5 and asked the group whether the identified action imperatives and action plans, if implemented, could be anticipated to resolve the problem issues surrounding the BOD and to enable the BOD to perform in terms of its reason for existence.

Each member of the group was asked to respond with their personal thoughts on how the session had gone and to provide a personal commitment to the group in terms of how they would make a contribution to completing the tasks that the group had set itself. At this stage, all feedback was positive although many stressed that the way ahead would still be difficult. Participants remarked that, ““We have a whole new perspective of the BOD” and “It’s the first time I’ve seen the business and the BOD like this”. There was general agreement from participants that this was the case.

6.3.5 Evaluation of group level consulting project

The evaluation of the individual level consulting project was done in accordance with the methodological beliefs of the Gestalt approach that were presented in section 5.6.5.

- Participants understood the purpose of the BOD, in the context of current and anticipated future developments in the organisation and in the managed healthcare industry. This session had enabled participants to place their issues and problems into the open, in a facilitated environment. The discussion on the purpose of the

BOD had highlighted many reasons for resistance and the fragmented and unproductive nature of the BOD. This allowed participants to experience that issues that were previously being kept away from discussion were being dealt with and this, together with the development of a reasonable (in the eyes of participants) framework for the BOD (its purpose) allowed the participants to begin to contact with one another and with the issues under discussion in a more positive manner than they had previously. For the first time, the true primary task of the BOD seemed clear to many participants.

- The group had created the ideal profile of the BOD, in accordance with the stated purpose of thereof. This enabled participants, most of whom were not experienced directors of companies, to explore the interactive field using the String Model and to describe an ideal state (or figure) representing the BOD in great detail. This figure was then explored to develop the figure of the BOD into a clearer, more unified representation of what the BOD should be. As this figure emerged, participants became more excited about the opportunities for growth and development that this figure promised. It also allowed each participant to develop the Gestalt of the BOD themselves in a non-threatening, or in a classroom lecture manner, through their own experience and insights. It allowed participants with different interests and perspectives to work together in a constructive manner, whilst recognising and encouraging the diversity of perspectives, removing some of the stress and tension from this contact.
- Given the formation of the new Gestalt representation of the BOD that had been promoted by describing the ideal BOD in terms of the String Model, participants had demonstrated a clear understanding of the current position of the BOD against the ideal position and analysed the ideal and current states of the group, in the light of both current reality and future contextual developments and determined strategic priorities for the BOD. Differences between the old figure and the new were clearly highlighted. This was done in a manner in which no blame was allocated for the current situation. Participants unanimously agreed that the new figure was more appropriate and desirable than the old figure of the BOD.
- Participants had defined and described the action required from the BOD in order to drive forward the identified strategic priorities, with key milestones and

responsibilities. Participants explored the String Model representation of the ideal BOD, further clarifying issues and allowing contact with important issues, such as the identity, role and functioning of BOD as a group and its relationship with other groups and organisations in the client system.

- Participants seemed committed to performing the agreed upon actions. The researcher and the participants were satisfied that participants had contacted with most of the correct issues in a constructive manner and that an appropriate plan of action had been derived.

In the post-intervention scenario, a month after the facilitated intervention, the researcher made contact with the CEO, who stated that the BOD was “definitely working together better”, but that there were still “individuals who lacked the skills and Shape to do the real work”. The researcher gleaned that contact amongst the members of the BOD seemed to have improved and there had been a significant reduction in the number of inflammatory communications directed at the various members of the BOD.

The researcher inquired as to whether the required changes to the Shape (number of BOD members and their skills profiles) had been implemented yet. The CEO replied that they had not and the reason for this was that “the elections can only be done at the end of the year”. He stated that “this is holding us back a lot”. The Rotational Flexibility of the BOD was being restrained by the policies and procedures that it, itself had instituted to promote stability and governance, but which were constraining the ability of the group to act in such a way as to improve the BOD’s Shape, its Organic Intellect, Infobility, Valence, Producing Ability and its Capacity.

It also emerged, from discussions with the Director of New Business, that some of the participants in the process had stated after the facilitated session that they had been “brainwashed into forgetting about the fact that some of the Executive Directors weren’t performing”. Instead of promoting growth and development in the BOD, this statement indicated regression and resistance, if not to the Gestalt of the BOD, then to contact with some of the group members or with the primary task.

Unfortunately, given the nature of the consulting project, the researcher was not able to make contact with those involved in order to explore the issue of post-contact regression.

One of the weaknesses of the consulting agreement (and therefore of the methodological framework) seems to be that more than a single session of contact is required with the group, in order to sustain and systematically work with group pathology. However, consulting psychologists can only be involved at the request of the participants and are not responsible for managing the group in its daily functioning.

From the holistic and systems perspectives and given the interrelated nature of the various subsystems and phenomena in the client field, it is likely that individual, group or organisational pressures arising from outside of the group were pulling group members back. This phenomenon was not dealt with sufficiently in the researcher's approach. It could be, for example, that ethnic, educational or other background issues amongst the members of the BOD made working together negatively Valent. Pressures from hospital groups (who can exercise great pressure over doctors to work with or not work with certain roleplayers) could be a factor in determining the agendas of the members of the BOD.

Table 6.14*Extract From BOD Action Plan*

NO.	DEVELOPMENTAL ACTIVITY	ACTION
1.	Improve BOD Teamwork and Relationships	
1.1	BOD Charter	<ul style="list-style-type: none"> • Develop BOD charter in terms of King II
1.2	Shape of the BOD	<ul style="list-style-type: none"> • Investigate appropriate size and structure for the BOD and table plan to restructure BOD
		<ul style="list-style-type: none"> • Establish and empower appropriate BOD sub-committees
		<ul style="list-style-type: none"> • Ensure succession planning for BOD (Ensure diversity consideration in board membership)
1.3	BOD Roles and Responsibilities	<ul style="list-style-type: none"> • Clearly define director roles and responsibilities in terms of BOD Charter (Clearly differentiate between fiduciary and operational responsibilities)
1.4	BOD Integration and Interaction Management	<ul style="list-style-type: none"> • Monitor BOD and organisational culture and climate
		<ul style="list-style-type: none"> • Agree on effective mandate management
		<ul style="list-style-type: none"> • Ensure effective integration of BOD members in terms of business structure, roles and responsibilities
2.	Optimise Business Strategy and Structure	
2.1	Formalise Business Strategy	<ul style="list-style-type: none"> • Develop formal comprehensive business strategy with participation of all BOD members
		<ul style="list-style-type: none"> • Ensure strategy is put in place to effectively manage financial risk
		<ul style="list-style-type: none"> • Ensure operations remain effective and efficient
		<ul style="list-style-type: none"> • Investigate XXXXXX takeover and potential economies of scale
		<ul style="list-style-type: none"> • Utilise business intelligence programme effectively
2.2	Optimise Business Structure	<ul style="list-style-type: none"> • Recruit additional HDSA shareholders
		<ul style="list-style-type: none"> • Ensure effective integration of company divisions with each other
		<ul style="list-style-type: none"> • Establish separate risk company to minimise risk for organisation and for stakeholders
		<ul style="list-style-type: none"> • Investigate potential restructuring or redeployment at executive management level

Table 6.14 (Continued)
Extract From BOD Action Plan

3. Finalise Strategic Contracts and Alliances		
3.1	Strategic Contracts	• Secure black economic empowerment contracts
		• Secure contracts and relationships with major employers
		• Secure contracts and relationships with pharmaceutical companies
		• Secure contracts and relationships with medical aid companies
3.2	Strategic Alliances	• Integration and partnership with other networks (e.g. specialists)
		• Effective interaction and relationship with Department of Health
3.3	Communication	• Implement monthly market update
		• Implement monthly employee report – from BOD
4. BOD Orientation and Development		
4.1	Identify Competencies	• Identify knowledge and skill requirements for BOD members in terms of BOD Charter
4.2	Identify Training and Development Needs	• Identify shortfalls in knowledge and skills of BOD members
4.3	Identify Training and Development Solutions	• Source appropriate training and development interventions for BOD members and ensure that training and development is conducted
		• Budget for BOD orientation and development in 2004 Business Plan
4.4	Implement Programme	• Schedule and monitor training and development interventions for BOD members
4.5	Evaluate Programme	• Appropriately evaluate return on investment of BOD orientation and development activities

6.4 RESULTS OF ORGANISATIONAL LEVEL CONSULTING PROJECT

The final case study describes a consulting project conducted at the level of the organisation and reflects the experience of applying the String Model to facilitate the design of a multifaceted organisational change intervention on a large gold mine.

6.4.1 Initiation of organisational level consulting project

The results obtained during the initiation phase of the organisational level consulting project are presented below in terms of the methodological framework specified in Chapter 5.

6.4.1.1 Approach by the client

The approach was made by the General Manager of the gold mine. The researcher had worked with the client on various organisational level, group level and individual level consulting projects over the preceding two years and the request to become involved in this consulting project was made during a face-to-face meeting during which feedback was provided by the researcher on a psychometric research project (individual level) that had just been completed by the researcher.

6.4.1.2 Initial briefing by the project sponsor

The following issues emerged during the initial briefing by the project sponsor.

- Project sponsor

The project sponsor was the General Manager of the Mine. The work described in this case study was performed with the Executive Management Committee (EXCO) of the mine or with the sponsor directly.

- Issues that led up to the consultation request

The General Manager began the discussion with the researcher in terms of a review of the strategic direction of the Mine against the following background.

When the General Manager had taken over the Mine approximately eighteen months prior to this project, the Mine's performance in respect of both gold production, cost and safety were rather mediocre and the life of the mine was substantially threatened due to the strategy of the previous General Manager not to develop the ore reserves to be mined in the future. Without ore reserves being made ready for mining, gold cannot be produced.

The General Manager had, at that time, contracted the researcher to put in place a twelve-month turnaround strategy for the Mine. Goals had been set and the strategy executed with conviction. Within twelve months, the Mine's performance had improved significantly and good results were being obtained on a consistent basis. Several EXCO members were replaced within the first six months of the General Manager's tenure. Since then, the EXCO had developed into a cohesive and individually competent and confident team under the moderately participative, yet empowering leadership of the General Manager.

At this stage, according to the General Manager, a major constraint (blockage or resistance) was the fact that the EXCO team, although functionally competent were inclined to think and manage from a traditional, discipline-focused mindset. The General Manager also stated that he experienced some inertia in the team, given that the approach that they had adopted two year ago had worked very well to date. This mindset was reflected in a lack of integration and coordination between the various departments and a tendency to manage in a reactive manner, for example, the Human Resources function waiting for the Mining function to tell them what staff they would need over the next twelve months before the Human Resources function decided what to do to ensure optimal staffing levels. The same type of situation existed between technical functions such as the Mining and the Engineering Departments.

The General Manager stated that he wished to embark on a process that would lead to improved levels of organisational performance for the mine and that one of the ways in which he could do this was to get his EXCO thinking differently about the business.

6.4.1.3 Initial responses by the researcher

During the discussion, the researcher asked the following String Model related questions in respect of the mine.

Table 6.15*Examples of String-Related Questions Asked During Organisational Level Project Briefing*

DIMENSION	CONTEXTUAL DEFINITION
Shape	How is the mine currently structured in terms of departments and levels? What is the state of the infrastructure and does it impose any constraints?
Hunting Ability	What ore reserves are have been identified and developed to be available for mining? What opportunities exist that the mine can take advantage of in order to improve itself?
Nurturing Ability	How well are the people cared for on the mine? How well is the infrastructure and equipment cared for?
Producing Ability	Has the mine achieved its production, financial and safety results over the past year?
Infobility	To what extent do the people in the different departments and at the different levels receive the correct information on time, to enable them to do their work?
Organic Intellect	Do the people at the various levels of the organisation have the required knowledge, skill and attitudes to deal with your requirements for the future?
Rotational Flexibility	How well is the mine placed to respond to changes in the operating environment, e.g. the exchange rate, availability of reserves to mine, infrastructure failure etc?
Valence	How favourably would the stakeholders describe the mine – the employees, the unions, managers, the corporate office and the community?
Organic Integration	How good is the cooperation and coordination between the different functional departments of the mine?
Capacity	What is the Capacity of the mine (in terms of all its resources) to achieve even better results?

The researcher responded by summarising his understanding of the issues leading to the consultation request and the objectives of the proposed consulting project. The researcher suggested that, given the fact that the EXCO team had achieved some level of stability (Organic Integration, or equilibrium) and maturity over the past twelve months, they would be ready to move to a new level in terms of their thinking about the mine. What was needed was a new challenge, something that would excite the team to take the Mine from being a very good mine to being an excellent mine.

Given that the researcher had worked with all of the individual members of the EXCO and with the mine in the recent past, he responded that many individuals would, in terms of their personalities, probably resist the change. Related to aspects of their Shape and Rotational Flexibility, ideas of change and new challenges would be unlikely to have Valence with them and they would avoid contact with such ideas.

The researcher gave the General Manager a very brief overview of the String Model, which was described as a tool that would facilitate the members of EXCO perceiving the mine in a holistic, integrated way. The researcher undertook to submit a written proposal in this regard to the General Manager. This was well received. The General Manager stated that he was looking for a way to “take the mine to the next level”.

The researcher also noted that the process should allow time for the individual (very traditional) members of the EXCO to come to grips with a new way of thinking about the mine, without letting them feel embarrassed about perhaps not initially understanding. This would be important to ensure that the EXCO took ownership of the end product and regarded it as their own.

6.4.1.4 Written proposal to the client

The researcher would then put in writing a formal proposal, providing an overview of the project as outlined in Chapter 5. The String Model itself was not described in the proposal, but was referred to briefly as a conceptual model that is used to assist the process of holistic, integrated, creative thinking. However, the dimensions of the String Model, together with their basic definitions were included. The researcher received a written confirmation of acceptance of the written proposal from the sponsor, a week after the proposal was submitted.

6.4.2 Orientation to organisational level consulting project

In order to orientate himself to the client system, the researcher undertook the following activities, the results of which are described below.

6.4.2.1 Individual interviews

Individual interviews were conducted with each member of the EXCO on a one-to-one basis. In individual interviews with the members of the EXCO, various constraints were identified. These included the fact that the human capital available to the Mine was not being maximised and that current performance in terms of the efficiency and effectiveness of ore extraction could be made truly remarkable with current technology.

Organisations, like all living organisms, develop through a series of stages (such as those described by Adizes, 1999). According to Levinson (1991) they develop a character of their own that determines their culture and behaviour and differentiates one organisation or industry from another. One of the major issues preventing a radical change in the way the mine was managed and what it was achieving was identified as a lack of multidisciplinary integration both horizontally and vertically throughout the organisation. The major reason for this was identified as cultural. The mine had become quite successful operating in terms of the traditional recipe, derived and perfected over many years and most individuals saw no real reason to change.

6.4.2.2 Collection and analysis of pre-existing data

The following data were reviewed during the orientation phase of this project.

- The Mine's Stratplan for the previous year, and
- The past two years' production, finance and safety results.

6.4.2.3 Integration and interpretation of data collected

An integration of the data collected during the orientation phase, in String Model terms, is presented in Table 6.16 below.

Table 6.16*Integration and Interpretation of Researcher's Notes from the Orientation Phase of the Organisational Level Project*

Shape	The inherent, unique form or structure of an entity, which differentiates it from its environment.	<ul style="list-style-type: none"> Organisational structure is hierarchical with traditional, functional structure and staff GM fantasises about a different structure for the Mine but doesn't know what it is
Hunting Ability	The ability of an entity to become aware of relevant opportunities in the interactive field, to initiate contact with these and to conclude appropriate transactions of the required scope, standard and frequency.	<ul style="list-style-type: none"> Some members unwilling to countenance the idea of doing things differently – complacent and fear of trying something else in face of current success
Nurturing Ability	The ability of an entity to prepare for, foster and support contact with the interactive field, that is appropriate and contributes to its well-being.	<ul style="list-style-type: none"> Question – is GM's quest to challenge team to greater heights a function of his ego and won't bring the promised results, or can it? GM and EXCO foster good relationships with next level down
Producing Ability	The ability of an entity to attain or produce meaningful results through its interfaces with the interactive field, according to its reason for existence.	<ul style="list-style-type: none"> Mine has produced very good results in almost every area – achieving its primary task – set to continue Members of EXCO split over the potential for better performance – creating resistance and unwillingness to engage in contact with idea of deviating from current recipe to perform better – likely to be reflected in other groups in organisation
Infobility	The ability of an entity to discern appropriate information from the interactive field, to render it usable in terms of medium and format and to channel this information accurately and timeously to the relevant receptors.	<ul style="list-style-type: none"> Question – is there too much information in the system (overuse of e-mail) – clogging the client system, preventing true contact amongst individuals and groups – allowing people to avoid contact by sending e-mails back and forth?

Table 6.16 (Continued)*Integration and Interpretation of Researcher's Notes from the Orientation Phase of the Organisational Level Project*

DIMENSION	DEFINITION	INTERPRETATION
Organic Intellect	The structure, functioning and dynamics of the various types of intelligence of an entity and the application of these to aspects that are meaningful to it.	<ul style="list-style-type: none">• High level of technical competence in people throughout the mine• Intelligence of the entity is hierarchical, silo'd and focused in a narrow, technical way – not achieving the synergy of organic links throughout the organisation
Rotational Flexibility	The degree to which an entity is able to adapt to changes in the interactive field and to constructively manage the energy liberated in the adaptation process.	<ul style="list-style-type: none">• New challenge is not differentiated from the background and therefore there is a general lack of contact with the idea of significantly improved performance – likely to encounter significant resistance and blockages related to arguments about infrastructure and other resources
Valence	The attractiveness of an entity to other entities in the interactive field, at a particular time.	<ul style="list-style-type: none">• Interviewees find the mine a better place to work than other mines they have worked on• Working for the current GM is unanimously considered attractive proposition
Capacity	The energy that is present in the entity at a particular time (contained in the entity's Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility).	<ul style="list-style-type: none">• Significant energy is available across the Mine in terms of Nurturing Ability, Producing Ability and Organic Intellect• Work is required to improve Rotational Flexibility and Infobility
Organic Integration	The extent to which an entity is in equilibrium within itself and with its interactive field.	<ul style="list-style-type: none">• Entity fairly well balanced and in reasonable equilibrium with environment

At this point, it was clear to the researcher that the General Manager wanted a new challenge for the mine. He wanted them to do more within, or despite the various physical constraints of the mine and despite the real or imagined constraints imposed by the members of the EXCO. He stated that "this mine hasn't yet begun to perform" and "this mine can do so much better". The other members of the EXCO team were more satisfied and complacent about the mine's performance and couldn't see a reason to change from what they were doing, saying "look where we have come from", "we are already the best mine in the company", "what do we want to change a recipe that works for – don't fix what aint broken" and "we are just going to destabilise the mine again for one person's ambition".

The researcher thought that the only way to engender in the EXCO team the kind of changes that the General Manager was seeking would be to get the participants to think about the mine holistically and in a different way to that which they were accustomed in order to allow insight and heightened awareness to develop. If this desired situation was only the General Manager's egotistical daydream that could not be realised, then full contact with the idea together with his EXCO team might bring this to his awareness.

The interrelatedness of phenomena and levels of consulting in the field of consulting psychology was once again refreshed in the researcher's mind. The organisational level project required the researcher to start the work with the EXCO (group) and allow them to define and lead the way forward for the organisation (the mine).

6.4.2.4 Finalisation of formal objectives

The goal of the consulting project was to create a multidisciplinary management model with the EXCO team of the Mine. This model would then be used as the basis for setting up an action plan for the ensuing two years.

- To facilitate the EXCO team in formulating and understanding the purpose of the mine, in the context of current and anticipated developments on the mine, in the broader organisation and in the gold mining industry;
- To assist the EXCO team to create the ideal state of the mine, in accordance with the stated purpose of thereof (its reason for existence);

- On the basis of the outputs of the abovementioned, to facilitate a clear understanding of the current state of the mine, in the context of the ideal state;
- To analyse both the current and ideal states, in the light of both current reality and future contextual developments in order to determine strategic priorities for the mine;
- To define and describe the action required from the EXCO in order to drive forward the identified strategic priorities, with key milestones and responsibilities; and
- To obtain the commitment of the members of EXCO to performing the agreed upon actions.

As in the previous two case studies, the researcher formulated these objectives in terminology that the participants would be comfortable with and understand relatively easily, rather than in more psychological terms.

6.4.2.5 Confirmation of researcher's understanding

The project sponsor indicated to the researcher that he would leave the further preparation for the session in the researcher's hands. Accordingly, other than at the initial interview with the project sponsor and in the preparation of the written proposal, the researcher did not revert to the sponsor specifically to confirm expectations.

6.4.3 Preparation for organisational level intervention

In preparation for the facilitated intervention, the researcher undertook the following activities.

6.4.3.1 Confirmation of methodology

The facilitated intervention comprised a two and a half day workshop with the EXCO off-site at a conference venue.

6.4.3.2 Instruments and methods of use

The following instruments were prepared for the intervention.

Table 6.17

Instruments Selected and Prepared For Organisational Level Project

Instruments	Remarks
Guideline to String Model (See Annexure 1)	Used as described in Section 6.4.4.6 but referred to throughout the project.
Interview Guideline (See Annexure 2)	Used as described in Sections 6.4.1.3 and 6.4.2.1
Integration Form (See Table 6.16)	Used as described in Section 6.4.2.3 but referred to throughout the rest of the consulting project.
Project Calibration Guideline (See Table 6.18)	Used as described in Sections 6.4.4.7 and 6.4.4.8, but constantly referred to by the researcher throughout the Intervention Phase.
Guideline Presentation (Based on the outputs of Chapter 4)	Used as described in Section 6.4.4.6.
Description of Ideal State Questionnaire (See Figure 6.5)	Used as described in Sections 6.4.4.7 and 6.4.4.8.
Assessment of Current Performance Questionnaire (See Figure 6.5 and Figure 6.6)	Used as described in Section 6.4.4.7 and 6.4.4.8.
Relative Priority Calculation Spreadsheet (See Table 6.19)	Used as described in Section 6.4.4.9

The String Model was calibrated as follows by the researcher, based on consideration of the information collected during the preceding steps and the researcher's personal knowledge base.

Table 6.18*Calibration of the String Model for Organisational Level Project*

DIMENSION	CONTEXTUAL DEFINITION
Shape	The inherent physical and organisational structure of the mine that enables it to realise its purpose.
Hunting Ability	The ability of the mine to identify relevant ore reserves of the correct value and to develop the required amount of face length, equipped to standard, for the mining of safe profitable gold.
Nurturing Ability	The ability of the mine to prepare for, foster and support relationships with employees at all levels and with corporate management and staff that are appropriate and that contribute to their overall well-being.
Producing Ability	The ability of the mine to extract the correct amount of gold-bearing ore of the optimal grade from underground ore reserves on a sustainable basis.
Infobility	The ability of the mine to discern appropriate information from the environment and to render it usable in terms of medium, format and to channel this information accurately and timeously to the appropriate receptors.
Organic Intellect	The inherent structure and state of the various types of intellect and the application of this to appropriate and relevant problems in terms of the purpose of the mine
Rotational Flexibility	The ability of the mine to adapt to changing demands and to continue to perform at an appropriate level, whilst constructively managing the energy liberated in the process.
Valence	The combining power of the mine, its teams and individuals at a particular time in a manner that is congruent with the production of safe, profitable gold.
Organic Integration	The manner in which the mine is organised, systematised and coordinated (i.e. as an organic whole).
Capacity	The maximum amount of Hunting Ability, Nurturing Ability, Producing Ability, Infobility, Organic Intellect and Rotational Flexibility that the mine has at this particular moment in time.

6.4.4 Intervention in organisational level consulting project

The intervention was approached as follows.

6.4.4.1 Sponsor's introduction and endorsement

The General Manager presented his vision for the Mine over the next two years. Headlines included the need to take the Mine from being a good mine to being a remarkable mine. This meant revisiting their existing goals and setting a real challenge for the Mine and for the EXCO. Much emphasis was placed on the requirement for lateral thinking in order to create a new mindset based on interdisciplinary cooperation and realising the synergy of making the EXCO team function even better and devolving this process down to lower levels. The General Manager had created various guidelines for the new Challenge. This included guidelines in terms of what was to be achieved in terms of safety, infrastructure, ore resources, gold production, human capital and financial results.

There was a great deal of unhappiness about the extent of some of the elements of the Challenge. The Production Manager stated that the targeted volumes of production could not be achieved at that mine. He was visibly agitated by the prospect. The Engineering Manager stated that production at such a level would strain the infrastructure of such an old mine. All the participants, however, maintained contact with one another.

6.4.4.2 Creating rapport with participants

As the researcher was fairly well known to the participants, the researcher introduced the objectives of the session by playing a series of humorous video clips to the EXCO, with each video clip illustrative of a specific objective, in order to break the ice. This was well received and this served to remove, at least temporarily, some of the anxiety from the researcher. At this stage, several of the participants were distracted (looking down, fidgeting and scratching their heads). Understandably, the EXCO team were anxious and this served to make the researcher almost as anxious about what would happen. The researcher kept telling himself to "trust the process and go wherever this takes you".

6.4.4.3 Presentation of objectives and agenda

The researcher presented the objectives of the facilitated session and the agenda. This was accepted by the team, with questions for clarification being directed mainly at timing. It was almost as if some of the EXCO members, resigned to the fact that they had to be there at the contact boundary, were trying to contain their anxiety by pegging down the boundaries of the session, so that they could know for how much time they would have to suffer the whims of the General Manager and this issue of change. They wanted to know what time the breaks would be and what time the session would be concluded. There was some empathic behaviour and pairing taking place, with one of the EXCO members pouring water for the others and much knowing eye-contact being made between the Production Manager and the Engineering Manager.

6.4.4.4 Feedback in terms of String Model dimensions

The researcher presented feedback from the preceding phases to participants (see Figure 6.16). There was much defensiveness about the issues. Some participants attacked the contextual relevance of this feedback. According to Perls, Hefferline & Goodman (1951), *deflection* is the avoidance of contact or of awareness by turning aside, as when one is polite instead of direct. Deflection can be accomplished by not expressing directly or by not receiving. It is a blockage in the entity's Infobility. Deflection can be useful where, with awareness, it meets the needs of the situation (e.g., where the situation needs cooling down). Other examples of deflection include not looking at a person, verbosity, vagueness, understating and talking *about* rather than *to*.

Although other participants convinced the individual that the feedback was accurate and was used only to get the important issues on the table for discussion, this highlighted, once again to the researcher, the need for consulting psychologists to be very aware, during preparation and intervention, of what they want to say and what is appropriate to say.

6.4.4.5 Anchoring in terms of purpose

The researcher facilitated the process of the EXCO team defining the purpose of the mine in order to bring the differing perspectives together to get a common point of departure. The following statement of purpose was developed.

“To produce safe, profitable gold by optimising ore reserves and breaking and extracting gold-bearing ore, utilising people, infrastructure, equipment, funds and technology for the benefit of the shareholders, our employees, their families and the community within which we live and work.”

This statement of purpose contained nothing with which the members of the EXCO were not familiar or which would cause them further anxiety. This was done purposefully, so as to begin to encourage contact with the possibility of further development of the mine, whilst keeping the participants in contact with their current conceptions of the mine at this stage.

6.4.4.6 Introduction to the String Model

The String Model was introduced as a holistic, integrated model for describing and analysing the organisation. The researcher presented the various dimensions of the String Model to the EXCO, together with their basic, conceptual definitions as reflected in the pre-prepared form (See Annexure 1).

6.4.4.7 Review of current performance in String Model terms

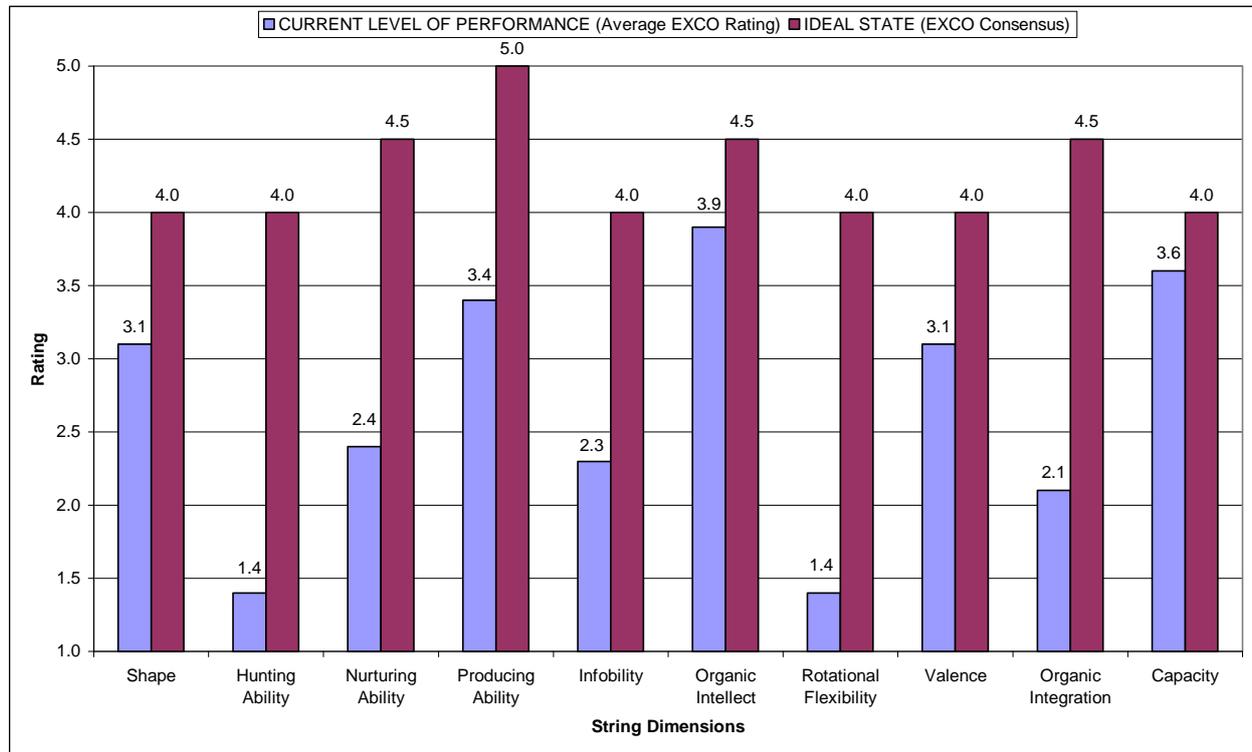
On the basis of the discussions of the ideal state of the mine, the participants evaluated the relative current performance in String Model terms.

As illustrated in Figure 6.5, the participants assessed the current status of the mine in terms of Shape, Producing Ability, Organic Intellect, Valence and Capacity as reasonable, with Nurturing Ability, Infobility, and Organic Integration as relative concerns and Hunting Ability and Rotational Flexibility as relative weaknesses.

As was the case with the previous two case studies, this discussion proved to be a very useful process that added to the awareness of the participants of the issues that were facing the mine. In most cases, participants were able to justify their ratings in terms of an aspect of the String Dimension that had not been considered by the other participants.

Figure 6.5

Participants' Assessment of Current Performance and Ideal State of the Mine

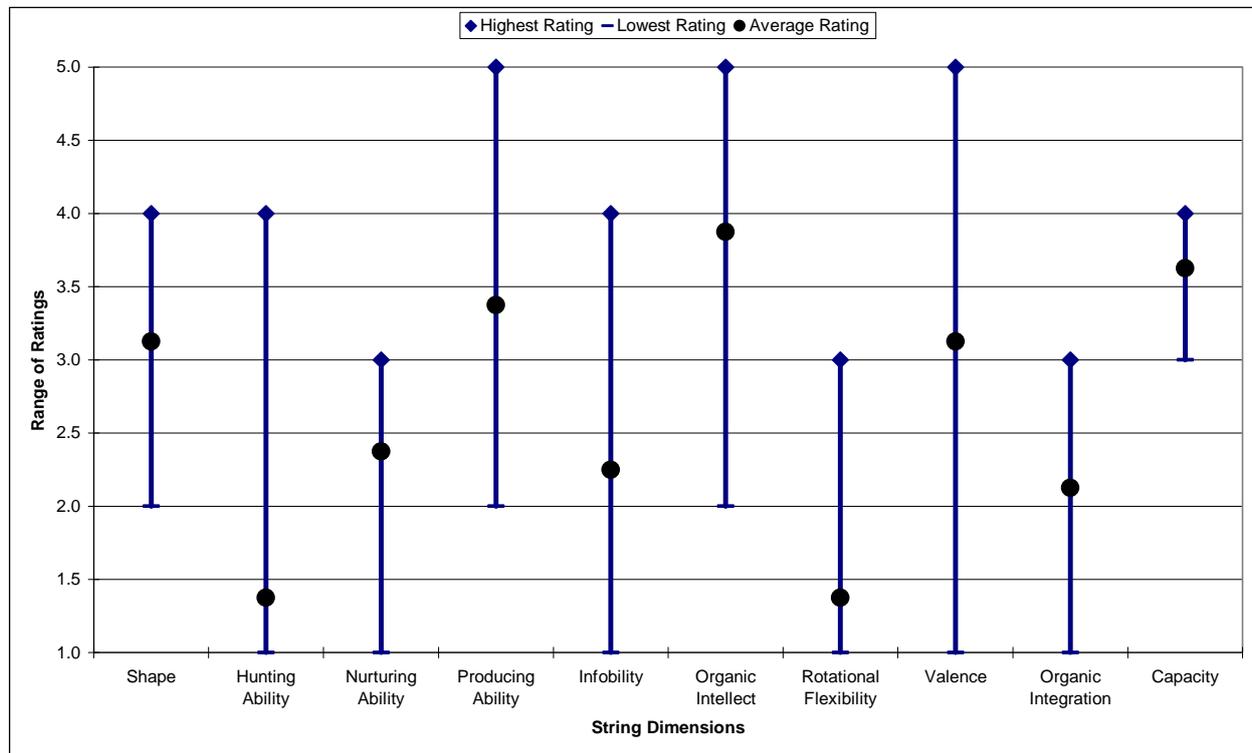


In terms of the range of ratings, participants were consistent in terms of their ratings of the mine in terms of Capacity only (see Figure 6.6). There was a wide range of ratings on the dimensions of Shape, Nurturing Ability, Rotational Flexibility and Organic Integration. A very wide range of ratings was recorded in terms of Hunting Ability, Producing Ability, Infobility, Organic Intellect and Valence. The researcher presented Figure 6.2 to the participants and facilitated a discussion about the ratings on the dimensions with a wide and a very wide range of ratings.

In some cases, there had been disparate interpretations of the meaning of the String Dimensions in the context of the mine and what should be included or excluded and these were resolved during the discussion. This process also enabled the participants to discover what Stevenson (2004) terms polarities that were previously outside of their prior awareness. According to Perls, Hefferline & Goodman (1951) exploring opposites is a useful experiment in the process of figure formation.

Figure 6.6

Range of Participants' Perspectives as to Current Performance of the Mine



6.4.4.8 Development of ideal state in String Model terms

The researcher then decided to attend to the experiment of creating the ideal state of the mine in terms of the String Model dimensions first, before allowing the participants to specify the current state. The reasoning behind this decision was that the researcher wished the group to be as creative as possible in describing the mine in a new way, unrestrained by the current situation.

From their position at this particular point in time, participants' assessed of the ideal state on each of the String Model dimensions as follows. Nurturing Ability, Producing Ability, Organic Intellect and Organic Integration were required to be strengths, whilst Shape, Hunting Ability, Infobility, Rotational Flexibility, Valence and Capacity were required to be at least reasonable.

It was during the discussion regarding what the ideal mine would look like in terms of the String Model that a breakthrough in thinking about the way the mine operated occurred.

The Engineering Manager and the Mineral Resources Manager proposed changing the way the mine worked from the traditional Mining, Engineering, Geology, Survey, Rock Engineering, Safety and Health, Finance, Human Resources and Asset Protection disciplines into three closely related clusters (changing the organisational structure or Shape of the mine). The new proposal was termed clustering and suggested that:

- The Mining, Engineering, Geology, Survey and Rock Engineering disciplines should work closer together to identify gold deposits, equip the areas for mining and then to mine the areas as efficiently and effectively as possible. This cluster was named the *Breaking Cluster*.
- The Finance and Asset Protection disciplines should work much more closely together in the sense that they are both primarily responsible for nurturing the non-people assets of the company. This cluster was named the *Assets Cluster*.
- The Human Resources and Health and Safety disciplines, which are responsible for nurturing (in its broadest sense) the people of the organisation, were grouped together in a *People Cluster*.

The participants became greatly excited with the idea and a flood of ideas emerged as the figure of a new way of working on the mine emerged in greater and greater clarity. At the same time, one or two of the participants were clearly anxious about the implications of the ideal structure. Their comments of “we have to be careful of just doing this” and “we don’t understand clearly the implications” were indications of anxiety.

Anxiety arises when the emerging figure cannot develop further because it is divided. Instead of figure and ground emerging out of the undifferentiated field, the differentiation takes the form of two elements which are both significant but which cannot join in a single figure. These elements enter the foreground, but are at odds with each other (Yontef, 2005). When the individual is anxious, the emerging figure is being divided by the tension which occurs at the same time as the mounting excitement which normally accompanies (or even sometimes announces) the Gestalt. Perls, Hefferline and Goodman (1951, p.212) termed anxiety “the fear of one’s own daring”.

The researcher's interpretation was that the anxiety being experienced was due to the conflict between these individuals' excitement about the proposals and their fear of what it would take or mean to actually implement the required changes. However, the interpretation of what was happening at the time indicated that the Gestalt, the unified picture of the ideal organisation that was different from that of the current situation, had clearly begun to emerge.

Participants remarked that the proposed changes to the fundamental structure of the mine would mean that the various clusters (of people, other resources and knowledge) had to physically relocate to be in closer proximity to, and in greater contact with, each other. They were currently sitting in different buildings even and had minimal contact with each other, except by means of written reports and the occasional contact in meetings or at the workplace.

Comments, such as "There is so much more that we can still get from thinking about the mine using this model", "The new model for running the mine is going to be much better than the old one" and "I'm surprised - I never thought in 25 years that anyone could teach me anything about the mine", were made by participants. There was much excitement amongst participants and the researcher thought that the old figure of the mine was on the verge of being replaced by a new figure. As one participant stated, "This is a whole new way of mining".

It would also require a change in the manner in which the Organic Intellect of the organisation was deployed. The clusters would form closer linkages in terms of their interpersonal contact and their systems and processes. They would now work together on the same production plans at the same time and set combined goals. Participants were in agreement that this could improve the quality of production planning, which was one of the most frequently cited problems.

The clustering would also improve Nurturing Ability because employees in the various functions would work more closely together and contact with and get a greater understanding of the conditions and problems that the others were faced with. Infobility would also be encouraged due to closer physical proximity, joint working on tasks and an integration of technical and managerial systems and processes. Non-essential and duplicated information and systems could be eliminated, further improving Infobility.

Participants remarked several times that a significant element of training of individuals to broadly understand what the value of the other disciplines within their clusters was (improving the Organic Intellect of the organisation), would be required. For example, miners now would come to understand how difficult the job of the geologists was to predict the dip of the ore bearing seam on a consistently accurate basis. This would improve the Organic Intellect of the organisation as well as its Organic Integration.

Initially, the relevant EXCO members would be required to drive the process until the rest of the organisation became more used to operating in this way and the value thereof was either proved or disproved. They remarked that an organisational initiative such as this had never been attempted in the South African mining industry and represents a tremendous shift in thinking from the past one hundred or so years of mining.

Several times, the researcher had to apologise to the participants for interrupting them and encourage them to take a short break and then continue with the next step in the process.

6.4.4.9 Assessment of relative priorities

Further analysis of this assessment yielded the relative priorities reflected in Table 6.19. The Relative Priority Rating is determined programmatically by subtracting the current performance rating from the ideal performance rating and multiplying the subtrahend by the ideal rating. Thus, the Relative Priority Rating is a function of ideal performance versus the size of the development gap.

The EXCO team rated the impact that optimising the performance of the Mine in terms of each of the dimensions could have on their ability to meet the Challenge. This rating was combined with a rating, by the team, of its current performance on each dimension. These two ratings were then multiplied together to yield the weighted scores reflected in the table above.

The participants in the organisational level case study found this part of the work session easier to deal with than the participants in group level case study. They seemed more comfortable with this type of quantitative work than with the more qualitative work.

Table 6.19

Relative Priority Rating of String Model Dimensions for Organisational Level Consulting Project

Relative Priority	String Dimension	Priority Rating
1	Organic Integration	10,8
2	Rotational Flexibility	10.4
2	Hunting Ability	10.4
4	Nurturing Ability	9.5
5	Producing Ability	8,0
6	Organic Intellect	7.2
7	Infobility	6.8
8	Valence	3.6
8	Shape	3.6
10	Capacity	1.6

6.4.4.10 Identification and development of key action imperatives

The key action imperatives for the Mine, identified by the participants are listed below. The participants defined the key action imperatives and the statements of the ideal state themselves. This was facilitated by breaking the large group into three small groups and tasking them to develop the action imperatives and statements of the ideal state in terms of each action imperative. The smaller groups then gave feedback to the big group and the content of Table 6.20 emerged as the final product.

6.4.4.11 Identification of proactive strategies and tactics

The researcher facilitated the identification of proactive strategies and tactics for the achievement of the ideal state of the mine. Once again, this was facilitated by breaking the large group into three small groups (different membership to the previous step) and tasking them to develop strategies and tactics to address the key imperatives.

Table 6.20*Key Action Imperatives Identified for the Mine*

No.	Action Imperative	Ideal State
1	Implementing the Cluster Model	Clusters work together in a seamless fashion and all systems contribute to resources of the correct quality and quantity being available at the right site at the right time.
2	Creating Flexibility	Available quality mineable face length of the required grade for 6 months of mining operations
3	Winning the Hearts and Minds of the Workforce	An enthusiastic, motivated workforce that is aligned and achieves targets
4	Driving Quality Production	Drive continuous improvement in quality volume to achieve business plan objectives

In terms of the Cluster imperative, the EXCO members grouped themselves into their clusters in order to develop strategies and tactics for how to action this imperative.

6.4.4.12 Action planning

These action plans identified for each key action imperative and the identified strategies and tactics, the *who* and *when* the *what* had to be accomplished. The potential actions were clustered into projects and the action plan completed. The content of Table 6.21 emerged as the final product.

6.4.4.13 Closure of facilitated intervention

Reflecting on the objectives that were agreed to by the General Manager, for the facilitated workshop with the EXCO members, the researcher asked the EXCO team to evaluate whether they felt that these objectives had been met. This enabled the researcher to conclude the session in a positive manner. The results of this phenomenological evaluation conducted by the participants are presented below.

6.4.5 Evaluation of organisational level consulting project

Participants evaluated the organisational level consulting project as follows:

- The EXCO team did formulate and understand the purpose of the mine, in the context of current and anticipated developments on the mine, in the broader organisation and in the gold mining industry. This step had served to provide some sense of security to participants and a common framework in terms of which they could move forward and contact with the idea of exploring the interactive field for developments that could improve the performance of the mine.
- The EXCO team created the ideal state of the mine, in accordance with the stated purpose of thereof. The String Model provided the participants with a novel way of looking at their organisation. This promoted excitement and interest, whilst unsettling them enough to promote active, conscious attention and exploration. The methodological framework provided a safe environment for experimentation. Participants were able to use the String Model to experiment with a potential new structure for the mine and see the mine as Gestalt, in some cases, for the first time.
- On the basis of the outputs of the abovementioned, participants clearly understood the current state of the mine, in the context of the ideal state. Participants had analysed both the current and ideal states, in the light of both current reality and future contextual developments and determined strategic priorities for the mine. This had served to nurture contact with the new figure and to make incongruencies and contrasts between the new figure and the old figure clear. This led to the generation of ideas in terms of how to move to the new Shape and the changes that would be required of (and those it would engender) the other dimensions of the String Model. It had also created the positive mindset and excitement amongst participants that there was indeed room for growth and development, even in an organisation that some had worked in for 25 years.
- Participants defined and described the action required to drive forward the identified strategic priorities, with key milestones and responsibilities; and the commitment of the members of EXCO to performing the agreed upon actions was obtained. This had served to strengthen the new Gestalt in the minds of the EXCO members and

develop it into a bright figure, clearly differentiated from other phenomena in the interactive field and the destruction of the previous figure. The EXCO team had clearly acknowledged and accepted the new *what is*, although cautions were expressed in terms of “not underestimating the challenges of implementing the new Shape”. However, some participants were clearly still trying to replace the old figure with the new, illustrated by comments such as, “I still need some time to think through all of the things I’ve written down to sort out over the past two days”.

Three months later, a discussion with the General Manager and the Senior Human Resources Manager indicated that the action plans that had been developed during the intervention phase were being successfully implemented. Most employees had reacted positively to the changes brought about by the change in Shape.

A great deal of work was being done in terms of providing individuals with the knowledge and skills (Organic Intellect) required by the closer working relationship with other disciplines in order to clearly crystallise the *figure* of the new rendition of the mine in the minds of employees and to make this stand out from the previous one. One EXCO member stated that “we can never go back to the old way, quoting the saying that a mind, once stretched, can never return to its original dimensions”.

The EXCO team had worked together in order to create a training programme, based on the new model for the mine and had presented this to all employees at the next level. This, so-called training programme, was as much about increasing the contact amongst the roleplayers in the various clusters, improving their Infobility and Organic Integration, as it was about developing their Organic Intellect. Exco members were currently presenting it to a further level down the organisation.

The Senior Human Resources Manager remarked how significantly employees attitudes had changed towards the planning process – deciding how much mining would take place in which areas. Employees were more confident than they had previously been that a realistic, achievable plan was being put forward. Whereas, in the past, the planning process had been begun by the Mining Discipline, then passed on to the Mineral Resources Discipline, back to the Mining Discipline (for changes) and the on to the other disciplines, such as Engineering, Human Resources and Finance, the plan was now being jointly developed by

the Breaking cluster, involving Mining, Mineral Resources and Engineering employees in drafting and finalising the plan.

According to the Senior Human Resources Manager and Mineral Resources Manager, the process had “gone extremely smoothly” and “there is a lot of buy-in from the Mine Overseers”. Changing the Shape of the organisation had brought about increased Organic Integration in the system. It had improved Infobility and had brought together employees from various disciplines to share and leverage their expertise (Organic Intellect), instead of drawing on their knowledge, skills and experience in isolation.

The General Manager also remarked that the various disciplines had become more tolerant of each other’s problems in the planning process and developed greater awareness of each other’s contributions, improving their Valence to one another. Many times, said the Mineral Resources Manager, he had “seen Mine Overseers *willingly* revise the plan because the Geologist recommended it”, whereas in the past, this would have led to “great unhappiness amongst the Mining people”. The Organic Intellect of the organisation had been increased because the Mine Overseers were now more able to understand the technical, geological reasons for not mining in a particular place.

At the stage of writing up this research, the mine had clearly adopted the new model which had been derived during the intervention phase. There had been significant change in the way that the mine was working. The EXCO, who had derived the new Shape for the mine, had been able to get buy-in and understanding from the next level down in the organisation through positive contact with them and enabling them to destroy the figure of the old Shape and replace it with the new Shape of the mine.

This was bringing about a number of developments in terms of the other String Model dimensions. Organic Integration had improved. The Valence of the mine to external parties had also improved – the General Manager had been approached by at least two other mines who wanted to be shown what changes had been made. The Organic Intellect of the mine had improved, enabling greater synergy through the development of understanding and insight amongst skilled employees. These positive changes in the various String Model dimensions had brought about an increase in the Capacity of the mine (the energy flowing through the other dimensions) to meet and exceed the targets that had been set.

At the time of writing the research (approximately two months after the facilitated workshop using the String Model), the mine remained the leader in the industry, in terms of the amount of gold produced, cost efficiency and safety. It was, however, too early to state that these results were directly related to this intervention. New research, beyond the scope of this exploratory application of the String Model must be conducted to determine the impact of the intervention on these results.

Table 6.21*Extract From EXCO Action Plan*

NO.	DEVELOPMENTAL ACTIVITY	ACTION
1.	Implementing the Cluster Model	
	Integration management driven by EXCO	<ul style="list-style-type: none"> • Implement system of interdisciplinary staff meetings and contacts • Organise group visits to other departments and sections • Share successes between disciplines – combined discipline functions and acknowledgement of service departments • Investigate how to implement cross department rewards and recognition • Conduct multi-disciplinary scrutiny • Face to faces - cross discipline for strategic interaction
2.	Creating Flexibility	
2.1	Breaking cluster	<ul style="list-style-type: none"> • Seek agreement on type (mining method) • Develop in correct areas – according to mining plan • Proactive layout design to eliminate potential constraints in the system • Develop and construct 3rd string ore pass • Implement phase A of infrastructure upgrade programme • Understand the new system constraints and eliminate • WinCC must support the infrastructure • Backfill: current and future infrastructure • Backfill: expansion of dirty water handling system to accommodate build on
2.2	People cluster	<ul style="list-style-type: none"> • Ensure development crews are optimally staffed to ensure development plan adhered to • Establish specialist winzing crews
2.3	Asset cluster	<ul style="list-style-type: none"> • Ensure development crews are optimally staffed to ensure development plan adhered to

Table 6.21 (Continued)
Extract from EXCO Action Plan

3. Winning the Hearts and Minds of the Workforce		
3.1	Breaking cluster	• Ensure correct measurement systems in place (MIS)
		• Ensure that all enabling factors are in place (as per XXXXXX focus issues)
3.2	People cluster	• Communicate all deviations from Challenge to all employees
		• Celebrate successes and learn from mistakes or failures
		• Conduct appraisals face to face
		• Utilise performance management system as enabling tool
		• Plant catalysts for change and innovation culture
		• Develop alignment within teams – team development and team building initiatives
4. Driving Quality Production		
4.1	Breaking Cluster	• Review and formalise drilling and geological information system
		• Improved advance geological information (get evaluation 100% correct)
		• Identify level 3 opportunities
		• Reduce effect of seismic events on production
		• Roll-out 12m face advance initiatives, i.e. Tauwana
		• Implement appropriate technologies, specifically raise-borer, cleaning, ore transport, drilling, support
4.2	People Cluster	• Proudfoot GN understanding and roll-out (evaluate applicability)
		• Keep workforce well - identify sick people and help them
		• Ensure good relationship with unions, associations and individuals
4.3	Asset Cluster	• Quantify the extent of stock levels on buffer stores

6.5 DISCUSSION OF RESULTS

The results outlined in the preceding sections of this chapter are discussed here in terms of conceptual and practical observations arising from the researcher's having used the String Model and congruent Gestalt methodological framework in the consulting situation. The researcher offers the following observations regarding the experience of having used the String Model in the consulting situation.

- The String Model is a comprehensive and unitary model which can enable consulting psychologists to deal with the complexities of the inseparability of individual, group and organisational level phenomena. Initially complex to use and to understand, it proved to be difficult for the researcher to use, because the dimensions and the concepts that they represent are complex. Yet, it is the potential complexity of the Gestalt image that holds the promise that invites exploration. The String Model, as Gestalt, has to become quite clear and distinct from other elements and approaches in the field.
- Several times, the participants experienced *overload* in terms of the model. The researcher found that he had to constantly urge clients (and remind himself) to simplify the operational meaning of dimensions wherever possible, in order to keep going forward. If this is not carefully managed, resistance may result. Despite the appearance of complexity, the String Model dimensions were often described by participants as "intuitively right", "business friendly" and "not overly psychological".
- With skill and experience with the String Model, it will be possible to define, classify and understand the correct aspects of the String Model dimensions under the theoretically correct dimensions. For example, the aspect of *skill* could fall under Organic Intellect or under Capacity, depending on relative definitions and the meaning and connotations these aspects have in the client system.
- The researcher initially experienced some uncertainty as to how rigidly to apply the pre-intervention calibration of dimensions, i.e., as they were presented in Chapter 4. A distinction has to be made between consulting psychologists and non-psychologists using the String Model. Consulting psychologists may use the String Model to interpret phenomena in the client domain in terms of which ever psychological

paradigm they prefer, for example, using psychodynamic or behavioural concepts. When clients use the String Model, a balance has to be maintained between using the original definitions and customising or calibrating them in terms that are acceptable to, and understood in, the client system. Consulting psychologists should still interpret behaviour in psychological terms in order to assist clients to develop their awareness and insight, but clients need to own the definitions and feel at ease using them in order to work effectively with the model.

- The String Model caters for different intrapsychic orientations and backgrounds. The researcher observed that the String Model appealed to participants with different educational backgrounds and varying intrapsychic systems for different reasons. The dimensions of the model accommodate both primarily technically-oriented and primarily relationship-oriented people from all disciplines. The same observation may be posited in terms of appeal to consulting psychologists.
- Using the String Model can offer unique perspectives and insights into domain phenomena. The model is able to deconstruct original thinking patterns and put people *out of their comfort zones*. The approach definitely presents clients with a novel way of exploring domain phenomena. The model encourages integrated, holistic, multidisciplinary thinking and figure formation, rather than only functional or process oriented perspectives.
- The String Model should be used to stimulate and aid figure formation against a clear background. Using the String Model requires appropriate explanation and positioning. In the researcher's experience, it should be presented as a mental model, a tool for thinking and a discussion-piece that allows for individuals to develop insight and awareness and for participants with a common goal to develop shared awareness of issues. It is not intended to be a true representation of any particular reality in the sense that it is unlikely that there can be a one hundred percent correspondence between what is documented in terms of the various dimensions of the String Model either in structural or dynamic terms. The String Model is not expected to conform to Shepherd's (1977) conception of second-order isomorphism and must be positioned accordingly.

- Due to the innovative nature of the String Model, the Gestalt-oriented methodological framework benefits from being relatively structured (as opposed to less strongly structured). This provides some structure and therefore some comfort for the participants, allowing them more freedom to experiment. However, as illustrated in two of the three case studies, the framework must be flexible enough to allow for consulting psychologists to manage the contact of participants with the appropriate aspects of figure and ground.
- The phases of Orientation and Preparation are vital in order to render the String Model useful and appropriate in the consulting situation. It is imperative that the consulting psychologist clearly understands the purpose of the intervention as this will influence the entire methodology. Consulting psychologists have to have a perspective of figure and background information in the interactive field, in order for them to be able to appropriately facilitate contact in the client system.
- The selection or preparation of instruments to be utilised during the Intervention Phase are vital if the intervention is to meet the client's needs (especially the expectations of the project sponsor). Specifically, when the desired outcomes are more operational in nature, the consulting psychologist should ensure that intervention procedure incorporates instruments and methods to generate for example, action plans or the intervention remains too theoretical. It is important that consulting psychologists assist their clients to operationalise and complete the required action. The researcher experienced the need to end up with a final product in a more conventional format and terminology than that engendered by the String Model – using the terminology of the client, not only using String Model terms (although clients seem to pick up on and internalise concepts such as Valence, quickly).
- It can be difficult to manage participants' inclination to skip the more creative and, arguably unfamiliar, processes that may lead to individual or shared awareness and insights, and to jump straight into analysis or solutions. In such instances, participants are avoiding contact with the figure. The researcher had to manage the impatience of some participants in terms of this aspect by asking them to bear with the process and asking them to trust the process and the researcher. The support of the project sponsor is vital in this regard and reinforces the importance of checking

what the project sponsor wants the intervention to yield and clearly understands (and agrees with) how the process will unfold and what to expect during and after the intervention.

- The researcher had to trust the Gestalt approach, i.e., the String Model and the Gestalt methodological framework for implementation. There were times during all three case studies when the String Model seemed to be too complex to work with, or when it seemed that some of the dimensions were not relevant. There were also times when some of the participants did not understand the concepts or when there seemed to be a long period of time where no breakthrough in awareness and understanding. The researcher concluded that awareness and insight cannot be pressed or timed and that each individual, group or organisation must grapple with the String Model in the context of their own experience until such time as insight is generated.
- Allied to the preceding point, the researcher found that giving participants a break from the process to be beneficial to generating a breakthrough in insight or awareness amongst participants. In both the group and organisational level case studies, participants experienced significant breakthroughs after the entire group was given a short break to ruminate on and discuss domain phenomena on an informal basis. In the researcher's experience, participants would group together with those with whom they felt most comfortable and would discuss with them their own personal ideas and insights. It appeared as if the participants were considering and filling in reality and that facilitation of the intervention may benefit from what Epstein (1995, p.132) refers to as creating a *holding space* where participants can explore their awareness and insights.
- In general, feedback from participants in the Intervention Phases of the case studies was very positive. Many participants reported that they had enjoyed the process and learned a great deal.
- Each participant in the Intervention Phases of each case study was asked whether they had confidence that the outcomes produced by them could be translated into results – if they were implemented as planned. No negative feedback was recorded. Clients reported that they felt very sure that they had addressed important issues in

a comprehensive and thorough manner and had experienced improved awareness of and insight into issues in the consulting domain.

- There was much interest in the String Model, both in terms of its development and its usefulness as a tool for thinking about the client system. Many participants remarked that they had been through similar processes before and that this process had certainly not bored them, although they admitted to having been “caught off-sides” by the String Model, commenting that “I didn’t have a clue where you were going when you started...” and “That was a way-out model in the beginning...”.

6.6 CHAPTER SUMMARY

In this chapter, three case studies were presented to illustrate the researcher’s experience of using the Gestalt approach, developed in the preceding chapters in the practical psychological consulting situation. The String Model was deployed as a tool to assist the researcher and his clients to perceive the consulting domain in a different way and to think and make connections between phenomena that are not accessible without the use of this approach. The Gestalt approach was deployed in three consulting projects, in the Aerospace, Healthcare and Mining industries respectively.

In the individual level case study, a comprehensive, integrated Individual Development Plan (IDP) was facilitated with a high potential individual that would direct his development over a two year period and ensure that he is able to take his place on the management team of the company with the greatest probability of success. The process involved in the case study includes an initial discussion of objectives, a presentation of the process of developing the String Model, the internal and external calibration of the String Model for use at the individual level in this type of consulting project, the design and implementation of a multi-source diagnostic evaluation and feedback instrument based on the dimensions of the String Model and the process of defining the ideal state in terms of the individual’s functioning on the management team. Various gap closing strategies were then identified and evaluated and the IDP was developed and approved by the project sponsor.

The group level case study addressed the issue of the Board of Directors of a medium-sized company in the Healthcare Industry. The functioning of the Board was characterised by conflict, frustration and perceptions of non-delivery by the individual directors and members

of the management team. The goal of the project was to determine the reasons for the reportedly dysfunctional behaviour of the Board, to present an explanation too them and to design and facilitate a process that would address the issues and allow the Board to operate effectively. The process employed involved using the dimensions of the String Model to facilitate a comprehensive self-assessment of the functioning of the Board by its members. This involved the calibration of the String Model dimensions within the specific context of the current problem situation, conducting the assessment and presenting to the group the findings thereof, together with an explanation, in String Model terms, of the problem issues.

In the organisational level case study, the goal was to create a multidisciplinary management model for the organisation, with the Executive Management team of a large gold mine. This model would then be used to determine strategic, tactical and operational plans for the mine over the next five years. The process involved determining the General Manager's vision for the mine over the next ten years and the development of broad guidelines for realising this vision. The String Model was introduced and the future position of the mine was described in terms of the dimensions of the Model. This may be termed the process of calibrating the String Model for use at this level.

The description of the desired future position for the mine was used to facilitate an assessment of the current status of the mine in this regard. The *fit* between the various dimensions of the String Model was considered to determine the extent to which the various dimensions were either complementing one another or restraining one another. The gap between the desired state and the current state were then determined and explored. Action plans were developed with relevant milestones and responsibilities to take the mine forward toward its desired future position.

The results of the application of the Gestalt approach to consulting psychology were discussed in terms of conceptual and practical observations in respect of the String Model and the methodological framework. Feedback from the participants involved in the case studies was also included. In each case, the product of the consulting process was most comprehensive and facilitated a great deal of growth in the understanding of the clients themselves. Although clients (involving some twenty individuals in total) were curious about the dimensions of the String Model, their questioning revealed a great deal of interest in the String Model and how it could be applied in their situations. The dimensions of the String Model appear to have some degree of face and empirical validity in the consulting situation.

Using the String Model at the various levels of consulting requires a great deal of conceptual effort and preparation on the part of the consulting psychologist, particularly in terms of the process of calibrating the String Model for use in a particular context. The String Model does not represent a one-size-fits-all approach, as it has to be calibrated for use in each consulting project and it cannot replace the training and experience of the psychologist. The String Model (indeed, the entire approach) is merely a tool to assist consulting psychologists to add greater value to their clients. The String Model assisted the researcher, at all three levels of consulting to greater value to clients in terms of the outcomes of the consulting projects than was previously possible.

In the final chapter, the researcher revisits Chapter 1 and makes conclusions about the extent to which the aims of the research have been met, the research questions answered and the research problem resolved. Given the initial and exploratory nature of this research, various theoretical and practical limitations of the research are presented. Finally, the researcher provides suggestions for further research, related to the String Model and the methodological framework that was created, developed and deployed in this research.

CHAPTER 7 CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This research has been directed at developing a Gestalt approach to consulting psychology that, when used in consulting projects at the individual, group and organisational levels of consulting, enables consulting psychologist and clients to perceive domain phenomena in a significantly different manner and which enables them to obtain significant, positive outcomes from the psychological consultation process. The results of the first application of the approach were described in Chapter 6 and suggest that there is definite potential for further research in terms of this approach.

This chapter presents the conclusions, drawn by the researcher, from the research as it stands. The conclusions are based on an evaluation, by the researcher, of the extent to which a Gestalt approach to consulting psychology, comprising the String Model and a congruent methodological framework have met the requirements of the aims of the research and which flow from the research questions. These conclusions are also related to the upfront prescriptions for the Gestalt approach to consulting psychology that were stated in Chapter 1. The final conclusion addresses the extent to which the researcher believes that the approach developed and deployed in this research provides at least one viable answer to the stated research problem.

The limitations of the research are then discussed against the backdrop of these conclusions. A critical view is taken of the research as a whole and specific aspects of the research design are discussed from the perspective of scientific value. The discussion of limitations of the research takes place in the context of the scientist-practitioner perspective of the consulting psychologist – which places, to some extent, a greater burden on the research. The research must fulfil its obligations to be both scientific and practically useful within the feasible parameters of time, breadth and depth.

The exploratory nature of the research lends itself to the generation of many questions that cannot be answered within the scope of one research project. The final section outlines some of these questions and suggests areas for future research in terms of the String Model, its usability for consulting psychologists in the consulting situation and the value that can be added for clients accordingly. The chapter is concluded with a chapter summary.

7.2 CONCLUSIONS

A general conclusion in terms of the general aim of the research (see section 1.7.1) is provided below and this is followed by conclusions in respect of the various specific aims of the research, specified in section 1.7.2. In addition, various conclusions are drawn in respect of the *a priori* prescriptions for the proposed solution to the research problem (see section 1.5).

7.2.1 General conclusion

The general conclusion of this exploratory research is that the Gestalt approach to consulting psychology, comprising the String Model and the methodological framework for its application that were developed, promote unique insights into domain phenomena in the field of consulting psychology. This approach assists consulting psychologists and their clients to break down their sedimented perspectives of phenomena in the client system, to contact with other participants and issues in the interactive field, to experiment and to create different perspectives, based upon increased awareness and insights. This improves the ability of consulting psychologists to function as catalysts and to add value to their clients. The approach that was developed contributes to the development of the field of consulting psychology and to the ability of consulting psychologists to compete in a complex, challenging environment.

The general conclusion presented above is qualified in accordance with the exploratory nature of this research. It may be stated that the String Model and the methodological framework are at an exploratory stage and are still evolving. Yet, this does not detract from the value of the research. Collins and Gentner (1987) support the notion that a mental model may be usable, whilst it is evolving into its final form. The researcher agrees with Finke (1990), who states that, ordinarily, a considerable amount of refinement and restructuring is needed to transform an inventive concept into a fully working model.

According to McClaughlin and Marsh (1978), successful theoretical innovations are not fully clarified until people have been using them for a year or two and clarity can only be acquired during use – not by pre-specified advice. In terms of the Gestalt themes of excitement, growth and development, the research has been successful. However, the cautions presented above are valid.

7.2.2 Specific conclusions

The following specific conclusions are provided in response to the specific aims of this research, which were stated in Chapter 1.

7.2.2.1 Specific conclusions regarding consulting psychology

The aims of the research, regarding the state of the field of consulting psychology, the theoretical and practical underpinnings thereof, the services rendered by consulting psychologists, the competencies that they should have and the application of Gestalt principles to the theory and practice of consulting psychology, were met in Chapter 2. The following conclusions, specific to this section are presented:

- In the context of the tremendous potential variety of work that consulting psychologists may perform provided in Chapter 2 and the various intrapsychic aspects that underlie the formation of healthy figures in the consulting environment, the Gestalt approach developed in this research provides what Collins and Gentner (1987) refer to as a path to parsimonious, simplified understandings of complex phenomena and complex systems.
- The education, training and experience of consulting psychologists cannot be displaced by the String Model (or any other single mental model). As discussed in Chapter 2, the extensive range and complexity of psychological consultation services requires a high level of skill and experience. The methodological framework presented in Chapter 5 and the case studies in Chapter 6 further illustrate this point. Significant knowledge of psychological and consulting principles is required to use the Gestalt approach to psychological consultation effectively.
- The Gestalt approach is relevant at all three levels of consulting. The String Model provides an effective representation of an individual, group or organisation. Even the issues facing the consulting psychologist at the individual and group levels occur within an organisational context. The juxtaposition of these various levels seems naturally to lend itself to a broad range of paradigms and theoretical and practical approaches, although it is accepted, as Lundin (1996) points out, that disagreements will arise over basic facts and methods in psychology.

- The String Model may be used as a tool to perceive phenomena in the consulting domain as Gestalt, utilising the personal skill and knowledge of the consulting psychologist and promoting access to an integrated representation of the knowledge base of consulting psychology, thereby increasing the ability of consulting psychologists to add value. Working with the Gestalt approach provides an opportunity to generate new knowledge and insight into phenomena in the consulting domain. The String Model allows the consulting psychologist to view phenomena in the consulting domain in a decidedly different manner than the norm, as required by Harrison (1995).
- The String Model, created, explored and developed in this research is flexible and has utility for consulting psychologists who have different backgrounds, education, training and personal preferences. As discussed in Chapter 2, consulting psychology represents an integrating movement away from the fragmentation of knowledge in the domain of psychology with its various schools of thought and approaches (Lowman, 2002a). In general, the more limited consulting psychologists are by a particular paradigm, approach or methodology the more constrained they are in addressing client problems and adding value. As discussed in Chapter 6, the String Model allows a great deal of flexibility in terms of psychological approaches, consulting roles, styles and processes.
- The String Model provides an integrating tool (for consulting psychologists) for the various the approaches that constitute the propositional knowledge base of the field of psychology as well as the various sub-disciplines of psychology. It also provides an integrating tool that assists the consulting psychologist to integrate his or her own body of personal knowledge and assists the consulting psychologist to integrate propositional and personal knowledge. The String Model can make a contribution to the field of consulting psychology and contribute to the growth of the knowledge base.
- The String Model provides a consistent framework for reflection on the consulting situation and thinking about the various phenomena in an abstract sense, primarily allowing the consulting psychologist to imagine the various relevant phenomena and to think about the way these behave and interact with each other. This allows the

consulting psychologist to apply his or her specialist knowledge as a psychologist to the consulting problem.

- The String Model is amenable to empirical operationalisation and testing, although only limited testing, in terms of applying the model, is conducted in the case studies presented in this research. The application of the String Model is subject to the same ethical prescriptions as those which govern the work of psychologists. The String Model has an element of aesthetic appeal to it in order to allow the consulting psychologist represent an individual, group or organisation in his or her mind and to access the interpretive and creative aspects of the mind, using the String Model as a tool to do so.

7.2.2.2 Specific conclusions regarding the role of intrapsychic factors in consulting psychology

The aims of the research regarding the nature of intrapsychic processes that govern the manner in which consulting psychologists and their clients become aware of, interpret and experience domain phenomena, the formulation of guidelines to be borne in mind when attempting to derive a mental model and congruent methodological framework were met in Chapter 3. The following conclusions, specific to this section are presented:

- The String Model was designed to be unique and to stimulate interest, enabling it to cross the awareness threshold and provoke conscious and unconscious factors in the consulting domain. As such, particular attention was paid to factors such as intensity, complexity, contour, foreground versus background and field-dependency. The String Model makes substantial use of an image that represents an unified, holistic, integrated structure and which has dynamic and static properties and has an element of spatial orientation and movement. Care was taken in respect of the symbolism of the String image, the concepts and the language used to describe it.
- The String Model is simple enough to facilitate the processes of spontaneous perceptual organisation and categorisation, in order to improve the processes of instantaneous interpretation, rapid interpretation and deliberation of domain phenomena and the implications thereof. Once a consulting psychologist has integrated the String Model with his or her personal knowledge base, it will have

utility in terms of facilitating the orienting response to a new or complex consulting situation and make it possible to grasp the relevant phenomena more easily.

- In consideration of the various types of thinking discussed in Chapter 3, the String Model is a useful tool to aid the processes of productive thinking, including undirected, creative thinking and directed thinking, such as problem-solving. The high-level nature of the String Model renders it amenable to the processes of metacognition which will facilitate its applicability in a greater variety of consulting situations. This includes executive processing ability (Sternberg, 1985) central to the ability of the consulting psychologist to decide on the nature of a problem to be solved, to select a set of components (the String Model) to help solve the problem, to select a strategy into which to combine these components, to decide upon a mental representation, to allocate attentional and other resources to the problem and to monitor the solution process.

7.2.2.3 Specific conclusions regarding the derivation of a mental model

In Chapter 4, a mental model was derived that meets the aims of the research. The String Model is unique and congruent with the theoretical and practical underpinnings of the field of consulting psychology. It was derived with due consideration of Gestalt consulting principles and the intrapsychic processes that govern awareness, interpretation and experience of domain phenomena in the field of consulting psychology. The following conclusions are specific to this section:

- Whilst no mental model provides an epistemologically truthful representation of individuals, groups or organisations, they are still useful. According to Collins and Gentner (1987) mental models do not have to be entirely accurate representations of phenomena and be useful for science and practice. Based on this research, the String Model is sufficiently able to represent an individual, group or organisation (see Chapters 4 and 6).
- Based on the researcher's experience in applying the String Model in practice, and the feedback of participants in the case studies (see Chapter 6), the String Model promotes the differentiation of an individual, group or organisation from other phenomena or entities in the consulting domain. This is one of the first steps in Gestalt figure formation. The first String Model dimension, that of Shape promotes

the idea of a unified, whole entity that may be explored at different levels of resolution (see Chapter 4).

- The remaining nine dimensions of the String Model add richness and clarity to the representation of the entity, with wholeness and balance (Rotational Flexibility, Organic Integration and Capacity) and growth and development as themes (Hunting Ability, Nurturing Ability, Infobility and Producing Ability and Valence).
- Exploring each of the String Model's dimensions (such as Hunting Ability) either individually, or together with other dimensions (such as Valence) may lead to the perception of interconnections between aspects of individual, group or organisational functioning that were not apparent before. This is useful, because, as Becker, Huselid and Ulrich (2001) state, unless all elements of the architecture of a system are in place simultaneously and support one another, the system cannot really achieve sustained excellence. Dimensions such as Organic Integration suggest that the holon is not in balance if the various elements are not properly integrated. The dimension Infobility suggests that the right amount of the right information in the right format must be available in the right place at the right time. The interplay between these two dimensions is thus reinforced because the condition of Organic Integration, for example, cannot exist if Infobility (or any of the other dimensions, is not optimal).
- In all three case studies, the reaction of the client to the use of the String Model was positive. Initially, when presenting the model to the clients, they requested copies of the dimensions and the definitions thereof to refer to (an attempt to understand the mental model in terms of their own personal knowledge bases and perspectives). Many questions were asked initially, more for the sake of clarity and understanding, than in terms of limitations. Such questions related, in all three cases, to the fact that the client tends to feel somewhat off-balance with the String Model initially and concerned issues such as the location, within the model, of a technical function, or a financial function. As explained in Chapter 6, questions around where phenomena such as leadership fit into the model were frequently posed.
- Given the extensive scope of the research, there are many questions about the validity and practical utility of the String Model. However, the String Model can be

used as illustrated in the case studies, even if it is not yet adequately validated. The String Model has significant potential.

7.2.2.4 Specific conclusions regarding the development of a methodological framework

A methodological framework that is congruent with the theoretical and practical underpinnings of consulting psychology, that takes account of Gestalt consulting principles and which promotes the application of the String Model was developed in Chapter 5. The methodological framework was successfully applied in Chapter 6.

- The methodological framework was designed to promote the deployment of the String Model in practice. In the three case studies presented in Chapter 6, it succeeded in structuring the process of using the String Model to generate excitement, growth and development in the client systems, according to the principles of Gestalt psychological consultation. The methodological framework provided the structure for a complete, holistic consulting project, extending from the initiation to the evaluation thereof.
- The methodological framework allowed the researcher to enter the client systems and to familiarise himself with domain phenomena in those systems. This gave the researcher the opportunity to make contact with roleplayers and with task issues in the client system and to begin to make diagnostic interpretations in respect of which issues needed to be dealt with by the participants in the respective client systems. These diagnostic interpretations guided the process of defining objectives for the project, for reinforcing contact with the project sponsor and injecting energy for change into the client system.
- In the intervention phase, the methodological framework provided the flexibility for the researcher to structure the process of desedimenting participants existing perspectives of domain phenomena and encouraging creative exploration of the interactive field. At the same time, the methodological framework allowed for changing the order of certain of the steps (see the organisational level case study in Chapter 6) in order to address the specific requirements and needs of the consulting project.

- The methodological framework specifically focused participants on the appropriate figure information and relegated irrelevant information to the background (whether participants were individuals or groups) by allowing the String Model to be introduced at the appropriate time, when participants had formalised the reasons for existence of the appropriate entity (or figure). The framework facilitated experimentation in the client system by injecting a novel mental model at the appropriate time, allowing participants to progressively develop their awareness of, and insight into, domain phenomena, by for example, defining the relevant entity in String Model terms and then engaging them in further exploration of the interactive field by encouraging participants to develop the ideal state and an assessment of relative priorities. This process allowed participants to significantly develop their Gestalt impressions of the relevant entity, whilst encouraging them to adopt the new Gestalt (and to destroy the old Gestalts).
- In order to complete the whole, the framework provided for evaluation of the participants' phenomenological experience of the value of the intervention process according to Gestalt psychological principles – by asking the individuals to relate their experience of the process.

7.2.3 Conclusions based on the prescriptions for the proposed solution

A priori prescriptions for the Gestalt approach were posed in section 1.5 of Chapter 1. The following conclusions relate to these *a priori* prescriptions. The Gestalt approach, comprising the String Model and a methodological framework for its application:

- Originates within the field of consulting psychology and is thus applicable to the world of work. It is applicable to psychological consultation at the individual, group and organisational levels, across industries and to a wide range of psychological consultation projects. The String Model may be used to represent individuals, groups or organisations, regardless of the nature of the work that they do.
- Avoids the pitfall of being too academic or psychological, which may result in it becoming only an espoused approach. The String Model may be used by consulting psychologists, to interpret domain phenomena in psychological terms, but may be calibrated to use customised definitions and terminology, for use by clients, in any

given client system without detracting from the ability of the approach to promote excitement, growth and development (see Chapter 6).

- Facilitates thought and action, where awareness and understanding of the current and desired situations may readily be followed by application in a congruent manner. The Gestalt approach facilitates excitement, awareness and insight by encouraging contact amongst participants and with issues in the client system. The methodological framework facilitates the translation of new figures, awareness and understanding into concrete plans of action that cement the new *what is* and that may be realised (see Chapters 5 and 6). In each of the case studies, the output of the consulting project was very comprehensive and very integrated.
- Creates the opportunity to use the String Model to think about and debate the individual, group or organisation. In the group and organisational level case studies, the groups that considered the String Model had been working together as a team in that business for six years and for almost two years respectively. Yet, the discussion of the dimensions of the String Model and how it applied to these groups generated tremendous debate about the actual nature of the group (see Case Study 2 in Chapter 6) and the nature of the organisation (see Case Study 3 in Chapter 6).
- Enables consulting psychologists and their clients to effectively structure their interactive fields, providing them with new awareness and insights into domain phenomena. The methodological framework provides the structure for guided exploration of the interactive field in a relatively ordered, but flexible manner (see Chapters 5 and 6).
- The holonic nature of the String Model promotes a holistic, systems perspective of domain phenomena and the differentiation of important aspects of the interactive field from the rest of the phenomena in the interactive field. The various dimensions of the String Model effectively structure the exploration of the interactive field and provide a useful substrate upon which to heighten awareness and Gestalt figure formation (see Chapters 4 and 6).
- Does not restrict consulting psychologists in terms of the psychological methods, tools and techniques to be used, according to their preferences and levels of skill.

The only restriction is that domain phenomena be approached in a holistic, unified, systems fashion. The methodological framework presented in Chapter 5 allows for the use of quantitative instruments in the consulting situation. These are used to encourage participants to identify incongruencies and differences in understanding. More qualitative methodologies, such as directed discussion, are also accommodated in the methodological framework. Psychodynamic interpretations may be made in terms of String Model dimensions (see Chapters 4 and 6). The dimensions of the String Model may also be defined and interpreted from other psychological schools of thought.

- Provides a significantly different way of looking at domain phenomena, in terms of how such phenomena are perceived, thought about or felt and exposes new perspectives of the nature of these phenomena and the connections between them. The approach assists consulting psychologists to break down traditional, functional or silo perspectives of domain phenomena, enabling a holistic, integrated and multidisciplinary perspective of domain phenomena (see Chapters 4 and 6).
- Is both complete and relatively simple. The String Model, together with the methodological framework for its application constitute a psychological whole. Given the complexity of the domain phenomena, it is a relatively simple approach.

Based on the above, it is clear that the research questions posed in Chapter 1 have been answered by the research. The Gestalt approach to consulting psychology, comprising a String Model and a congruent methodological framework can be used by consulting psychologists to facilitate increased awareness within client systems and, in so doing, increases their ability to add value and remain ahead of their competitors in the consulting context. This provides one solution to the problem statement.

7.3 LIMITATIONS

By its very nature, this research has many limitations. These are elaborated upon in this section, as follows:

- The vastness and complexity of the domain of consulting psychology and the number of potential factors at the individual, group and organisational levels are extremely

difficult (if not impossible) to represent using one single model. It is difficult to find a Theory of Everything (Kaku, 2000) in any discipline.

- The more suitable a mental model appears to be for the consulting psychologist, the more restrictive it may be. As Roskos-Ewoldsen, Intons-Peterson and Anderson (1993) state, the more cohesive, symmetrical or psychologically good (Gestalt) a representation is, the more difficult it may be to disassemble and reassemble. As the saying goes, *if all you have is a hammer, everything looks like a nail*. Conversely, the risk of attempting to create a mental model which accommodates as many paradigms, perspectives and situations as possible, lies in making the mental model so generic as to be meaningless or having no utility for the consulting psychologist.
- The thought experiment described in Chapters 4 and 5 can be interpreted as a form of directed induction. Kelleher (2002, p.15) states that in reality, any piece of social research is always already pre-conceptualised at the outset – even if the researchers are unaware of their own tacit frames – so the challenge is not to avoid pre-conceptions but to be aware of and explicit about them.”
- There are some consulting problems that are more conducive than others to resolution using visual imagery (Denis, 1991). The case studies do not represent a suitably wide range of consulting projects to justify the conclusion that the String Model can be applied across all potential consulting situations.
- Individual differences in the ability to visualise can create differences in the results that are achieved using the model (Logie, 1986). Shah (1999) suggests that expert visualisers are more likely to make general inferences using the model than are those less inclined to conceptualise visually. In addition, Finke (1990) states that a pre-inventive form, constructed by one person may not be so useful or inspiring to others. Also, as Murray (1995) states, not all perceptual mechanisms are based on visualisation.
- Expectations constrain the utility of imagery (Roskos-Ewoldsen, Intons-Peterson & Anderson, 1993). They affect what can be detected in an image and, if a particular orientation is expected (created by the researcher’s background and experience) it is cognitively difficult to re-orient images. This reduces the probability of making

discoveries using images, which may lead the consulting psychologist using the String Model to jump to conclusions on the basis of using what Logie (1986) terms tacit knowledge of the spatial (and other) properties of the image to mimic the operations of perception (Logie, 1986).

- Certain ways of picturing phenomena may be detrimental to their usage in thinking (Denis, in Cornoldi & McDaniel, 1991). On the other hand, productive thinking may be facilitated by imagery not so directly related to the phenomena being studied (Scott & Wertheimer, 1962). Cornoldi and McDaniel (1991) describe the argument that visual images or representations are too unimodal to account for the complexity of thinking processes or of real-world phenomena.

- Although it is the opinion of the researcher that the design of the research is aligned with the exploratory nature thereof and with the phenomenological underpinnings of the Gestalt paradigm, there is no doubt that case study methodology has certain limitations which affect the extent to which, particularly the generalisability of the conclusions. According to Bartholomew (2002) case study methodology has the following weaknesses, which are, despite the arguments of Perls, Hefferline & Goodman (1951), relevant to this research.
 - Case studies are ideographic in nature and are thus not representative enough to facilitate generalising findings across the domain;
 - Case studies are prone to selective perception and interpretation;
 - It is very difficult to determine causality among phenomena from a single case study;
 - It is theoretically possible to fit any given case to a specific theory or model; and conversely; and
 - It is possible to interpret practically any case to fit any theory.

- The research does not seek to validate the String Model, other than in terms of the three case studies presented in Chapter 6. The String Model could, for example, have been strengthened by following an approach similar to that of Muller (1997) and presenting the String Model to independent experts (for example, consulting psychologists) to evaluate in terms of criteria for a valid Gestalt Model. Given the broad range of potential applications of the String Model, highlighted in Chapter 2

and further elaborated upon in the recommendations for further research in this chapter, the gathering of further empirical evidence to facilitate the evolution of the model is beyond the scope of this exploratory research.

The significance of these limitations is accepted by the researcher, as work beyond the scope of this research continues.

7.4 RECOMMENDATIONS

As the field of consulting psychology is still evolving, this research may lead to debate and perhaps further research on this and related topics, thus contributing to the development of the field. The following research would build significantly on the scientific and practical status of the String Model and, in so doing, make a contribution to the field of consulting psychology.

- Accepting the String Model as relevant and valid, research into the developmental process would be extremely useful to answer such questions as how the String originates, which dimensions need to be developed at which stages and when the entity becomes more than the sum of the parts.
- An interesting application of the String Model for the consulting psychologist in terms of, particularly, diagnosis, explanation and prediction is that of computer modelling. Just as it is possible to develop computer software to systematically analyse variables and the relationships between them, it may be possible to develop software to support the various dimensions of the String Model and to very quickly and accurately make diagnoses of a particular situation or predict the next development. According to Derek van Eeden, a computer software designer (D van Eeden, personal communication, 1 November 2003) the ability of computer software that can discover relationships between variables based on data collected and to build up a body of knowledge, is currently the focus of much interest in the world of software development.
- Using the String Model as a tool for self-assessment can further assist the consulting psychologist to develop a comprehensive, integrated plan for the development of a professional practice. In addition to the consulting competencies and activities that

may be addressed in terms of the String Model, practice-related competencies, such as marketing, client relationships and effective delivery of services are highlighted using the String Model (for example, in terms of the dimensions of Hunting Ability, Nurturing Ability and Producing Ability).

- The String Model may be utilised to research the potential for the future performance of individuals, groups and organisations. Given further research, it may be possible to evaluate the current status of, say a work-group, in terms of the dimensions of the String Model and on the basis of this, identify and forecast or estimate the potential of the work-group. This may be done on the basis of empirical research indicating that, once certain thresholds are attained in terms of the various dimensions of the String Model, that the work-group has the inherent makings of a successful group. Various aspects to be developed in order to realise this potential may also be identified in terms of the String Model as could the indication of time-frames for development.
- The thinking process and skills embodied in the design and application of this research could be the subject of course content for the further professional development of consulting psychologists. The String Model may be used as a tool to stimulate professional development for newly qualified consulting psychologists.
- Eraut (1994) reports that research into professional development for novice professionals indicates that such development continues well beyond the initial professional qualifications and that the first two or three years after qualifying are probably the most influential in developing the particular personalised pattern of practice that every professional acquires. This would seem to indicate that a metacognitive model that assists the professional to better integrate theory with practice would be of value to newly qualified consulting psychologists and would improve the ability of the consulting psychologist to develop theories-in-use (as discussed by Argyris & Schön, 1974) in a more integrated and practical manner.
- It would be useful to undertake research to determine whether or not the String Model can explain differences in performance between individuals, groups or organisations. For example, it may be possible to follow a similar methodology to

that described by Becker, Huselid and Ulrich (2001) and rank a stratified sample of publicly listed companies in terms of the ratio of their market value to book value.

- A String Model based assessment instrument could then be completed for each company to determine its status on each of the String Model dimensions and perhaps on an overall String Index. The String results for the top ten percent performing companies could then be compared with those of the bottom ten percent performing companies in the sample. This may provide some empirical evidence as to the role of the various String Model dimensions in company performance. Similar kinds of studies could be embarked upon at the individual and the group levels with relevant criteria of individual and group performance respectively. It would be interesting both from a scientific and a practical perspective to see if there any similarities in the String profiles between consulting levels. If, for example, Infobility is causally linked to performance at organisational level, does this apply at individual and group levels? There may be universal principles of performance which could be discovered in this manner.
- The relationship, if any, between the various dimensions of the String Model must be researched further. In a similar manner, research may be conducted into whether or not there are hierarchical relations between the various dimensions of the model.
- Various instruments, for example, the Relationship Building Effectiveness Profile and the Relationship Building Effectiveness Profile Facilitator Guide (Training Warehouse, 2003) that measure the ability to establish sustainable relationships include the dimension of Nurturing Ability as part of the requirements for individuals to be able to network successfully. These instruments emphasise temperament, communication skills, social involvement and persistence skills as part of the ability to nurture. Other relevant measurements and instruments may be developed for use with the String Model (holistically) and for the various String Dimensions. Hopkins (1996), for example, provides a superb perspective on Capacity and the various levels at which this dimension may be assessed. Hopkins (1994) describes in detail, methodologies and instruments for this type of assessment. It is certainly possible (as demonstrated in the case studies in Chapter 6) to develop, from the basic definitions of the dimensions of the String Model and its characteristics, various

research instruments that could be standardised for a particular consulting level and employed with different research design.

- Each dimension of the String Model is worthy of substantial empirical research. The concept of Organic Intellect, for example, which incorporates traditional intelligence, emotional, spiritual and physical intelligence may be explored in order to develop theoretical models of how the various components of Organic Intellect interact, what effect they have on one another and on other dimensions of the model. Issues such as barriers to the effective realisation of the potential of an individual, group or organisation's intellect, researched as described by Davidson (2002), may also be researched in terms of the String Model. The relative contribution of each of the components of Organic Intellect towards some external criteria of performance may be investigated.
- Various types of validation studies may be undertaken, some of which have been discussed here. Such studies may be concurrent (as in the Becker, Huselid & Ulrich, 2001 example cited above). Research may also be predictive (by determining the current status of an individual, group or organisation on the String dimensions and making predictions about future performance – the case studies presented in Chapter 6 will be amenable to this once criterion data is available for collection). Longitudinal studies (such as that described in Collins [2001]), may be conducted to determine changes in performance over time in terms of the String Model.
- The existence of Superstrings or clusters of Strings (Kaku, 2000) and the structural and dynamic implications of, for example, merging holons is an area that the researcher intuitively feels may yield significant value for consulting psychologists and their clients. For example, research may focus on the String Model implications of individuals (as in working relationships), groups (as in trying to enhance intra-team cooperation in order to improve team performance) or in terms of organisations (as in mergers and acquisitions).
- Relating the dimensions of the String Model to the metaparadigmatic perspective adopted in this research could yield interesting hypotheses, worthy of further research. For example, P Koortzen (personal communication, 15 July 2003) suggests that the dimension Hunting Ability had *survival* as a theme or a driving force and

may thus be related to the more psychoanalytic approaches in psychology. Similarly, as stated by FvN Cilliers (personal communication, 15 July 2003), Nurturing Ability may be related to humanistic approaches, having 'unconditional acceptance' as a theme.

- It may be possible to marry each of the dimensions of the String Model with a particular approach or school of thought in psychology. If there is, for example, a diagnosis that Nurturing Ability is less than optimal, an intervention based on Rogerian principles may be the most effective means of resolving the project and so on for the other dimensions. Such an addition to the model, if it were feasible and usable, would enable the consulting psychologist to develop a portfolio of skills that would enable him or her to adopt an eclectic approach to consulting psychology projects without facing the danger highlighted by Jordaan and Jordaan (1984, p.19) that the main shortcoming of the eclectic approach is that it really amounts to "knowing a very little about a lot".
- Related to this, there may be research opportunities within a particular paradigm or approach, say cognitive psychology. The various dimensions of the String Model could be interpreted in terms of cognitive psychology and the methodologies and techniques thereof employed to investigate the various dimensions of the model and to intervene in a related manner. This would enable consulting psychologists with preferences for a certain school of thought or approach, to develop and deploy the String Model accordingly.

7.7 CHAPTER SUMMARY

In the final chapter, the general conclusion was reached that the Gestalt approach to Consulting Psychology: the String Model, that was created, developed and applied in the research represents a Gestalt mental model that, when used by consulting psychologists, assists them to perceive the consulting domain in a different way and to think and make connections between phenomena which are not apparent to less perceptive observers and, in so doing, enables them to add more value to their clients. Adding value to clients in a unique way is what ensures both the growth of the field and the status of consulting psychologists.

Specific conclusions were presented in terms of the specific aims of this research that were stated in Chapter 1. These conclusions emphasised that, although the String Model can be effectively used as a tool for thinking and that the professional knowledge and training of the psychologist are indispensable – they are far more important than the String Model *per se*. The String Model enables the consulting psychologist to consult more effectively at the individual, group and organisational consulting levels, without prescribing psychological approaches, methods or techniques. It enables the generation of create new knowledge to supplement personal knowledge and also makes a contribution to the vast and complex field of consulting psychology.

Using the String Model provides a holistic, systems oriented, comprehensive view of the individual, group or organisation. This makes the String Model a useful tool to assist the consulting psychologist in consulting at these levels. It can be used to assist in the various consulting activities implied by the description of core competencies by the Society for Consulting Psychology (APA, 1999).

Using the String Model as a tool for thinking requires a great deal of conscious effort, particularly in respect of the perceptual, cognitive and metacognitive processes. It also requires a great deal of consulting experience. These processes, especially those of visualisation and imagery were especially important in the process of creating the pre-inventive structure of the mental model, as well as exploring and developing the String Model. Elements of the perceptual, cognitive, emotive, dispositional and self subsystems of the consulting psychologist were considered in the process of developing the String Model.

The researcher returned to the prescriptions for the proposed solution to the research problem that were posed in Chapter 1 and concluded that the Gestalt approach satisfied these upfront prescriptions to a significant extent. The researcher then revisited the problem statement in the light of the results achieved and concluded that the research had provided at least one viable answer to the research problem. The Gestalt approach, comprising the String Model and a congruent methodological framework for its application in the consulting situation promotes unique insights into domain phenomena and can enable consulting psychologists to facilitate increased awareness within client systems. In so doing, it can increase the ability of consulting psychologists to add value to their clients. This is what will ultimately ensure the growth and development of consulting psychology, both as a science and in practice.

Various limitations of the research were discussed. One limitation concerns the difficulty of developing a single mental model that is useful at all three levels of consulting and is flexible enough to be used by consulting psychologists with different predispositions and methodological preferences. The process of generating the mental model is subject to directed induction, meaning that there is an element of pre-conceptualisation about it. Although the processes of visualisation and imagery are useful for mental modelling, they may not always be effective for solving every kind of problem and may not appeal to everyone. A further limitation of the research is the fact that case study research is qualitative in a nature and that the String Model itself and the dimensions thereof were not subjected to a more rigorous, empirical development and validation process.

This exploratory research has generated many aspects that are amenable to future research, which would further increase the value of the Gestalt approach to consulting psychologists and develop the body of knowledge of the field of consulting psychology. These include various forms of empirical validation of the String Model itself and of the dimensions that make up the Model. Much research may be done to discover relations between the String Model and individual, group and organisational performance in an attempt to try and discover areas that are useful to predict superior performance. There is also much to be gained from developing processes, methods, techniques and instruments for assessing and diagnosing individuals, groups and organisations in terms of the String Model.

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