



A social psychological basis of corruption and sociopathology

Corruption and
sociopathology

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Abstract

Purpose – The purpose of this paper is to explore the social psychological basis of pathologies, from which result neuroses and behaviours like corruption and sociopathic behaviour. It takes the perspective that social collectives have normative minds and can be explored in terms of their social psychological processes.

Design/methodology/approach – Knowledge cybernetics will be used to show how pathologies can develop from the interconnection between such noumenal attributes as ideology and ethics.

Findings – Social entities have similar psychological pathologies to individual ones. Piaget's notions of how the mind operates can be applied to corporate personality, and their inability to create and coordinate different perspectives can be seen as an organisational pathology.

Research limitations/implications – The paper is a theoretical construct that explores corruption and sociopathology at a deep conceptual level. It requires elaboration through case examples to provide pragmatic meaning.

Practical implications – The capacity to create a methodology that is able to explore the existence and development of pathologies.

Originality/value – This is the first approach of this type using cybernetics to explore at a high conceptual focus the development of pathologies like corruption and sociopathic behaviour.

Keywords Social deviance, Corruption, Organizational behaviour, Cybernetics, Social behaviour

Paper type Research paper

Introduction

Social psychology is more commonly defined as the study of the relationship between human mind(s) and social behaviours, and as advocated by Allport is seen as centring on the individual making up the social fabric. An obverse view is rather to see the social collective as having a psychological condition that is affected at a lower focus by more elementary influences that arise from its participating groups or individual participants. These two perspectives appear to be consistent with those discussed in the Mead Project of 2004, which explores social psychology as a concern of the collective or group psychology. From this the term “group psychology” can be said to mean the psychology of a structured collection of individuals among which has arisen a normative mind, seated in the noumen, and operates in a way that may be distinct from that of the individuals that make it up. The noumen used here is not that absolute mental region of being described by Kant[1], but rather a more relative one that exists alongside visions, images, ideas and patterns of thinking. The normative nature often coincides with fuzzy processes due to the inability of people to adequately understand each other, due ultimately to the principle of knowledge migration (Yolles, 2006).

More or less coherent social collectives like countries and enterprises are durable and develop behaviour by virtue of the noumenal and existential attributes that they have. The noumen is not only a normative collective mind, but it is also capable of



associative projection (after Piaget) that allows the coordination of perspectives from others in its social environment, and this can influence its behaviour. Both noumenal and behavioural activity is influenced by the collective's existential collective being, often connected with its culture. Behaviour is also normally the result of an explicitly formalised social/role structure, and the two together operate phenomenally.

Since it is a collection of individuals and their empirical psychology that creates noumenal and existential processes, there is a broad (rather than just a metaphorical) relationship between the social psychology of collectives and the psychology of the individual. Individual pathologies may not directly affect the collective because of normative smoothing, but this can be impaired by its political structures.

Pathologies can result in a loss of organisational health, and we can identify two forms: internal directed or endogenous and externally directed or exogenous. Endogenous pathologies can cause social abnormalities like neuroses and dysfunctions within the collective that can interfere with the way the collective performs its tasks, while exogenous pathologies, i.e. those directed towards the environment, can result in sociopathic behaviour. Having the right models that improve our ability to understand the nature of a social collective provides an entry into how its pathologies may be "treated".

Individuals have a curious capability of attaching themselves to a collective noumen while being simultaneously able to maintain a psychological distance from it. This is explained by the proposition (Yolles, 1999) that people are able to partition their mind, and maintain the partitions separately without contradiction. Indeed, there are many illustrations of this when they join groups, and operate in a way that is distinct from the way that they would behave as an individual.

Allport[2] thought that the group mind is static and the cause of individual behaviour. Perhaps, he was thinking of the ephemeral group whose frame of reference is the individual, and it will not have developed a noumen or existential culture. Shift the frame of reference to that of the durable group, and we get a very different picture. Here, a group mind only properly arises once a group culture has been brought into being. This culture is not static as would be inferred from Allports view, but is a dynamic thing quite consistent with the idea of the "Principle of Immanent Change" as proposed by Sorokin before him, where durable cultures change through their own internal dynamics. As such the group mind and its psychology has characteristics that may well be related to that of the individual, even though there are some fundamental distinctions, including its normative nature and explicit structures that could not be found in the individual mind.

Overall, the modelling approach being adopted here arises from the paradigm of knowledge cybernetics (KC) as formally defined by Yolles (2006). KC adopts a graphical approach to exploring the pathologies of social collectives through a set of modelling techniques. One of these takes an epistemological approach. The other approach is ontological in nature. The two approaches can be distinguished further by saying that the epistemological approach typically adopts lateral processes of analysis, where a particular mode of analysis is exhaustively explored. The ontological approach draws on transitive processes of analysis by examining the connection between the different modes of being. A coupling of these approaches is sometimes seen in social psychology. This tends to explore complex problem situations and their contexts of the individual and collective mental conditions, and sometimes even in terms of culture. These conditions are actually different modes of being that exist at different

ontological levels of examination. Having said this, social psychology uses ontology to explore the relationship between these modes, and epistemology to explore the modes themselves.

Lateral and transitive approaches are actually directly relatable. To understand how, one needs to realise that implicitly epistemological analysis involves undefined sets of distinguishable contexts, which implicitly coexist. To relate the lateral and transitive approaches, all that is required is for the sets of contexts that coexist need to be explicitly formulated. Thus, for instance one can distinguish between cultural, group mind and behavioural aspects of a social collective.

So, given that a social collective may be seen as an entity with a normative mind and a group psychology, then its pathology can occur with an endogenous pathology that leads to forms of dysfunction that affects the way in which the collective functions as a whole. The main form of such dysfunction considered here is corruption, which is today an important theme in both developed and developing nations/corporations. An exogenous pathology leads to sociopathic nations/corporations. The dysfunction still develops, but it emerges at a different level of social analysis and has very different manifestations.

The psychology of the collective mind: cognitive projection

Pathologies occur when individuals and groups in a social system are prevented from autonomously regulating their collective existence in a way that opposes their capacity to be viable. So pathology is important to understanding why particular types of behaviour are manifested, and how they may be dealt with where they represent important degrees of ill-health or conditions of unfitness.

Here, we take a conceptual leap forward, and explore the social collective in terms of the notion of its “collective mind”, thereby developing an extension to typical forms of social psychology. As such we shall explore the social collective in relation to its ability to behave as a singular cognitive entity, and just like an individual person have collective social psychological conditions that are equivalent to, but will have additional mechanisms from the psychological of people. Both are agents of behaviour, the former being composed of a collection of individuals and the latter a single individual. Developing a model of the collective agent will lead to explanations of how the pathologies of an organisation can be harmful not only to the collective itself, but also potentially to the social environments in which they exist.

Kets de Vries (1991) in his book *Organisations on the Couch* adopts a Freudian view about dysfunctional and neurotic organisations. We are told that they can develop feelings of guilt, adopt collective psychological defences that reduce pain through denial and cover-up, and operate through processes of power that might be unproductive.

Such conditions may be treated by corporate (or sociopsych) therapist. In general, the function of the therapist is to “treat” a collective by helping it deal with its own pathologies (including neuroses), thereby enabling it to “improve” its behaviour. This is not only intrinsic behaviour that is directed towards its own internal environment, but also its extrinsic behaviour that is directed to its external social environment. However, theory of the social psyche of the collective is less well developed to theory of the psyche of the individual.

One of the core features of both a unitary and collective agent attributed with a psyche is its ability to cognitively project. There are two forms of projection that have

been defined in the literature for the individual. The first is the Freudian defence process that we will refer to as attributive projection. It operates when an agent attributes its unwanted thoughts and feelings to another agent, or the related process when the agent attributes the characteristics of an image it has about a perceived phenomenon, thereby responding to the image not the phenomenon.

The second type of projection, that we call associative projection, is of more interest to us here. It was originally defined by Piaget (1977, p. 20) as a result of his study of child development. Following Priddy's (1999) explanation of this, the mind is active in forming an image of phenomenal reality, rather than being simply being a passive receptor. The image is formed through its ability to reason and create perspectives. An agent that has an ability to create associative projection therefore also has the capacity to form an image that can be projected phenomenally, this image demonstrating recognition of the behaviour of others.

A collective agent with associative projection must also necessarily have a collective psyche that is active in forming collective images through a shared reasoning process, and an ability to create perspectives. The agent has associative projection because it is composed of a set of individual agents that interact in the pursuit of common interests. These interactions are mediated by cultural structures that create normative anchors that provide a basis for cultural coherence.

So, when we talk of the collective psyche of an agent, we are also talking of its collective mind. Such agents behave consistently and have a rationality that can be explained. However, a collective agent may behave independently from the individuals that compose it because the normative anchors for the former may be different from the anchors of the latter. The reason for this will become clear in due course.

The principle of knowledge migration is that through communication processes, people understand the knowledge embedded in complex messages only in terms of their own patterns of knowledge, so it is locally interpreted. When knowledge migration occurs in a collective, with its normative psyche and fuzzy social psychological processes, misunderstandings and misdirected behaviours can develop. These are errors that can be relieved through collective (cybernetic) reflections and processes of learning.

Knowledge migration is a process that occurs when collective agent with a psyche, fuzzy social (collective) psychological processes occur that can result in misunderstanding and misdirected behaviours. These can be relieved through collective reflections and processes of learning. It is here where action learning and action research can help the social collective.

The notion of the collective psyche originated with Jung (1936, pp. 87-110). He argued that a collective agent can have an inherited unconsciousness. It owes its existence exclusively to the inherited attributes of the individuals that compose the collective. While the individuals may be consciously aware of these attributes, the collective as a whole will not be so aware. So this leads one to recognise that the plural agent, like that of the individual, has both a conscious and unconscious mind.

The idea that there is a collective mind is still supported in the literature, because it explains a lot about social collectives. Thus, Weik and Roberts (1993) argue that organizations are not things but processes, and the collective mind can be used to explain organizational performance in situations that require nearly continuous operational reliability. They conceptualise the collective mind as a pattern of "heedful" interrelations of actions in a social system.

Any social collective can be seen as composed of a set of local autonomous agents that construct their actions within a field of interaction that create a set of interconnected actions. The result is seen as a global property of the social collective. One can understand the rise of the mind of a plural agent as social collectives develop with some purpose and degree of formalization. In this case heedful processes are often the result of intention, coordination, integration and hence coherence. In another exploration of the collective mind, Brown (1961) explains that the Freudian view of the group (the social collective) is that it has a number of individuals who have substituted one and the same object for their “ego-ideal”. The nature of this comes from the idea that people often decide on certain goals very early their early development, and the determinant for this is called the ego-ideal, and that distracts one from the present – the so-called here and now. In psychology ego-ideal is more or less the conscious ideal of personal excellence and goals toward which an individual strives, deriving from a composite image of the personal characteristics of the individual sees as an iconic personality. The result of the use of the ego-goal is that people consequently identify themselves with one another in their ego.

Brown further argues that this Freudian explanation cannot be substantiated from observation. He summarises his argument by saying:

[...] there is a clear distinction between Freud’s view based on patterns of the family [...] and the social psychologist’s view frequently based on the study of work-groups or at any rate groups which are doing something [...] (Brown, 1961, p. 123).

In addition:

if we assume that a group is a collection of individuals which can only be understood in terms of individual psychology, we have to introduce the concept of the group mind to explain why [...] we cannot account for its collective actions [...] a group [does not show] the same reaction as a number of unrelated people regarded as isolated personalities (Brown, 1961, p. 122).

Perspective and emotional projection

For Priddy (1999), the creation of knowledge and meaning through perception occurs through “apperception”: a process of abstracting meaning from phenomenal experience through interpretation that makes it coherent with other relevant experiences (thus providing context); it also gives perception significance. The mind perceives phenomena and supplies knowledge that corresponds to a particular viewing point or perspective. In so doing it structures the phenomena into meaningful patterns through the process of projection. Indeed, linking this with the notion of Frieden (1998) that phenomena are themselves created through the interaction between information and cognition, we can align ourselves with the constructivist notion that reality is actually created, but at a non-conscious level. As Priddy tells us, the conscious mind perceives what the mind itself projects.

There is a relationship between perception and concept that connects with operations and transformations. While a concept obtains indispensable information from a corresponding perception, a concept is not extracted from the perception by simple abstractions and generalisations. A concept, from which derives a perspective or a frame of reference, is a good deal richer than the projective perceptions because it always

entails a system of operations or transformations. This operative aspect of concept is not reducible to the perceptual structures and derives from the general structures of action.

There is also a relationship between images and operations. Images play a symbolic internalised role. Two classes of image are distinguished: reproductive images that evoke already known events or objects, and anticipatory images that depict events not yet observed (for us, these become embedded in the structures that facilitate and constrain behaviours).

Three types of reproductive image can be distinguished: static (stationary objects), kinetic (changes in position) or transformational (change in form or morphogenesis). Note that transformations connect to changes in perspective of a given object. Transformations involve active anticipations or re-anticipations. The image is useful to operations in that it symbolises an exact knowledge of states, but does not provide an understanding of transformations. Two conclusions arise:

- (1) The image is no more sufficient than perception in its ability to:
 - account for concepts of thought that arises from operative activities not reducible to figurative data; and
 - engender operations on the basis of experience (the image makes it possible to foresee/anticipate the results of certain transformations).
- (2) The image (like perception) does not develop independently but is due to the intervention of operations (that enable reproductive images that can anticipate transformations) of the image.

There is another type of projection: emotional, that Priddy (1999) explains:

- Involves a strong emotional drive.
- Is (following Freud) non-conscious and involuntary, motivated by emotions wherein a person imposes a subjective feeling or a thought on another person or situation.

Imposing a subjective feeling on another person or situation is a condition of empathy, or the identification with and understanding of another's situation, feelings, and motives, or the attribution of one's own feelings to an object. According to Piaget (1977, p. 132), empathy is knowing what another person feels, or feeling what another feels, or both. Knowing and feeling are indissociable facets of the same event. It is difficult to logically distinguish between genuine empathetic and egocentric projection. Empathy implies a kind of emotional sharing between subject and object that has more than a cognitive explanation.

Feffer (1970) uses the concept of egocentrism as a major explanatory variable in a general theory of schizophrenia. It adopts the notion of decentering (the ability to shift from one focus of examination to another), and is crucial in structuring experience. For Feffer, the inability to decenter is a characteristic of schizophrenic thought disorder. Such people lack the ability to formulate communications that reflect an accurate understanding of the information needs of their listeners. This is also a characteristic of centralised social communities in which there is more than one predominant paradigm. There is another feature of egocentrism. Following Piaget it is a polar opposite of perspectivism and taken together they create a common egocentrism-persepectivism axis. Egocentrism is applied to the state of recurrent subject-object confusion that

operates to confine an individual to a singular and highly personalised point of view while denying to others the uniqueness of their own vantage. Perspectivism, however, refers to the progressive capacity to differentiate between one's own and others' points of view. It implies the recognition of universality rather than the absence of subjectivity.

Concepts of human psychological can be applied, with appropriate constraints, to any durable autonomous social collective that operates through its noumenal and existential dimensions: that it is when it has a collective mind and a culture. When such collectives are durable, they are also often referred to as being viable. It is worth, therefore, to explore the notion of viable systems.

Viability and viable systems

Any durable autonomous social collective, with its set of identifiable parts and a collective interest in working together as a whole, develops am more or less shared common interests, and this can be modelled as a system. The notion of the system developed significantly from the 1950s, when through authors like Ackoff, Ashby, Beer, von Bertalanffi, Koestler, Weinberg and Simon it became an independent domain of study in management. The constructivist view of systems saw social collectives as autonomous purposeful human activity system populated by people with a psyche operating in a social environment that is structured, and within which they develop patterns of behaviour. When these systems have durability and a potential for sustainability, they were also called viable systems.

Beer (1979) developed a pragmatic theory of the viable system, by using the highly theoretical work of Whitehead and Russell (1910). This distinguished between systemic behaviour and a cognitive dimension that operates as the controller for the system.

To illustrate Beer's notion, we construct a primitive "onion" ontology which distinguishes between an environment, a behavioural system, and a cognitive metasystem (Figure 1). Here, the metasystem operates as a controller for the system that exists within an environment that is complex because of its variety (a measure of the different states that a situation can take) and that are likely to require particular forms of action (requisite variety) to respond to it. This notion of variety is very closely related to the idea of complexity, and is indeed usually seen as a measure of complexity (Bar-Yam, 2004). It is a term discussed and developed by Beer (1979) following his interest in social system variety engineering.

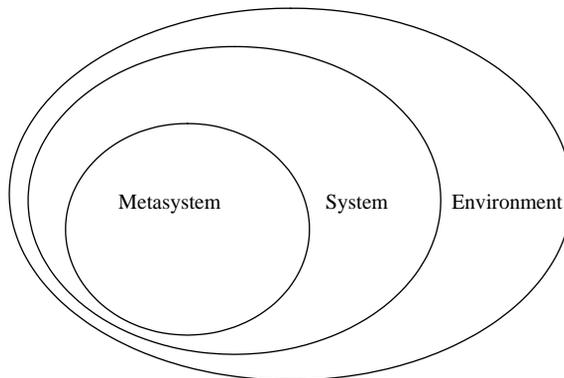


Figure 1.
A primitive ontology
depicting relationships
among the environment,
system and metasystem in
Beer's theory of viable
systems

The term variety arises because of the idea that complex environments are constantly in change and as a consequence generate conditions that continually test an autonomous self-organising system. The ability of the system to survive depends on its ability to create the requisite variety (Ashby, 1964) that equally responds to the variety it experiences from the environment.

While the system defines a structured behavioural space, the metasystem is a cognitive one “capable of deciding propositions, discussing criteria, or exercising regulation for systems that are themselves logically incapable of such decisions and discussions or of self-regulation” (van Gigch, 1987). As such it operates through a cognitive base of attitudes, values and beliefs that underpins culture, paradigms, and patterns of knowledge (Yolles, 1999).

There is a dynamic relationship between these ontological divisions that we show in Figure 2, which (after Koestler (1967) who wanted to represent the holism of systems by a more appropriate name) is an extended system that we shall call a holon. The holon is therefore conceived as an extended system that is in some way coupled to its proprietary and largely invisible metasystem from which control is projected and from which system responses are explored and evaluated.

The extension to the system therefore depicts what we shall call its higher functions. There is also a coupling between the system and its environment, and when this enables the development of a shared history it can be referred to as a structural coupling (Maturana and Varela, 1987). This couple enables environmental variety to be channelled and recognised, and highlights the way that the system responds to the affective impulses of its environment. These impulses have within them a variety of affects that can only be responded to through reactions that are requisite to that variety. In other words, when a variety of independent affective problem situations arise the system must deal with each of them each in an appropriate way. It should be noted that structural coupling is only possible between two ontologically similar

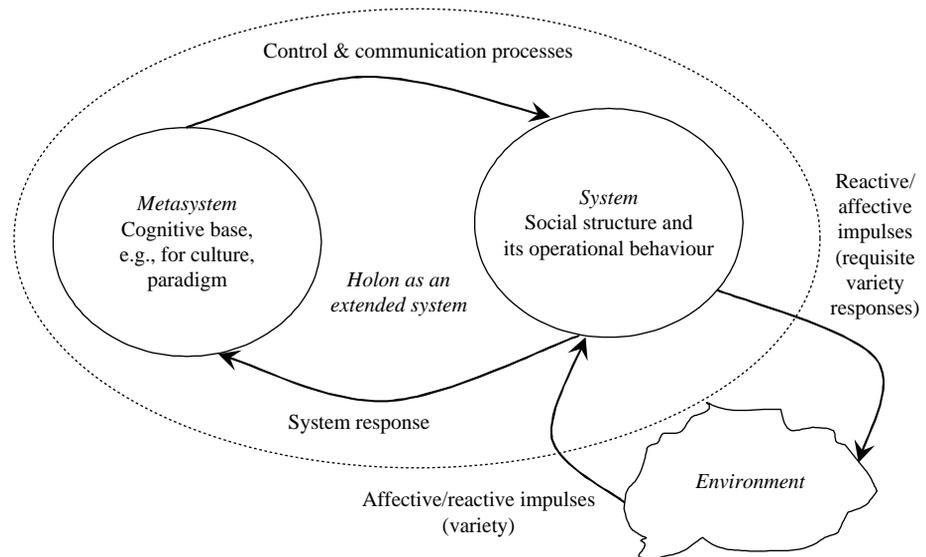


Figure 2.
Dynamic relationship
among the system,
metasystem and the
environment

entities, as in the case of the environment and the system. Since the metasystem is not normally a decision space and the environment an action space, no structural coupling is possible between the two.

The idea that complex social systems can be viable has achieved prominence through the work of Beer (1972, 1979). For Yolles (1999) a viable system is one that can be seen to be self-dependent, and thus takes on an independent existence suggesting that it should be seen as autonomous (Yolles, 1999), though the notion of autonomy will require some further consideration in due course. Argyris (1976) argues that the viability of such systems lies in their ability to respond to unanticipated environmental changes, and a system is viable if it can respond to changes whether or not they have been foreseen.

Viable systems indicate a condition of a system that enables them to respond to their environments. They are able to survive despite the fact they are likely to have pathologies (conditions of ill-health) that impact on their operative effectiveness. They have dissipative structures and hence maintain a condition of bounded instability, and the only way that they can survive is to provide energy to create order by formulating reactive/affective impulses that maintain requisite variety, and that can respond to the variety of affective/reactive impulses that originate from their complex environment.

So, the notion of viability is related to self-dependent autonomous social collectives that have the capacity to respond to changes initiated by the environment or by its own internal dynamic processes. The survival of viable systems is deemed to be dependent on their capacity to introduce changes to their structure (and which will impact on their behaviour), whether or not the changes have been foreseen.

This ability to make such changes is often represented as self-organisation. Yolles (2006) has referred to this as automorphosis, since it represents a condition of self-change in a system's morphology (or structural form). Hidden behind this simple notion is the idea that other "higher" forms of change can also occur that become reflected morphologically, for instance within processes of thinking within cultural systems.

In systems theory the environment is normally thought of as being external to the system. However, for Sorokin (1962) the social system also has an internal environment that is subject to proprietary change processes through the development of internal change and evolution (which he called the principle of immanent change).

Consequently, the perturbations referred to may arise either from internal or external environments. The usual way of dealing with this is by creating a hierarchy of systemic foci (sometimes called a holarchy) with a matching hierarchy of environments. Hence, an internal environment at one focus in the holarchy is also an external environment at a lower focus.

A viable system should be seen as complex and adaptive, and able to maintain a separate existence within the confines of its existential or other constraints. Viable systems should have at least potential independence in their processes for regulation, organisation, production and cognition.

Schwarz (1997) explains at some length the mechanisms by which viable systems can pass through processes of emergence and evolution, towards further complexity. This occurs through the development of patterns, that is: patterns of self-organisation that accommodate phenomenal change through morphogenesis and new forms of complexity; patterns for long-term evolution that support autonomy; and patterns that

lead to systems functioning viably through their capacity to create variety and indeed requisite variety.

Curiously, many who live in their complex social collectives do not recognise the nature or importance of the constraints or facilitations under which they operate, and that have been imposed by the ideological-ethical and socio-political structures around them. Nor do they appreciate what the significance of this for the viability of their social collectives.

Viability, then, is the ability of an autonomous system to durably survive. Viable complex systems evolve through a sequence of structures and processes that enables them to maintain integrity, identity and autonomy. However, such a system will not be able to maintain itself viably through evolution if its parts decompose or are consumed, and where no possibility arises of its parts being re-synthesised, replaced or substituted, or where its integrity is lost through sever pathologies. While many pathologies impact on the ability of viable systems to effectively pursue their interests or purposes, sever pathologies erode their capacity to maintain their status of being viable.

Viability and operative intelligence

Autonomous systems existing in a testing environment are viable by virtue of the innate operative intelligence. This proposition results from coupling Beer's (1979) conceptualisation of viability with Piaget's operative intelligence. This coupling proposes that the intentional ability of an autonomous human activity system to be viable and therefore durably survive in a potentially hostile environment is a direct function of what we shall refer to operative intelligence. A second proposition tells us that viability is influenced by a social system's cultural and knowledge context. These propositions are represented as a primitive ontology in Figure 3. However, they require an understanding of the nature of operative intelligence, and for this we shall refer here to Austin's (2005) explanations of Piaget's theory of child development as posited by Demetriou *et al.* (1998). However, it can be said that this is consistent with Piaget (1950).

To recognise the utility of theory of the individual within the context of the collective autonomous system, it is useful to note Yolles's (2006) argument, which is that theory like that of Piaget's (1950) or Wollheim's (1999) is relevant. It argues that in collectives, normative cultural structure can occur because the symbolic forms that create it can have a meaning that is to some extent shared by individuals within it. The coherence of the culture is ultimately determined by the strength of the capacity to so

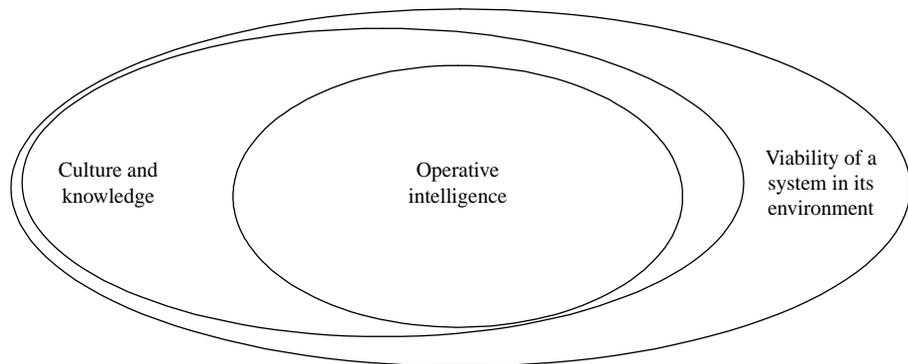


Figure 3. Primitive ontology, showing the connection between viability and its imperative operational intelligence, based on the propositions from Beer and Piaget

share. The theory leads to the recognition that while there is distinction between the individual and the collective, theory can be migrated from one to the other.

Piaget's theory describes intelligence within the context of cognitive development that frames how the world is understood and represented. Operative intelligence is dynamic and intimately connected to understanding. It is responsible for the representation and manipulation of the transformational aspects of reality. It involves all actions that are undertaken so as to anticipate, follow or recover the transformations of the objects or persons of interest.

Piaget assigns the name figurative intelligence to reflections of operative intelligence. Figurative intelligence is static in as far as it is representative of what has been extracted through the performance of operative intelligence. It involves any means of representation used to keep in mind the states that intervene between transformations; i.e. it involves perception, drawing, mental imagery, language and imitation. Because states cannot exist independently from the transformations that interconnect them, it is the case that the figurative aspects of intelligence derive their meaning from the operative aspects of intelligence. Figurative intelligence is therefore continually renewable.

Piaget further posited that this process of understanding and change involves the two basic functions: assimilation, and accommodation. Assimilation refers to the active transformation of information so that it may be integrated into already available mental schemes. According to Sternberg (1996), accommodation refers to the active transformation of mental schemes so that the particularities of whatever an individual is interacting with may be taken into account.

For Piaget intelligence is active in that it depends on the actions carried out by the individual in order to construct and reconstruct his/her models of the world. It is also constructive because mental actions are coordinated into more inclusive and cohesive systems and in this way are raised to more stable and effective levels of functioning. When one function dominates over the other they generate representations belonging to figurative intelligence. When the functions of assimilation and accommodation are in mutual balance they generate mental schemes of operative intelligence.

Interestingly, Piaget's theory of intelligence, including his notions of assimilation and accommodation, has been used by Kolb (1974) in his knowledge-based cycle of learning, this later being developed on by Honey and Mumford (1986) and commented on by Yolles (2006). In assimilation, what is perceived in the outside world is incorporated into the internal world, without changing the structure of that internal world. The internal world has to accommodate itself to the evidence with which it is confronted and thus adapt to it, which can be a more difficult and painful process. This process can also be applied to collectives, and attempts have been made to do this, for example by Nonaka and Takuchi (1995) and by Yolles (2006).

We are now in a position to formulate a third proposition that ties viability into operative intelligence. Operative intelligence is a condition that depends on the interaction between thinking and doing in overcoming a testing environment, and this operative couple is conditioned by believing.

This proposition can also be expressed through a primitive ontology. In Figure 4, we offer a model that connects the earlier propositions. It establishes an ontological relationship between the distinct spaces of being: believing/knowing, thinking/feeling and behaving/doing (or action). The holon consists of two "transitive" foci: a first order (thinking-feeling) focus that exists as an operative couple and can drive operative

Knowledge cybernetics

KC is a paradigm that is conceptualised in terms of social dynamics based on knowledge and knowledge processes, and recognises the importance of communications and control (which constitute cybernetics). It involves feedback and feed-forward that enables, for instance, thinking to be turned into behaviour in a way that can be controlled and evaluated, and knowledge to underpin this relationship. It is concerned with social collectives that have both a social and cultural dimension. It is interested in any autonomous system that is viable and therefore has a capacity to durably survive, a consequence of what we call operative intelligence.

Following Piaget, we assign two aspects to this: operative and figurative intelligence. We recall that operative intelligence is said by Piaget to be responsible for the representation and manipulation of the transformational aspects of reality, and as such it may be constituted in terms of operative processes that enable an organisation to maintain stable operations. Figurative intelligence is constituted as a means of mental representation for the states that intervene between transformations. It would therefore be expected to have both informational and knowledge attributes.

For our purposes, it is useful to identify two attributes of figurative intelligence: figurative imagery in which information rich constructs are reflections of operative intelligence, and figurative knowledge in which thematic patterns of knowledge are constructed to provide meaning. This representation is shown in Figure 5.

Here, the hierarchical distinction that arises from the relationship between viability and operative intelligence enables us to explore both first-order and second-order effects. There is an intimate connection between thinking and behaving that is direct and called as a first-order effect that involves a network of operative processes. While behaving is ultimately a function of empirical experience, thinking is associated with the mental images that are created through empirical experiences. However, there is a second-order effect that arises from the thematic assemblies of belief/knowledge that we have called figurative knowledge.

While the natures of the three attributes are all very different, they have channels between them that (epistemologically) define their mutual relationship in the autonomous being. These channels provide for migration (Yolles, 2006) that enable

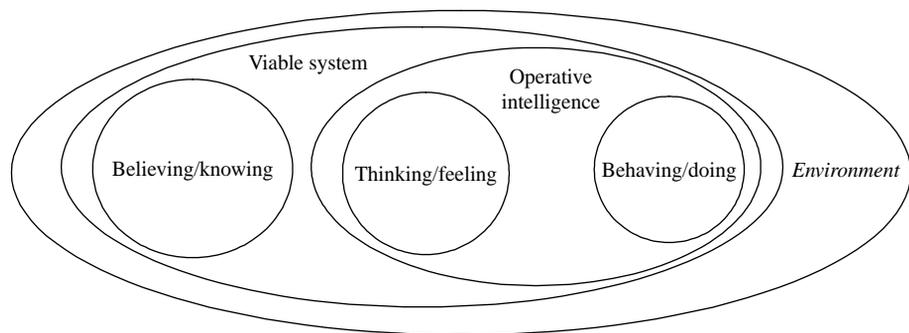


Figure 4.
The notion of viability
with operative intelligence
in a testing environment

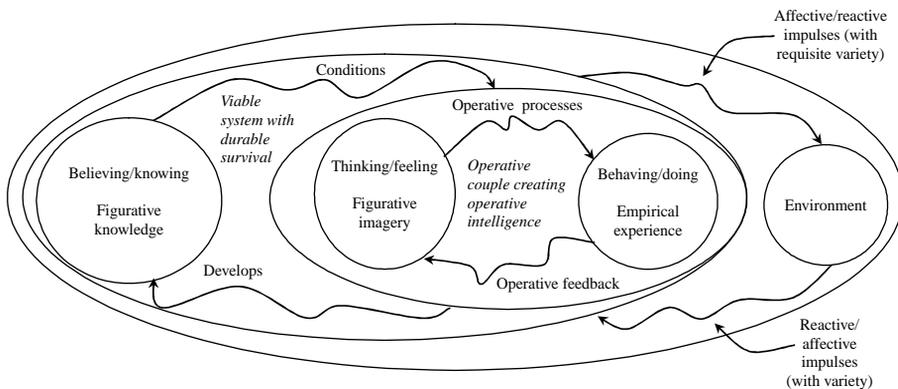


Figure 5. Piaget-related relationships between three types of reality showing channels of migrations

semantic impulses to occur locally in one domain and are represented locally in the others according to their own frames of reference. Thus, for instance this might occur through a process of autogenesis in which governing principles are used to migrate knowledge into an operative couple, or autopoiesis where a network of processes might migrate a system of thought into action. The relationship between this autonomous viable system and the task rich environment is that the system affects/reacts to the environment while the environment reacts/affects the system.

The representation of the model can be formalised as in Figure 6, called the social viable system (SVS) model, which is a development from Schwarz's level theory of autonomous viable systems. The model is cybernetic in nature, thereby centring on communications and control between the different levels. It is also context sensitive so that the nature of the levels can change given the right conditions. The (noumenal-phenomenal) couple facilitates operative intelligence that itself enables viability.

One of the features of KC is that it is capable of representing social collectives at a variety of foci. While it can create a hierarchy of foci within the phenomenal domain, equivalently to the way viable systems theory (VSM) does, the SVS model is also seen as a structure that can be used to generate conceptual fractal reflections everywhere in the model. We say conceptual fractals, because fractals as such have associated with

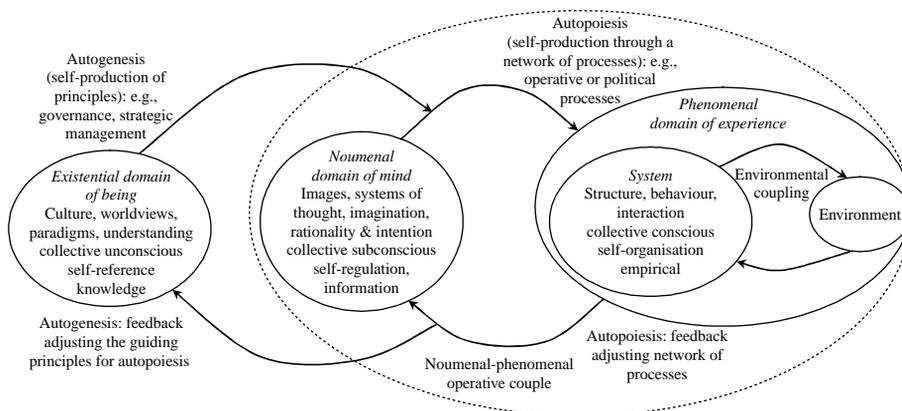


Figure 6. SVSs model based on Schwarz's model of autonomous viable systems, where autonomy is a function of autogenesis and autopoiesis

them a particular mathematical formulation (Mandelbrot, 1982), but conceptual fractals represent a weaker form of fractal thinking that do not have that expectation. This does of course, not mean that the mathematical formulations of conceptual fractals do not exist.

So, given that a social collective can be represented as an autonomous holon, then it is always possible to find conceptual fractals of SVS. The only requirement is that an appropriate context is defined for the lower focus, and that the parts of the fractal take on representations that are meaningful.

The basis of this SVS ontology was developed from Schwarz (1994, 1997) by Yolles (1999, 2006). The three domains constitute distinct modes of being: measurable energetic phenomenal behaviour, information rich images or systems of thought, and knowledge-related existence that is expressed through patterns of meaning.

The term existential is taken directly from Schwarz's (1994, 1997) usage; the term noumenal is taken from the positivist work of Kant (Weed, 2002), and though we also refer to the sphere of mind and thinking as did he, our approach is constructivist; and the term phenomenal has been adopted because of intended consistency with the principles of phenomenology as founded by Husserl (1950) (deriving from his 1882 doctoral thesis; also see Osborn, 1934 and after him Heidegger, 1927).

The domains of SVS are analytically distinct classifications of being, and they each have properties that are manifestations of knowledge. The phenomenal domain has social interests adapted from Habermas's (1971) and where the other domain properties arise as an extension of this (Table I) in a way explained in Yolles and Guo (2003) and Yolles (2006).

There is an implicit linkage between the domains that has been explored by Yolles (2006) using notions of relevance, as originally proposed by Schutz and Luckman (1974). The existential domain has thematic relevance that determines the constituents of an experience; the noumenal or virtual domain creates direction through the selection of relevant aspects of a stock of knowledge to formulate a system of thought, and it could be made more complex by involving feeling; and the phenomenal is associated with through and in particular action.

The notions of conscious, subconscious and unconscious derive from Freudian psychology, are connected to the ideas of Wollheim's (1999), and also related to the ideas of organisational psychology as promoted, for instance, by Kets de Vries (1991) resulting in a psychology of the collective.

Pathologies can be represented within the SVS model when the connection between the domains is broken then pathology arises. In Figure 7, two types of pathology are identified. The first is referred to as type 1 (i.e. types 1,1 and 1,2) that we shall refer to occur when the network of transformational process that convert images or systems of thought to structures and behaviors is blocked. Effectively this is a blockage of operative intelligence. When this occurs, behavior may be influenced directly by, for instance, unconscious elements.

The second type of pathology (types 2,1 and 2,2) that can occur is when the network of principles that conditions operative intelligence blocked, so that normative coherence cannot develop within the cultural fabric of the collective agent, in part because learning is not possible. This has major implication for the way in which patterns of behavior become manifested.

Cognitive properties	Kinematics (through social motion)	Direction (determining social trajectory)	Sociality	Possibilities/potential (through variety development)
<i>Cognitive interests</i> Phenomenal (conscious) domain Activities	<i>Technical</i> Work. This enables people to achieve goals and generate material well being. It involves technical ability to undertake action in the environment, and the ability to make prediction and establish control	<i>Practical</i> Interaction. This requires that people as individuals and groups in a social system to gain and develop the possibilities of an understanding of each others' subjective views. It is consistent with a practical interest in mutual understanding that can address disagreements, which can be a threat to the social form of life		<i>Political management</i> Degree of emancipation. For organisational viability, the realising of individual potential is most effective when people: (1) liberate themselves from the constraints imposed by power structures (2) learn through participation in social and political processes to control their own destinies
<i>Cognitive purposes</i> Noumenal (subconscious) domain Organising information	<i>Cybernetical</i> Intention. Within the governance of social communities this occurs through the creation and pursuit of goals and aims that may change over time, and enables people through control and communications processes to redirect their futures	<i>Rational/appreciative</i> Formative organising. Within governance enables missions, goals, and aims to be defined and approached through planning. It may involve logical, and/or relational abilities to organise thought and action and thus to define sets of possible systematic, systemic and behaviour possibilities. It can also involve the (appreciative) use of tacit standards by which experience can be ordered and valued, and may involve reflection		<i>Political mindedness</i> Manner of thinking. Within governance of social communities an intellectual framework occurs through which policy makers observe and interpret reality through ideology. This has an aesthetic or politically correct ethical positioning. It provides an image of the future that enables action through politically correct strategic policy. It gives a politically correct view of stages of historical development, in respect of interaction with the external environment
<i>Cognitive influences</i> Creating cultural disposition Exustential (unconscious) domain Worldviews knowledge	<i>Socioeconomic</i> Formation. Enables individuals/groups in a social community to be influenced by knowledge that relates to its social environment. It affects social structures and processes that define the social forms that are related to community intentions and behaviours	<i>Base</i> Belief. Influences occur from knowledge that derives from the cognitive organisation (the set of beliefs, attitudes, values) of other worldviews. It ultimately determines how those in social communities interact, and it influences their understanding of formative organising. Its consequences impact of the formation of social norms		<i>Politico</i> Freedom. Influences occur from knowledge that affect social community polity, determined in part, by how participants think about the constraints on group and individual freedoms; and in connection with this, to organise and behave. It ultimately has impact on unitary and plural ideology and morality, and the degree of organisational emancipation

Table I.
Domain cognitive properties that determine social orientation (sociality) developed from Habermas's knowledge constitutive interest

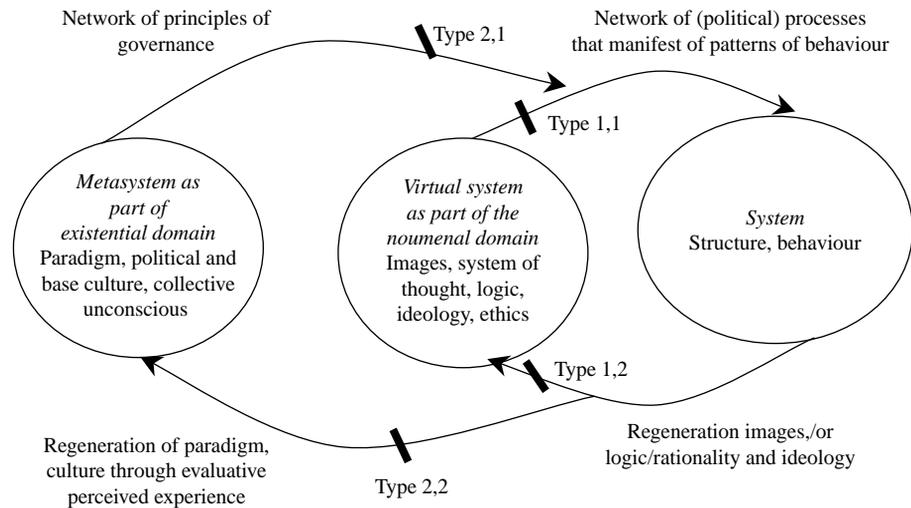


Figure 7.
Types 1 and 2 pathologies

Neuroses as pathologies

Returning to Jung (1933), had he been interested in exploring the psychology of the social in the same way as of the individual, he would likely have referred to a collective agent as having a collective mind with collective neuroses. A neurosis is most simply seen as an inner cleavage that drives agents to internal conflict because of contradictory intuition or knowledge. It happens when distinct groups or factions that are part of a collective have developed their own incommensurable paradigms making it difficult to meaningfully communicate. Where the paradigms compete for domination in a social community, neurosis can develop into analytical schizophrenia resulting in the formation of contradictory organisational purposes that debilitates the organisation.

Like Jung, Fromm (1947) sees that every neurosis is the result of a conflict between an agent's inherent powers and those forces that block their development. For Jung (1916), the moment of the outbreak of neurosis is not just a matter of chance – it is generally critical, and is usually the moment when a “new psychological adjustment, that is, a new adaptation, is demanded”. Examples of manifestations of plural agent's neuroses are:

- an employee strike against its corporate employer;
- the capacity of corporate managers to share information with other managers is compromised by their power seeking interests (we note that if the culture in the corporation is such that this behaviour is normative, then it can be argued not to be a neurosis); and
- riot in a prison or plural ethnic community.

Within this frame of reference we can describe agent consciousness, with awareness attached to behaviour and connected with corporate ego. The strength of the ego limits the capacity of a plural agent to adapt when it needs to, thereby creating pathologies. We can identify graphically at least two types of such pathology in Figure 8 and Table II. For simplicity we have combined the unconscious cultural state and disposition.

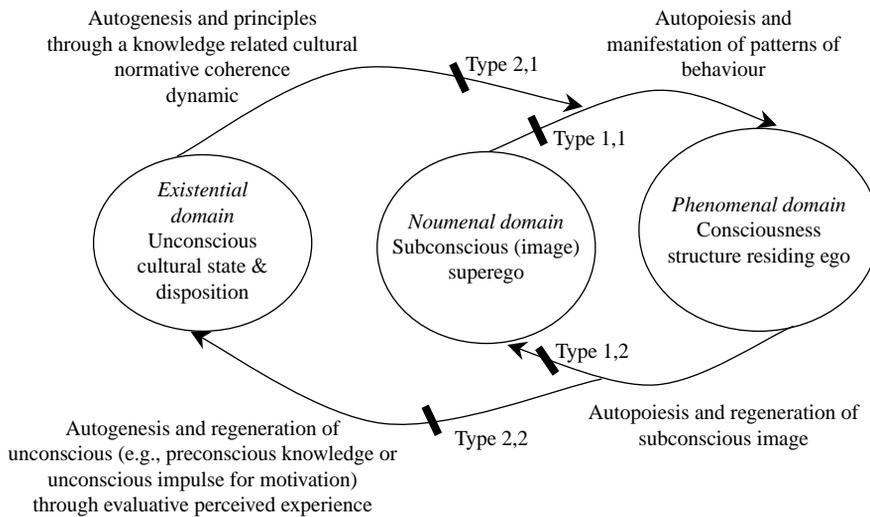


Figure 8. Transverse psychological model of the collective showing types 1 and 2 pathologies

Pathology type	Nature
1 (1,1 and 1,2)	Can result in disassociative behaviour that has little reference to ideate images (or the collective subconscious). When this occurs, behaviour may be influenced directly by the collective unconscious. Type 1,1 relates to phenomenal image projection, while type 1,2 to an ability to have a feedback affect
2 (2,1 and 2,2)	No changes in the normative coherence can develop within the cultural fabric of the collective agent. In types 2,1 existing knowledge cannot have an impact on the autopoietic loop, while in type 2,2 learning is not possible. This has major implication for the way in which patterns of behaviour become manifested. An example of the type of pathology might be when patterns of behaviour occur independently of subconscious constraint, but responsive to the instinctive unconscious
	<i>Associative type combinations</i>
T1,2	<i>T1,1</i> No phenomenal image projection or feedback resulting in direct link to existential domain <i>T1,2</i> <i>T2,1</i>
T2,1	No knowledge development/ learning and no phenomenal image projection. Feedback cannot be responded to No feedback resulting in regeneration of ideate image, and no learning process development
T2,2	No phenomenal image projection, and no possibility of coherence through learning capacity No regeneration of ideate image through experience, and no evaluative process deriving from experience No influence of knowledge or knowledge development (i.e. no learning or reflection). Image and phenomenal image projection cannot develop

Table II. Types of ontological pathology, and possible associative relationships between type combinations

The first of the types of pathology (types 1,1 and 1,2) that we shall refer to occur when autopoiesis is blocked, and this can result in disassociative behaviour that has little reference to subconscious images. When this occurs, behaviour may be influenced directly by the unconscious. The second type of pathology (including types 2,1 and 2,2) that can occur is when autogenesis is blocked, so that normative coherence cannot develop within the cultural fabric of the plural agent, in part because learning is not possible. This has major implication for the way in which patterns of behaviour become manifested. Micro-variations to this can occur by defining two forms of each type of pathology as types 1,1, 1,2, 2,1 and 2,2. An example of the type 1,1 problem might be when recurrent patterns of behaviour occur independently of subconscious constraint but responsive to the instinctive or emotional unconscious. In the case of social communities that have cultural instability (where there may be a plurality of shifting norms), this non-coherent and perhaps gratuitous/un-self-regulated behaviour may simply respond to the instinctive or emotional needs of individuals in that community. When types 1 and 2 pathologies occur together, behaviour is purely responsive and determined from structural capacities.

The pathologies of social collectives

We have considered the notion of pathology in social collectives, and here we shall explore some implication of Piaget's theory of interaction.

Piaget believed that the acquisition of knowledge (and hence the process of knowledge intensification) occurs through interaction with the environment, and it results in three different kinds of knowledge that depended on the type of interaction. Direct interaction with an object results in knowledge that is physical or empirical. Knowledge acquired from actions with an object is abstract, must be invented and is referred to as logico-mathematical knowledge. Social-arbitrary knowledge is acquired through interpersonal interaction with others within a culture. It has been accompanied in Table III by notions of knowledge type associated with our domains, and originally deriving from Marshall's (1995) and Shutz and Luckmann (1974).

Through his experience with the observation of his own children and the experiments he designed and performed, Piaget (1969, 1981) and Piaget and Inhelder (1969, p. 6) theorized that the acquisition of knowledge occurs through the processes of assimilation and accommodation (Table IV), an idea that was picked up and integrated into a learning theory by Kolb (1974). Assimilation incorporates or integrates new information into an existing knowledge scheme defined through a pre-existing

Viable system domain/knowledge	Piaget knowledge type		
		Nature	Source
Phenomenal/ executor	Physical or empirical	Knowledge about objects in the world	The object itself
Noumenal/ elaborator	Logico- mathematical abstract	Invented knowledge as a coherent set of mental operations	Actions on objects
Existential/identifier	Social-arbitrary	Culture-specific knowledge that is learned from other people	Actions and interactions with others

Table III.
Piaget types of
knowledge and their
connection to SVS model

cognitive structure that can be expressed as a noumenal ideate or model, filters or modifies information inputs, and entails adaptation by which the cognitive form is conserved. This process can, for instance, provide an explanation for the relationship between knowledge, information and data for a decision maker. Accommodation evolves a knowledge scheme to accommodate the knowledge that has just been assimilated, and modifies the cognitive form of an existent pattern of knowledge as a function of the externally perceived situation.

This whole process can be seen in terms of a set of knowledge flows that (in what is normally a dissipative system that is far-from-equilibrium) may reach a (perhaps transient) steady state resulting in some form of equilibrium. Hence, equilibrium can occur between accommodation and assimilation driving cognitive growth through the creation of a knowledge schema. Piaget considers that equilibration is a major factor to explaining why some children advance more quickly in the development of logical intelligence than do others (Lavatelli, 1973). The connection between accommodation and assimilation does not have to be seen as a balance due to equilibrium, but rather can develop a stable relationship that is created through fractal patterns of knowledge that develop through an evolutionary process.

According to Ginn (2002), this conceptualisation stems from Piaget’s theory of learning and thinking. In this, knowledge is not only transmitted (from a knowledge source) verbally but must also be constructed and reconstructed by a learner (a knowledge sink). To have and construct knowledge a sink must act on objects, thus providing knowledge of those objects by a cognitive organization of what constitutes reality. Understanding or reality comes with phenomenal action through knowledge.

The ability of an individual to acquire information and knowledge occurs through perception, and this can be argued to be dependent upon a perceiver’s existing patterns of knowledge. Piaget (1977, p. 20) argues that this can happen because people have a projective capability. Priddy’s (1999) understanding of such projection is that it occurs when the mind is not just a passive receptor, but is active in forming an image of reality. The idea of projection presupposes two kinds of properties:

- (1) an interrelation or coordination of viewing points; and
- (2) the possibility for deductive reasoning, thus enabling (for instance) an anticipatory capacity.

We have referred to projection having these properties as associative projection, a process of “subjectifying the phenomenal object”, thus connecting ones own comprehension and deductive reasoning from actions or operations that have been subjectively assumed. The subjectifying process is one of shifting the boundaries of what constitutes the subjective. To do this, the difference between subjectiveness and

Types of knowledge process	Nature of knowledge process
Assimilation	Incorporating new events into a pre-existing cognitive structure
Accommodation	Existing cognitive structures change to accommodate new information
Equilibration	Finding a balance between assimilation and accommodation, self and the environment, and creating a new knowledge schema

Table IV.
Distinctions between assimilation and accommodation according to Piaget

objectiveness needs to be understood. While a subject is composed of personalised experiences, an object is a non-personalised set of phenomena.

The nature of an object is determined from a knowledge created perspective of the subject. The two are irrevocably bound together, and it is from this association that action (the source of experiential knowledge) originates. It is through the dialectic interaction between the object and subject that the object is discovered in its properties that frees knowledge of its subjective illusions. This dialectic interaction enables the subject to organise its actions into a coherent system that constitutes its intelligence and thought.

While the subject appears therefore to be formulated through tacit knowledge, Piaget (1977, p. 62) considers that objects are only seen as pictures that have been theorised such that they can be interpreted. As shown in Figure 9, these pictures can be seen as virtual images maintained in the virtual system existent in the noumenal domain. This suggests that the relationship between the subject and the object is likely to be adequately described in terms of a second-order ontological couple. Thus, it is cognitive processes that establish theorising principles from which the subject and the object are ultimately connected. We shall return to this diagram in due course to discuss the type pathologies.

For Piaget (1977, p. 87) object conception derives from the coordination of the schemes that underlie the activities with objects, and objectivity derives from the coordination of perspectives. Where two disparate systems are to be co-ordinated, there must be a fixed point either internal to one or external to both.

The coordination of perspectives originates cognitively through understanding generated from experience. Experience is filtered through and assimilated by available cognitive structures that both change and are changed by potential phenomenological inputs (for example arising from experiences). The knower and the known are inextricably bound up with one another such that the object and the subject are inseparable. The acquisition of knowledge arises from the interaction between the object and the subject. It in particular involves both the operative functions relating to that

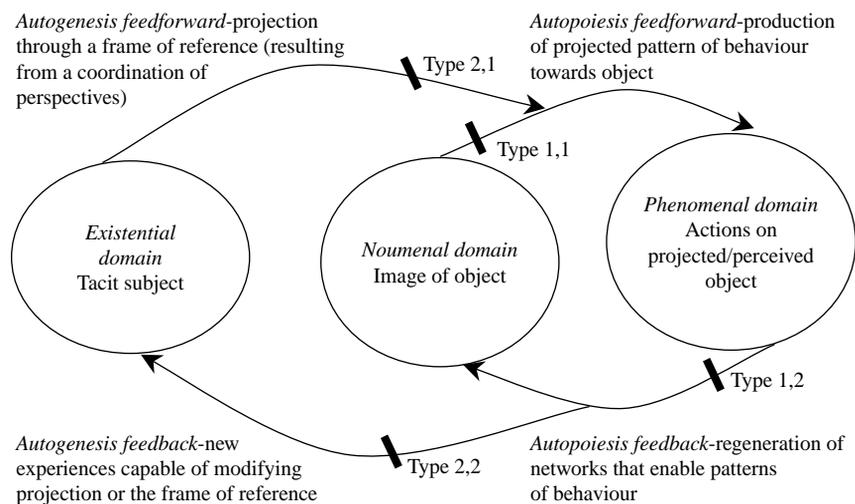


Figure 9. Interpretation of Piaget's notion of the relationship between subject and object

which can be generalised, as opposed to figurative functions that concern the specific nature of an external event. Piaget further asserts that all cognitions are inherently social. As such there is no distinction between social and non-social situations. The general coordination of actions provides the basis for cognitive structures that are individual as well as interpersonal and social.

The capacity of an individual to change the relationship between object and subject through the coordination of perspectives, therefore creating a new frame of reference, results in an ability to shift roles. In particular, the ability to take the role of another is seen as a special case of a more fundamental capacity to decentre or deparochialise the focus of ones conceptual activities to consider and coordinate two more points of view.

The formation of such a frame of reference can be important for political decision processes. Given, for instance, that the collective has a problem situation that it needs to resolve, then a better understanding of its overall context can result. This can lead to strategies that deal with causes rather than apparent effects, and as such resolving behaviour can develop that is more likely to result in outcomes consistent with hope or expectations. This is the opposite of what some would call symptomatic or palliative responses that may well exacerbate a problem situation rather than resolving it through behaviour that originates from a mono-perspective.

Transitive and lateral pathologies

While it is all very well to try to create a formal theory of the nature and cause of social collective pathologies, organisational ill-health is a condition that is ultimately recognised from operationally sick behaviour.

In the theory so far we have only really paid any attention to pathologies that can be described as transitive. That is, the connection between the different domains or modes of being (phenomenal, noumenal and existential) in same way limits the migration process that is essential for the modes to operate as a whole, a unity. This unity has an overall meaning that is defined by context, as is the nature of the domains/modes. Changing the context necessarily changes the meaning of the modes. Since the modelling technique derives from a process of fractal thinking, we can therefore always find a way of formally adopting transitive models of the distinct contexts. Setting up a matrix of contexts that can be logically related to each other enables us to formulate often complex graphical representation of the situation being examined. The technique is also more extensively illustrated in Yolles (2006). While the overall complexity is often too great to deal with as a whole, the distinct set of contexts can be easily explored individually or in relation to another.

Sometimes it is not immediately necessary to reduce a given situation into a set of contexts, allowing us to examine the collective simply in terms of a set of conditions. When this occurs, we say that we are using a lateral approach to explore the collective, when the pathologies are said to exist laterally.

Formally then, laterally based pathologies relate to within domain interactions, and interest in improving the collective is restricted to understanding from a knowledge perspective the nature of what is happening within domains or modes of being. However, in transitive-based pathologies we are concerned with between domain interactions and interest in improving the collectives concerns the how their distinct domains or models of being are coupled together.

Lateral pathologies represent conditions that are internal to a social collective, and this is the more usual way of exploring pathologies that occur within social collectives. When exploring collectives from a lateral perspective it is useful to recognise that two orientations for their pathologies may develop. They may be inwardly directed creating general conditions affect the internal operations of the collective adversely, and they may be outwardly oriented affecting the social environment in which they exist. A collective may have pathologies that are both inwardly and outwardly directed at the same time.

This distinction in orientation can be formalised, allowing us to define the two orientations of lateral pathology as follows. Social collectives may be:

- (1) autopathic which is consistent with an intrinsic analysis and primarily affect a collective agent internally and therefore its internal processes or conditions; and
- (2) sociopathic which is consistent with an extrinsic analysis of how the collective affects others in the social environment, where the stress for the organisational sickness may take a distinctly different explanation.

While autopathology may have an unintended impact that is external to the social collective, it primarily affects the internal working environment of a collective. It can therefore have a significant impact on the ability of the collective to operate intelligently when the pathologies interfere with this capacity. It also affects the capacity of individuals and groups to operate effectively and efficiently. However, sociopathic collectives contribute to the creation of pathologies within their external environment, sometimes through strategic motivations. In general, they maintain egocentric as opposed to sociocentric behaviour, and have exogenously oriented attitudes that are likely to include callousness and a conscience-defect. That a social collective is sociopathic does not mean that it is not also autopathic, so that being a member of one category does not exclude it from being a member of the other.

In passing it may be noted that laterally represented pathologies can ultimately be expressed in terms of a transitive model. While transitive pathologies are normally expressed graphically lateral pathologies can also be graphically represented thereby helping an corporate therapist to explain the processes at work. It is possible to illustrate this by exploring the pathology of the social collective in terms of its capacity for associative projection, an important property for any cognitive entity as we shall explain now.

We have discussed the psychological nature of the social collective, and its capacity for associative projection. However, it appears to be logically the case, even if we have not demonstrated it empirically, that sociopathic collectives have an impaired capacity for associative projection. Let us explore this proposition a little.

Following Yolles (2006) (who cites Piaget (1977, p. 20) in a discussion of human cognitive processes), social collectives have an associative projective capacity when they are active in forming an image of reality, and as already indicated it involves the two kinds of properties:

- (1) an interrelation or coordination of viewing points; and
- (2) the possibility for deductive reasoning.

In (1) there are logical processes at work that enable the consequences of relationships to be determined. We have already noted that a pre-requirement for this is (2) which

involves the ability to develop an object conception. For Piaget (1977, p. 87) object conception derives from the coordination of the schemes that underlie the activities with objects. This is in contrast to the notion of objectivity, which more generally is seen as a derivative of the coordination of perspectives. The capacity of an individual to change the relationship between object and subject through the coordination of perspectives results in an ability to shift roles (or to use the theatre metaphor, change characters). The ability to assume the role of another is seen as a special case of a more fundamental capacity to decentre or deparicularise the focus of ones conceptual activities to consider and coordinate two more points of view.

One of the apparent facets of the coordination of viewing points is the necessity to subjectify the object, thereby connecting ones own comprehension and deductive reasoning from actions or operations that have been subjectively assumed. This leads us to want to consider further the subject-object relationship. It has in particular been explored by Foucault (Rabinow, 1984) and the process of subjectification. For Foucault subjectification is the creation of an association between an emotional perceiver and a phenomenal object that is beyond the boundary of subjective perception. The process of subjectification is one of shifting the boundaries of what constitutes the subjective. The two are irrevocably bound together, and it is from this association that social action originates. The object and subject are in dialectic interaction, and this enables properties of the former to be discovered freeing knowledge of its subjective illusions. This dialectic interaction enables the subject to organise its actions into a coherent system that constitutes its intelligence and thought.

By now we should be aware that the real natures of the subject and object are distinct, and this very distinction is fundamental to associative projection. It is explained by Piaget (1977, p. 62) in the following way. The subject appears to be formulated through tacit knowledge while objects are only seen as pictures that have been theorised such that they can be interpreted. As a consequence, of this explanation we can formulate Figure 7 where we have applied the pathology types 1 and 2.

A type pathology is primary in nature, when the agent is incapable in some way of normally relating the noumenal (or “collective mental”) image of an object to its phenomenal actions within a context indicated by the tacit subject. Now, the collective coexists within the phenomenal environment with which it interacts. However, the object is external to its own behavioural system. As a result any of the types 1 or 2 pathologies or their combination constitutes a condition of collective sociopathology. Sometimes pathologies that arise may be disguised through the personality orientation of the agent towards the object.

There is an obverse of this proposition. Let us take it that associative projection is a normal attribute of those individuals who populate a social collective. Within the collective it occurs through the normative processes. So when associative projection is bounded because of an inhibited ability to adequately create subjective association, then the collective at least has the behavioural potential to be sociopathic. It comes from the inability of the collective agent to recognise objects, thereby limiting the inclusiveness of the perspectives that need to be coordinated.

In Figure 9, the nature of associative projection according to Piaget is shown. This is shown as a transitive process in which distinct levels of reality are connected. However, the coordination of perspectives arises from a more detailed lateral process that occurs in the virtual domain and is shown in Figure 10. It may be noted that the

images of the objects as depicted in this figure is constructed from ideological viewing points that arise from the collective agent's ideology, and its ethical position reflects this and guides behavioural responses.

In particular, in Figure 10 we show the potential for the images of the objects to be coordinated as they become structurally coupled to each other, with the image of one object influencing the images of the others.

This interconnection can and often does fail totally. Consider an illustration of this. Each department in a complex organization maintains an image of the other departments as objects in their local environments. Because of the all consuming egocentric pursuit of its own behaviour, each department sees the local objects as opaque images. Their purpose and function may be known, but what they actually do and the policies that they generate and pursue are not of much concern or interest. As a result the object-images are isolated from each other by being relegated to a virtual horizon that lies beyond immediate awareness and disallowing the possibility of structural coupling. Remedies to such a situation are sometimes expressed through the search for "joined up governance"[3], a term intended to convey the impression of organizational cohesion through policy and action research processes.

Where structural couplings are possible in Figure 10, they may become susceptible to type 3 (lateral) pathologies, so that the coordination of perspective fails. The seriousness of the inability to undertake associative projection of an agent is a function of the number and types (3,1 or 3,2) pathologies that exist.

When type 3 pathologies occur, there sociopathic responses may arise because of the inability of the agent to coordinate perspectives. However, this situation can be made more complex when transitive pathologies are also engaged. This can occur by developing the transitive nature of each of the objects in Figure 10.

Autopathology

Autopathic situations arise with structural and other problems. Thus, for example Claver *et al.* (1999) explore problems that reflect on the development of social pathologies that arise because of the restrictive hierarchical nature of organizations

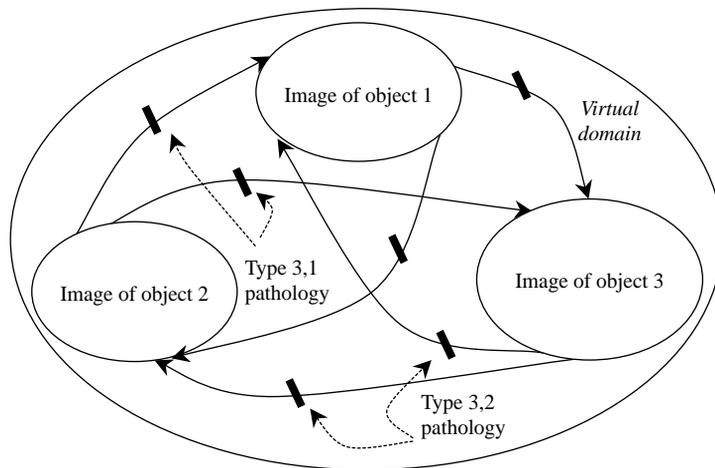


Figure 10. Interactive relationship between distinct images of objects, each interaction susceptible to (types 3,1 or 3,2) pathologies that interfere with the deductive reasoning processes that affect perspective coordination

and their authoritarian governance and relationships that operate through power based leadership roles. Such environments inhibit viable processes by creating emotional and rational bases for pathologies.

Following Yolles (2006), there are three dimensions that should be considered in this regard: culture, structure and behaviour. Behaviour is facilitated and constrained, but not caused by structure, but they are otherwise independent. Both are, however, conditioned by culture. When talking of culture we mean a general existential condition that maintains a belief system and supports patterns of knowledge and understanding. Culture may be argued to be composed of more than one aspect. An example is political culture with its embedded political knowledge that can be manifested as ideology and ethics. Another manifestation is empowerment that “formally” if not practically liberates the individual or group potential to perform certain types of operational behaviour. Thus, in some corporate environments, employees are empowered to make certain types of decision that directly result in behaviour, without having recourse to request permission from more senior roles. However, when push comes to shove the degree of such empowerment is often highly limited by the collective’s bureaucracy, and is therefore more apparent than substantive.

Another problem often comes with structures. Many collectives maintain restrictive hierarchical structures. They are the result of a political culture that is responsible for political awareness. For Rosenbaum (1972, p. 13) political culture is “learned behaviour”, implying processes of socialization involving the creation of values, attitudes and beliefs that influence a political positioning and the formation of political ideology and ethics. According to Hunter (2002) political culture is the normative context within which politics occur. This context includes the ideals, beliefs, values, symbols, stories and public rituals that bind people together and direct them in common action. Political culture is ultimately responsible for political processes that establish power distributions, which act to constrain and facilitate certain types of politically acceptable behaviour. This occurs through political structure with relatable action that is a reflection of that culture’s ideals, and, in turn, reinforces that culture’s normative boundaries.

Political culture also provides the boundaries of political legitimacy and the horizons of political possibility and defines modes of operations that reside in the political structures that are defined and that constrain social processes. These structures normally maintain political executives (in a pluralistic political environment there may be more than one executive, which can result in competition and conflict) supported by a political bureaucracy. This mediates between members of the social collective subjected to the political processes, and the executive(s). However, the bureaucracies also maintain political cultures with resulting power structures and modes of operation that may be, but are unlikely to be, a complete reflection of the social collective’s political culture in which they reside. Let us explain this.

The nature of bureaucracy is that that it controls meaning and develop systems of administration Mazlish (1990). This is different from the usual notion that a bureaucracy will simply reflect a given ideology. In other words, there is an interaction between a bureaucracy and an ideology that affects the development of both the bureaucracy and the ideology. One explanation for the interaction between them is that bureaucracies operate through the subjectivity of leaders, and both the leaders and the led define themselves and their relationship through their association within their

Term	Nature
Ideology	A collection of rationalized and systemized beliefs that coalesce into an image that establishes a potential for social action
Opportunity	The capacity to engineer favourable circumstance, for instance in respect of economic or political structures or conditions
Legitimacy	The capacity to engineer a body of regulations and rules by a governing executive operating under a constitutional right
Opportunity-legitimacy coupling	Legitimate regulations the creation of opportunity (e.g. economic or political) mutually influence each other and develop through a shared history. Breaking the connection means that illegitimate opportunities can develop resulting in illegitimate or corrupt practices
Ethics	A value system that can be used to explore moral value judgments and create what a social collective may call justice
Ethics-ideology coupling	Ideology is connected to ethics through the identification of what is right and wrong, and involves the notion of judgment and justice based on ideological values

Table V.
Nature of the terms and coupling relationships in Figure 11

Legitimacy is concerned with the creation and implementation of a body of rules and regulations that facilitate and constrain the behaviours of those who populate the structure of a social collective. These rules and regulations are legitimate when they are created in accordance with recognized or accepted standards or principles that conform to the dominant paradigm of the collective. The behaviours are facilitated from another factor too, opportunity and in particular economic opportunity. Legitimacy is also connected with accountability (Ackerman, 2005). There is also a close connection between ideology and ethics, ideology establishing a context for ethical developments. The ideological base for legitimacy and opportunity is therefore intimately connected with ethics. This relationship appears to be implicitly supported, for instance, by the “White Paper” On New Foreign Aid Policy published in 2006 by the UK’s Department of International Development, which outlines a foreign aid policy that focuses on promoting good governance and anti-corruption as a means to reducing poverty. Corrupt practices are therefore likely encouraged when the interactive relationship becomes pathological with type 3 breaks. There are indirectly supporting arguments for this.

Political structures that are invested with pathological faults facilitate the development of corruption, and this provides an illustration of autopathological conditions. Often corruption is seen in terms of a moral imperative, but there is more to it than just this. For instance, Goorha (2000) tells us that anti-corruption not only has a moral imperative, but also an economic one. Corruption has been generally vilified because it is indicative of governance that is failing to perform its chief function of limiting transaction costs, and indeed there is a direct relationship between corruption and transaction costs (Murphy *et al.*, 1993). This relationship tells us that low transaction costs encourage economic growth through institutions being able to exploit opportunities by engaging in economic exchange and transformation of resources (Goorha, 2000).

According to the World Bank, corruption is constituted as behaviour (on the part of officials in both the public and private sectors) in which people improperly (and in the context of the state, unlawfully) enrich themselves and/or those close to them or induce others to do so, by misusing the political role position in which they are placed.

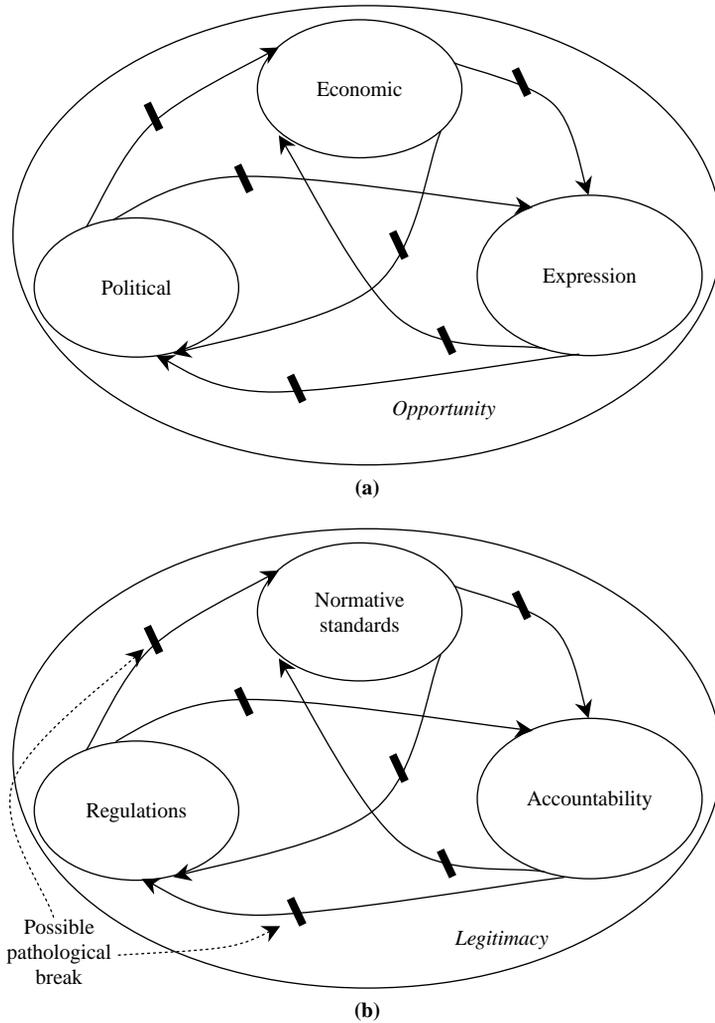


Figure 12.
(a) Deeper nature of opportunity and possible pathological breaks;
(b) deeper notion of legitimacy with possible pathological breaks

This definition really should be followed by an extensive examination since it raises questions about what constitutes legitimacy, and what is the nature of improper or unlawful behaviour.

For Anderson and Gray (2006) there are at least two dimensions of corruption (and both relate in some way to processes of legitimacy, a term we can easily define. Generalising from this, we posit two forms of corruption as:

- (1) *Constructional*. Which refers to bribery to influence the formulation or content of rules and regulations that are institutionally legitimised within the collective.
- (2) *Administrative*. Which refers to bribery by individuals or collectives to influence the implementation of legitimate rules and regulations.

While conceptually different, both types of corruption can have major impacts on the business environment. Constructional corruption weakens the legitimate administrative rules (e.g. state laws) that are deemed to support the social collective and facilitating its interests and purposes. Corruption undermines the collective's capacity to pursue due processes of governance, and to implement its legitimate rules and regulations. Both forms of corruption can pre-orientate preferences and reduce the likelihood of identifying or accessing opportunities that may enable the collective to operate more viably.

Corruption is higher where political opportunities are not realised, e.g. where policies and institutions are weak (Anderson and Grey, 2006). Weak institutions do not have the capacity to enforce facilitating or constraining processes in relation to policy provisions, or where the policies themselves are do not cater for the legitimate needs that a collective has. Collectives in transition, like the countries of Asia or countries of Central and Eastern Europe, are also likely to be subjected to higher levels of corruption, though this proposition implies that the definition of corruption in each collective is the same. In periods of fast growth, formulation corruption may be exacerbated, particularly if such growth is lubricated by the provision of wealth inducing resource.

The viability of a social collective is ultimately determined by the way it is able to respond to the challenges that arise from its environment. We are aware that this is called requisite variety, referring to the different problem states that a complex situation may develop that the complex collective must respond to through action. The capacity of the collective to identify and respond to such action imperatives can be diminished by its pathologies, especially when they reduce the possibility of generating appropriate options that can contribute to requisite variety. The most effective way of ensuring that there is a significant potential for the creation of options, is for the collective to prime as much of its populus for this task. This goes hand in hand with the need to ensure that members of the populations also have access to the core facilitating resources of the collective. Examples of such resources are education, health and opportunity. Thus, in a corporate environment, providing health plans or access to new knowledge for only the senior management does little to motivate lower ranks to participate in the search requisite variety options.

The accessibility to resources in many social collectives is dependent upon two vital attributes: economics and communication, and there is evidence to show that economic and communication deficits are causes for the rise of corrupt practices. There are two measures for this (McAdam, 2004), one from Transparency International and the other from Passau University with their corruption perception index. For instance, according to Transparency International (2006) there is a strong correlation between corruption and poverty. When corruption occurs within the mechanisms that evaluate the legitimacy rules and regulations within the collective then this too has its own potentially significant impact on the viability of the collective. For instance, a corrupt judiciary:

[...] erodes the ability of the international community to tackle transnational crime and terrorism; it diminishes trade, economic growth and human development; and, most importantly, it denies citizens impartial settlement of disputes with neighbours or the authorities. When the latter occurs, corrupt judiciaries fracture and divide communities by keeping alive the sense of injury created by unjust treatment and mediation (Transparency International, 2007).

Corruption is core inhibiting the ability of a social collective to maintain its viability. It is thus an autopathological condition of a collective that will ultimately impact on the way that it operates within its social environment.

Various studies of corruption and their causes, particularly within the context of the nation state, have been undertaken. For instance, You (2005a, b), in a comparative study on corruption between Korea and the Philippines, finds that inequality of income and wealth is the overriding variable that best explains the relative level of corruption among these countries and across time. In addition You finds that there are other rules that appear to apply which we can generalise as follows:

- high inequality can lead to greater incentives for corruption;
- lower inequality can lead to more equal opportunity for education;
- in a meritocratic bureaucracy education can result in lower levels of corruption;
- monitoring and accountability can reduce corruption;
- economic growth is not a cause of corruption; and
- economic growth can be a consequence of corruption.

In another study, this time on police corruption in India, Verma (1999) shows that longer-term corruption becomes cultural, and from his study we can attempt to generalise on his findings as follows. In organisations with elitism, politicization, unaccountability of behaviour, and outdated management practices a culture of corruption can emerge over the longer term. This can only be addressed through transformational change, where organizational structure (including roles and functions), management practices, supervision procedures, decentralization of power, creation of local accountability system.

More, exploring corruption and ethics within globalised society, Zekos (2004) identifies a number of propositions that can be generalised as follows:

- Ethics can lead to value maximization in the long run while corruption can lead to value minimization in the long run regardless of short-term value maximization.
- Ethical norms are influenced by culture, technology and religion affecting in parallel the conception of the wrong doing of corruption.
- Ethical standards are essential across different parts of social life.
- Corporate environments need personnel policy and codes of conduct that mirror ethical principles rather than just rules, and which aim to induce employees to feel that they ought to “comply with” rather “obey” company imposed rules.
- The introduction of codes of conduct enforceable internationally and not voluntarily defining the fundamental principles of business contacts will establish a harmonized view regarding corruption tactics and ethical principles and prohibiting the establishment of corruption methods and not baptizing them as ethically necessary for business.

In another study on corruption in the Russian Federation, Dinio and Ortung (2004) argues that that corruption: increases with the growth of the regional economy, decrease in per capita income, and population decreases; can be reduced by:

-
- encouraging economic development away from the political centre; and
 - fostering political accountability.

Ng (2006) in yet another study, this time of corrupt international financial markets, finds that corruption can be associated with a firm's higher borrowing cost, lower stock valuation and worse corporate governance.

Overall, therefore, it seems that corruption whether inside government or in corporate or civil interaction with government has some common principles. We can try to extract these, in particular by examining a study undertaken by Anderson and Grey (2006) for the World Bank on corruption to countries in transition, in particular with respect to the Countries of Central and Eastern Europe and in Asia. It uses data from the European Bank for Reconstruction and Development-World Bank Business Environment and Enterprise Performance Survey. Their study provides an in-depth look at how corruption in business-government interactions is changing in the transition countries and what factors might be influencing those trends. In Table VI we summarise and generalise on their findings.

Sociopathic processes

Sociopathology can most generally be explained by saying that its corporate psyche is too orientated towards the egocentric than the perspectivistic resulting in operative ailments that are in need of a corporate therapist. This is a much more serious condition in the collective, with its fiscal and connecting power, than it is in the individual who normally has neither of these and whose ability to engender harm is more limited.

A core cause for this failure in the psyche is that the sociopathic collective cannot distinguish between the subject and the object, as shown in Figure 7. From this it can be seen that transitive pathologies can develop that block the connections between each domain. Hence, a more detailed way of explaining the collective sociopath is because it may be susceptible to type 1 or 2 pathology (Table VII).

Thus, we now have a new way of exploring social collectives to determine their potential for sociopathology. This is to examine their ability to use the collective tacit subject, inaccessible to the collective as a whole, but which comes together through the normative processes that accumulate through the acceptances of the individuals that compose it. The tacit subject provides a means of anchoring the interaction between the image of objects and the actions that are undertaken. The ability to coordinate, within the image of objects, a plurality of objects is an important capacity. This was shown in Figure 10, where several images of objects are interactively accumulated, subject indeed to the agent's ideological position. More, in this figure the coordination of perspective is manifested through the way in which the images of the objects are coupled together. For the corporate therapist who wishes to treat a pathological agent, this suggests the possibility of identifying ways of exploring and "treating" collective agents that are being sociopathic.

In contrast to corruption which is a result of an autopathological orientation of its undirected pathologies by a social collective, sociopathic collectives engage in directed actions to enable them to achieve goals or satisfy appreciations[4] that in some way provide gratification. So from a social perspective these can be more effective and therefore serious for the social collective environment. Earlier we noted the existence of an egocentrism-perspectivism axis for the social collective in its orientation to its

Table VI.
Variables to fight
corruption

Variable	Need	Illustration	Explanation
Economic access	Positive economic pressure (e.g. against conditions of poverty)	Taxation as a negative economic pressure	Countries with less burdensome tax regimes tend to have lower levels of corruption in tax administration
Openness (in communication; egalitarian/flat access to governance)	Meaningful communications; low levels of complexity in rules/regulations; participatory opportunities to acquire power	Closed political systems with constraints on elitist access to steering media (e.g. power and money)	Opening up closed political systems can lead to an expansion of some forms of corruption in the short term, but over time more political and economic competition helps foster the transparency and accountability that is essential for controlling corruption
Accountability	Control and operational audit	Law and the judiciary	Judicial independence without accountability can open the door to widespread corruption
Transparency	Mode of operations with control operational/asset audit	Government procurement contracts	Improving procurement systems with independent corporations by having transparency, competition, and standardization, together with financial audit and control; though asset monitoring does not always work
Operational efficiency and effectiveness	Operational means, e.g. competition, standardisation, sound policy	Customs	Streamlined customs procedures and improved efficiency at border crossings reduced clearance times at the borders while also helping to lower corruption
Political support	Strong advocates	Purposeful leadership	Strong purposeful leadership is essential in shaping and pushing reform against corruption, especially in transitional countries

Source: Illustrations/explanations deriving from Anderson and Grey (2006)

Pathology type	Nature		
1 (1,1 and 1,2)	Can result in disassociative or dysfunctional behaviour that may be sociopathic, perhaps disguised when the agents personality orientation is extraverted. Behaviour has little reference to image of the object. When this occurs, behaviour may be influenced directly by the tacit subject, and may not refer to processes of perspective coordination. A type 1,1 pathology inhibits associative projection, while type 1,2 limits the ability to assess the consequences of actions		
2 (2,1 and 2,2)	The tacit subject cannot be fully integrated into the coordination of perspectives. In type 2,1 the tacit subject cannot influence the operative process that connects the image of an object to actions on that object. In type 2,2 learning about the tacit subject is impossible. This has major implication for the way in which patterns of behaviour in relation to the object are manifested		
		<i>Associative type combinations</i>	
		<i>T1,1</i>	<i>T1,2</i>
T1,2	No associative projection is possible		<i>T2,1</i>
T2,1	Associative projection is not influenced by a full understanding of self and the nature of the tacit subject	No assessment is possible of the impact of associative projection in relation to the tacit subject	
T2,2	While the tacit subject may be known, and influences associative projection, the outcome cannot influence the nature of the tacit subject	The consequence of actions that result from the coordination of perspective cannot be recognised, neither will this have any affect of the tacit subject, so that inherent understanding of what an agent is doing in a social environment cannot be achieved	The tacit subject is independent of the coordination of perspectives, leading to arbitrary coordination since there is no consistent inherent frame of reference

Table VII.
Transitive pathology types for relating the subject with the object

environment, and that we attributed to Piaget. Collectives that are sociopathic would appear to maintain themselves towards the egocentric pole. Why this is the case is not known, but it is likely to be best seen as a pathology that arises because of an inability for the collective to coordinate perspectives. If this is the case, then seen as a social illness, a return from sociopathology to healthiness may be possible by treatment from a corporate therapist.

As an illustration of the problem of egocentricism, authoritarian political collectives tend to see their populations as objects, viewing them from an egocentric pole. The collective would be able to perform more viably and for the benefit of the whole collective (rather than that of the few who lead it) if they were more directed towards perspectivism. While this would seem to logically draw us to an exploration of political philosophy, and a discussion of whose interests should be served by a social collective (those of the individual or those of the social as a whole), it does not necessarily do this. The reason is that it is quite simple. Rather than the membership of the collective engaging in an ideological discussion, perhaps it is better to propose that there should be a self-developing and interactive balance between these two pole positions that emerges from a discussion about the need for social viability.

Sociopathic situations are often less obvious than the more (perhaps chaotic) undirected autopathological conditions that a social collective experiences. However, they can be more serious because they are more likely to be calculated, and they tend to affect the social environment with greater impact. In considering sociopathology we shall find that it is useful to revisit ideology and ethics which we have said are important to social collective behaviour. Typically but not necessarily, in sociopathic collectives ideology is driven by authoritarian principles. More generally however, the ethics that it supports reflects a desire towards self-gain at any cost:

Its self-interest makes it inherently amoral, callous and deceitful; it breaches social and human qualities of empathy, caring and altruism, [...] [and here the] embodiment of *laissez-faire* capitalism meets the diagnostic criteria of a “psychopath” (Ackbar *et al.*, 2005).

This idea is supported by Bakan (2005) who explores the nature of private corporations, and how they respond to situations that they encounter in their operational environment. Bakan’s study of the private corporation begins with the recognition that in the mid-1800s it emerged as a legal person, being seen to operate with a “personality”. It is also an autonomous body pursuing amoral self-interest that enables it to effectively operate as a self-seeking acquirer of profit. It has overwhelmingly ignored any social ethic, and as a consequence of its single minded behaviour during the following century has accrued significant wealth.

A question that may be raised is who is responsible for collectives becoming sociopathic. Vonnegut (2006) explains that high level leaders have psychopathic personalities represented as smart, personable people with no consciences. While it may be the case that sociopathic corporations are run by sociopathic leaders whether they are recognised to be so by society or even by themselves, it may also be that some corporate leaders are not implicitly sociopathic but just get sucked into a sociopathic executive culture. So how can we reconcile the apparent paradox that leaders may not be sociopathic while their corporations may be? Normally, it seems that the individuals who compose the corporation are socially conscious and law abiding within their own personal spheres of life, but when they collect together within a corporate environment they abandon their own worldviews and join a new corporate one that is normally quite distinct. People have the curious ability of maintaining a plurality of isolated worldviews with their associated cultural bases and patterns of knowledge, and they seem to have an easily facility to switch worldviews to suite context without contradiction. Indeed, Yolles (1999) explains that if the worldviews can be considered as formal systems, then this innate capacity may likely satisfy the requirements of Gödel’s theorem of consistency and completeness that explains people’s apparent ability to operate in such paradoxical and contradictory ways. By operating in this way people are able to maintain separate patterns of knowledge in unconnected compartments that are each attached to a worldview, enabling them to operate with distinct ethical principles without apparent contradiction, except in very special circumstances (such an exception has been illustrated, for instance, in the film *Jerry McGuire* in which the hero, a sports agent played by Tom Cruise, realises that his company’s drive for profits dehumanises and takes as a commodity those sports persons being represented). Thus, for example, the State Executioner goes home and would not hurt a fly. In another example by Ackbar *et al.* (2005, p. 2), Sir Mark Moody-Stuart, chairman of Royal Dutch Shell, debated in private with activists about the need to pursue human rights, while simultaneously

overseeing his corporation Shell Nigeria in its violation of human rights and creating one of the world's worst centres of pollution.

When knowledge partitioning is formalised as part of a collective's paradigm, then one possible consequence is neurosis. Following Yolles (2006), who cites Jung (1933), this is an inner cleavage that drives agents to internal conflict because of contradictory intuition or knowledge. It happens when distinct groups or factions in a plural agent have developed their own incommensurable paradigms making it difficult to meaningfully communicate. Where this paradigm competes for domination in a social community, it can result in analytical schizophrenia where collectives are directed in their decision making in contradictory ways. Examples of manifestations of plural agent neuroses are: an employee strike against its corporate employer; the capacity of corporate managers to share information with other managers is compromised by their power seeking interests (we note that if the culture in the corporation is such that this behaviour is normative, then it can be argued not to be a neurosis); riot in a prison or plural ethnic community.

We have discussed the relationship between the sociopathic collective and the bounded capacity for it to undertake associative projection, and this likely affects the relationship between ideology/ethics and behaviour. Sociopathic corporations have an ethical position that usually reflects their egocentric nature and the search for profits as opposed to a sociocentric support for the development of effective social coherence. It also appears to be consistent with an ideology that supports the use of steering media. Habermas (1987) was concerned with the use of steering media in decision making as opposed to the development of consensus through communication. In hierarchical corporate (and civil) environments there tends to be local accumulation of the commodities of steering media like money and power. The consequence may be the marginalisation of others who do not have access to them (Yolles, 2001). An illustration of these facets is provided by Ackbar *et al.* (2005, p. 3), who note that in 1934 a business-backed plot emerged in the USA to install a military dictator in the White House since the then current government did not serve its ethical and ideological interests. It failed because of the intervention of General Smedley Darlington Butler.

It is not only private corporations that operate sociopathically. The executive of any governing body may display sociopathic traits, disassociating itself from the social environment in which it exists. This is likely what Beer meant when he invented the notion of pathological autopoiesis. This may impact on the society itself by creating marginalisation and suppression of some of its groups, or on others in the larger environment that it does not consider to be self-associated. Thus, for instance, the US company International Telephone & Telegraph (ITT) undertook some actions in Chile in the early 1970s to contribute to the destabilisation of its economy in collusion with the Central Intelligence Agency (CIA) as a representative of the US Government. This was in support of the overthrow of a democratically elected Marxist president Salvador Allende by a military junta headed by General Augusto Pinochet Ugarte, which seized despotic power in 11 September 1973. The US Government, it appears, saw its own interests more closely aligned with despotic regimes than with democratic ones.

The USA, like other Western nations, is today a harbour of corporate commerce, and if its corporations are amoral and support steering media decision making, one is led to question US culture from which its corporations and their ideological and ethical positions are born. Run as oligarchies, Western Nation States have a periodic selection of leaders

who populate their democratic debating chambers. During the in-between times they operate authoritarian regimes that are defended by bureaucracies and mechanisms of political mediation that result in what Hoftede (1991) refers to as power-distance. As such they take the position of making judgements on behalf of but not necessarily with reference to their constituencies. In authoritarian political structures it is not too difficult for elective processes to be corrupted and shift towards despotisms, and we have seen this in third world states. However, we get surprised when it happens in first world states, as has occurred for instance in the USA with the election of the incumbent President Bush (*New York Times*, 2005). In another instance, human rights constitute an important part of the US constitution, and its irregular suspension constitutes a despotic act. An illustration of this occurs when the US President used the excuse of terrorism, after the 11 September terrorist attacks in 2001, with the action of diminishing of traditional civil rights through arbitrary unconstitutional phone tapping and other practices connected with the unconstitutional infringement of privacy that civil rights groups are claiming constitutes State espionage. This is coupled with the unconstitutional diminution of human rights by acts of torture to terrorist suspects who are in any case incarcerated for years without due legal process demanded by law (Fresneda, 2006). Such abuses are perhaps reminiscent of the sociopathic witch hunts of the McCarthy era and are shown to likely have an endemic nature. More, collusion between the USA and a number of European democratic States (UK, Germany and Spain) is suspected in the transporting of terrorist suspects to their destination at torture venues (Cobain, 2006), though it is still unclear if this is the case, or whether the transporting of these suspects was a problem of autopathology in that it was known only to lower levels of administration from which the upward filtering of information failed.

Conclusions

Social collectives can be said to be social psychological entities and reflect similar pathologies to individuals' psychological entities. This can be supported by the notion that both have the capacity for associative projection. We have considered not only the nature of cognitive projection, but also perspective and emotional projection. This has led to consideration of personality type, and we have used Yolles's theory of KC to develop a deep theoretical basis for this that embeds Myers-Briggs work, and provides a potential to develop some of these ideas further.

Lateral pathologies can be distinguished in their orientation. Those with an internal orientation are said to be autopathic, and those with an external one sociopathic. The former develops problem situations that are endogenously directed, affecting the efficiency and effectiveness of their operations, and the latter develops pathologies that are exogenously directed potentially affecting the viability of those in its social environment. An example of an autopathic affect is the rise of corruption.

It appears that there is some potential in explaining sociopathic social collectives in terms of Piaget's theory, where there is an inability to create a coordination of perspectives due to one or more pathologies. It has been proposed that this could become the basis of a theoretical framework that is able to explore how this occurs, to enable diagnosis to develop, and as a result to create intervention strategies.

Sociopathic collectives may be corporate bodies, or they may be executive bodies intended to operate on behalf of a given social collective. However, it is not only private corporations that may be sociopathic. The executive of a public corporation may

disassociate itself from the social environment in which it exists, and operate sociopathically towards it. Hence, when governments create policies that disadvantage one group or another then this may well be a result of sociopathic behaviour, particularly if there is some consistency in its decision making. Where marginalisation and durable suppression of some of its groups also develops as a secondary feature of policy implementation, then the tensions that arise may well break out into conflicts. Thus, the race riots in the UK and the unrest in a number of French cities that have occurred within the last decade may all be associated with such secondary pathologies.

Perhaps, it is also important to therefore rethink what we see in the international arena. We rarely consider that Western States may have an ideology that is ultimately sociopathic, even though we may be aware that we live in an oligarchic political culture rather than a participative democracy. The fact that those in the West live in plutocracies suggests that political decisions are subject to steering media from which liberty and equity are not natural outcomes. The different forms of steering media like power and money may provide opportunity for switches. For instance, in China power chases money while in the USA it is money that chases power. So we are drawn to realise that the classical political distinction (that the McCarthians loved) between China as a communist nation and the USA as a democratic one needs to be changed. Rather they are both despotic in their own way: China is a political despotism in which decisions about the distribution of social goods like education and health are made through political criteria and processes, while it is at the same time seeking to become an economic despotism; while the USA an economic despotism in which decisions about the distribution of social goods are made through economic criteria and processes, while it is seeking to become a political despotism. As long as democratic institutions maintain their dependence on political hierarchies, they are vulnerable to any tendency that moves them towards a position of political despotism, and if their criteria for the distribution of social goods are not socially but economically derived then such a tendency can be more easily manifested.

Notes

1. Kant developed his idea of the noumenon as a positivist notion in his 1781 edition of *Critique of Pure Reason* (<http://en.wikipedia.org/wiki/Noumenon>). Here however, it is constructivist and figurative in nature (after the notions of Piaget, 1951).
2. Cited in www.brocku.ca/MeadProject/Bernard/Bernard_1924b.html
3. For example, see http://news.bbc.co.uk/1/hi/special_report/1998/11/98/e-cyclopedia/211553.stm
4. By appreciations we are referring to the term appreciative system as defined by Vickers in 1965, which is an interconnected set of more or less tacit standards of judgement by which we both order and value our experience. An individual's appreciative system will determine the way situations are seen and valued, and hence how instrumental judgements and actions are taken. It thus constitutes a process that interprets and transforms perceptions to enable behaviour to develop. Thus, the appreciative system determines the way an individual sees and values different situations, and how instrumental judgements can be made in respect of actions.

References

- Ackbar, M., Abbot, J. and Bakan, J. (2005), "The Corporation: a film by Mark Ackbar, Jennifer Abbot and Joes Bakan", www.thecorporation.com/index.php?page_id=2 (accessed January 2006).

- Ackerman, J.M. (2005), "Social accountability in the public sector: a conceptual discussion", Social Development Paper 82, World Bank, Washington, DC.
- Anderson, J.H. and Grey, C.W. (2006), *Anticorruption in Transition 3: Who Is Succeeding and Why?*, The World Bank, Washington, DC, available at: <http://siteresources.worldbank.org/INTECA/Resources/ACT3.pdf>
- Argyris, C. (1976), *Increasing Leadership Effectiveness*, Wiley, New York, NY.
- Ashby, W.R. (1964), *An Introduction to Cybernetics*, Wiley, New York, NY, (a re-publication of the 1956 ed.).
- Austin, T.L. (2005), "A comparison of the cognitive development of outcome based education: an exploration of South African learners", PhD thesis, University of Johannesburg, Johannesburg, available at: <http://etd.uj.ac.za/theses/available/etd-05232006-145736/restricted/Thesis.pdf> (accessed May 2007).
- Bakan, J. (2005), *The Corporation: The Pathological Pursuit of Profits and Power*, The Free Press, New York, NY.
- Bar-Yam, Y. (2004), "Multiscale variety in complex systems", *Complexity*, Vol. 9 No. 4, pp. 37-45.
- Beer, S. (1972), *The Brain of the Firm*, Wiley, Chichester.
- Beer, S. (1979), *The Heart of the Enterprise*, Wiley, Chichester.
- Brown, J.A.C. (1961), *Freud and the Post-Freudians*, Penguin Books, Harmondsworth.
- Claver, E., Llopis, J., Gascó, J.L., Molina, H. and Conca, F.J. (1999), "Public administration: from bureaucratic culture to citizen-oriented culture", *International Journal of Public Sector Management*, Vol. 12 No. 5, pp. 455-64.
- Cobain, I. (2006), "FO paper reveals British knowledge of torture flights", *The Guardian Newspaper*, 19 January, p. 10.
- Demetriou, A., Doise, W. and van Lieshout, C.F.M. (1998), *Life-span Developmental Psychology*, Wiley, New York, NY.
- Dininio, P. and Orttung, R.W. (2004), "Explaining patterns of corruption in the Russian region", Working Paper No. 727, William Davidson Institute, University of Michigan Business School, Ann Arbor, MI.
- Feffer, M. (1970), "Developmental analysis of interpersonal behavior", *Psychological Review*, Vol. 77, pp. 197-214.
- Fresneda, C. (2006), "Al Gore accuses bush of breaking the law repeatedly and persistently", *El Mundo*, 17 January, p. 25.
- Frieden, B.R. (1998), *Physics from Fisher Information: A Unification*, Cambridge University Press, Cambridge, available at: www.optics.arizona.edu/Frieden/Fisher_information.htm (accessed 2002). There is also a 2004, *Science from Fisher Information*, 2nd ed., Cambridge University Press, Cambridge.
- Fromm, E. (1947), *Man for Himself: An Inquiry into the Psychology of Ethics*, Rinehart, New York, NY.
- Fromm, E. (1961), *May Man Prevail? An Inquiry into the Facts and Fictions of Foreign Policy*, Doubleday, Garden City, NY.
- Ginn, W.Y. (2002), "Jean Piaget – intellectual development", available at: www.sk.com.br/sk-piaget.html (accessed April 2003).
- Goorha, P. (2000), "Corruption: theory and evidence through economies in transition", *International Journal of Social Economics*, Vol. 27 No. 12, pp. 1180-204.
- Habermas, J. (1971), *Knowledge and Human Interests*, Beacon Press, Boston, MA.
- Habermas, J. (1987), *The Theory of Communicative Action*, Vol. 2, Polity Press, Cambridge.

-
- Heidegger, M. (1927), *Being and Time*, Harper and Row, London (translated by Macquarrie, J. and Robinson, E.S.).
- Hofstede, G. (1991), *Cultures in Organizations: Software of the Mind*, McGraw-Hill, London.
- Honey, P. and Mumford, A. (1986), *The Manual of Learning Styles*, Homey, Maidenhead, available at: www.fae.plym.ac.uk/tele/course/cognition3.html (accessed April 2004).
- Hunter, J.D. (2002), "Politics and political culture: the critical difference", an essay available at: www.nd.edu/~isla/ISLA/webpages/thearts/sikkink/ (accessed June 2005).
- Husserl, E. (1950), "Ideen zu einer reinen Phanomenologie und phänomenologischen Philosophie", *Husserliana*, Vol. 1, Harper and Row, New York, NY, see Husserl, E., 1950, XIX. 1911: "Philosophie als strenge Wissenschaft", *Logos*, Vol. 1. English translation by Lauer, Q., 1965, Husserl.
- Jung, C.G. (1916), "Psychoanalysis and neurosis", in Read, H., Fordham, M. and Adler, G. (Eds), *The Collected Works of C.G. Jung*, Pantheon Books, New York, NY.
- Jung, C.G. (1933), *Modern Man in Search of a Soul*, Harcourt, Brace & World, New York, NY (translated by Dell, W.S. and Baynes, F.C.).
- Jung, C.G. (1936), "The archetypes and the collective unconscious", *Collected Works*, Vol. 9.i, available at: www.geocities.com/Athens/Acropolis/3976/Jung2.html (accessed May 2003).
- Kets de Vries, M.F.R. (1991), *Organisations on the Couch: Clinical Perspectives on Organisational Behaviour and Change*, Jossey-Bass, San Francisco, CA.
- Koestler, A. (1967), *The Ghost in the Machine*, Picador, London.
- Kolb, D.A. (1974), *Organizational Psychology: An Experiential Approach*, Prentice-Hall, Englewood Cliffs, NJ.
- Lavatelli, C. (1973), *Piaget's Theory Applied to an Early Childhood Curriculum*, American Science and Engineering, Boston, MA.
- McAdam, P. (2004), "Corruption: a non-parametric analysis", *Journal of Economic Studies*, Vol. 31 No. 6, pp. 509-23.
- Mandelbrot, B. (1982), *The Fractal Geometry of Nature*, Feeman, New York, NY.
- Marshall, S.P. (1995), *Schemes in Problem Solving*, Cambridge University Press, Cambridge.
- Maturana, H.R. and Varela, F.J. (1987), *The Tree of Knowledge*, Shambhala, London.
- Mazlish, B. (1990), *The Leader, the Led, and the Psyche: Essays in Psychohistory*, University Press of New England, Hanover, NH.
- Murphy, K.M., Shleifer, A. and Vishny, R.W. (1993), "Why is rent-seeking so costly to growth?", *American Economic Review*, Vol. 83, pp. 409-14.
- New York Times* (2005), "Fixing the Game, Editorial", *New York Times*, 5 December, available at: www.nytimes.com/2005/12/05/opinion/05mon1.html (accessed December 2005).
- Ng, D. (2006), "The impact of corruption on financial markets", *Managerial Finance*, Vol. 32 No. 10, pp. 822-36.
- Nonaka, I. and Takeuchi, H. (1995), *The Knowledge Creating Company*, Oxford University Press, Oxford.
- Osborn, A.D. (1934), *The Philosophy of Edmund Husserl: In Its Development from His Mathematical Interests to His First Conception of Phenomenology in Logical Investigations*, International Press, New York, NY.
- Piaget, J. (1950), *The Psychology of Intelligence*, Harcourt and Brace, New York, NY.
- Piaget, J. (1951), *Psychology of Intelligence*, Routledge and Kegan Paul, London.
- Piaget, J. (1969), *The Mechanisms of Perception*, Basic Books, New York, NY.

- Piaget, J. (1977), *The Development of Thought: Equilibration of Cognitive Structures*, Viking, New York, NY.
- Piaget, J. (1981), *Jean Piaget on Jean Piaget*, CH Beck, München.
- Piaget, J. and Inhelder, B. (1969), *The Psychology of the Child*, Basic Books, New York, NY.
- Priddy, R. (1999), "The human whole", available at: home.no.net/rrpriddy/P/11percent (accessed January 2001).
- Rabinow, P. (1984), *The Foucault Reader: An Introduction to Foucault's Thought*, Pantheon Books, New York, NY.
- Rosenbaum, W.A. (1972), *Political Culture*, Thomas Nelson and Sons, London.
- Schutz, A. and Luckmann, T. (1974), *The Structures of the Lifeworld*, Heinemann, London.
- Schwarz, E. (1994), "A transdisciplinary model for the emergence, self-organisation and evolution of viable systems", paper presented at the International Information, Systems Architecture and Technology Conference, Technical University of Wrocław, Szklaska Poreba, September.
- Schwarz, E. (1997), "Towards a holistic cybernetics: from science through epistemology to being", *Cybernetics and Human Knowing*, Vol. 4 No. 1, pp. 17-50.
- Sorokin, P. (1962), *Social and Cultural Dynamics*, Vol. 4, Bedminster Press, New York, NY, originally published from 1939-42.
- Sternberg, R.J. (1996), *Cognitive Psychology*, Harcourt Brace College Publishers, New York, NY.
- Transparency International (2006), "Corruption perceptions index", available at: www.transparency.org/publications/gcr/download_gcr#15
- Transparency International (2007), "Global corruption report 2007", available at: www.ti-bangladesh.org/GCR-07-Judiciary-Highlights1.pdf
- van Gigch, J.P. (1987), *Decision Making about Decision Making: Metamodels and Metasystems*, Abacus Press, Tunbridge Wells.
- Verma, A. (1999), "Cultural roots of police corruption in India", *Policing: An International Journal of Police Strategies & Management*, Vol. 22 No. 3, pp. 264-79.
- Vonnegut, K. (2006), "Custodians of chaos", *The Guardian Newspaper*, 21 January, review article and extract from his forthcoming memoirs.
- Weed, L. (2002), "Kant's Noumenon and Sunyata", *Asian Philosophy*, Vol. 12 No. 2, pp. 77-95.
- Weik, A. and Roberts, K. (1993), "Collective mind in organizations heedful interrelating on flight decks", *Administrative Science Quarterly*, Vol. 36 No. 3, pp. 357-81.
- Whitehead, A.N. and Russell, B. (1910), *Principia Mathematica*, Cambridge University Press, Cambridge.
- Wollheim, R. (1999), *On the Emotions*, Yale University Press, New Haven, CT.
- Yolles, M.I. (1999), *Management Systems: A Viable Approach*, Financial Times Pitman, London.
- Yolles, M.I. (2001), "Viable boundary critique", *Journal of Operational Research Society*, Vol. 51, January, pp. 1-12.
- Yolles, M.I. (2006), *Organisations as Complex Systems: An Introduction to Knowledge Cybernetics*, Information Age Publishing, Greenwich, CT.
- Yolles, M.I. and Guo, K. (2003), "Paradigmatic metamorphosis and organizational development", *Sys. Res.*, Vol. 20, pp. 177-99.
- You, J.-S. (2005a), "A comparative case study of corruption in South Korea, relative to Taiwan and the Philippines: focusing on the role of land reform and industrial policy", PhD thesis,

Harvard University, Cambridge, MA, Chapter IV, available at: ksghome.harvard.edu/~youjong/Ch%204%20Corruption%20in%20Korea.doc

- You, J.-S. (2005b), "Embedded autonomy or crony capitalism?: explaining corruption in South Korea, relative to Taiwan and the Philippines, focusing on the role of land reform and industrial policy", paper presented at Annual Meeting of the American Political Science Association, Washington, DC, September 1-4.
- Zekos, G.I. (2004), "Ethics versus corruption in globalization", *Journal of Management Development*, Vol. 23 No. 7, pp. 631-47.

Further reading

- Adams, D. (2007), "Practitioner experiences in relation to some insights of Stafford Beer: letter to Peter Smith in relation to his methodology on performance learning", personal communication.
- Aveleira, A. (2004), "Consciousness and reality: a stable-dynamic model based on Jungian psychology", *Metareligion*, available at: www.meta-religion.com/Psychiatry/Analytical_psychology/consciousness_and_reality.htm (accessed December 2005).
- Beer, S. (1975), *Platform for Change*, Wiley, New York, NY.
- Briggs Myers, I. (2000), *An Introduction to Types: A Guide to Understanding Your Results on the Myers-Briggs Types Indicator*, CPP, Palo Alto, CA (revised from the 1998 ed.).
- Caroll, R.T. (2003), "Myers-Briggs type indicator", Skepdic.com/myersb.html, available at: (accessed April 2005).
- George, J.M. and Jones, G.R. (2002), *Organizational Behavior*, Prentice-Hall, Upper Saddle River, NJ.
- Higgs, M. (2001), "Is there a relationship between the Myers-Briggs type indicator and emotional intelligence?", *Journal of Managerial Psychology*, Vol. 16 No. 7, pp. 509-33.
- Jung, C.G. (1957-1979), *Collected Works, Bollinger Series*, Vols. 1-20, Pantheon, New York, NY.
- McKenna, M.K., Shelton, C.D. and Darling, J.R. (2002), "The impact of behavioral style assessment on organizational effectiveness: a call for action", *Leadership & Organization Development Journal*, Vol. 23 No. 6, pp. 314-22.
- Maturana, H.R. and Varela, F.J. (1980) in Cohen, R.S. and Wartofsky, M.W. (Eds), *Autopoiesis and Cognition: the Realization of the Living*, Boston Studies in the Philosophy of Science, Boston, MA.
- Myers, I.B. (1998), *Introduction to Type: A Guide to Understanding Your Results on the Myers-Briggs Type Indicator*, Consulting Psychologists Press, Palo Alto, CA.
- Prigogine, I. and Nicolis, G. (1977), *Self-Organization in Non-Equilibrium Systems: From Dissipative Structures to Order through Fluctuations*, Wiley, New York, NY.
- Robbins, S.P. (2001), *Organizational Behavior*, Prentice-Hall, Upper Saddle River, NJ.
- Weinberg, G.M. (1975), *An Introduction to General Systems Thinking*, Wiley, New York, NY.
- Wikipedia (2007), "The viable systems model", available at: en.wikipedia.org/wiki/Viable_System_Model (accessed May 2007).

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