THE PATHOLOGIES OF SOCIAL COLLECTIVES

Maurice Yolles
Centre for the Creation of Coherent Change and Knowledge
Liverpool John Moores University, UK
Intended for ISSS Conference, Tokyo 2007

ABSTRACT

Social collectives are today increasingly more complex than they were in ancient Greece. As a result their coherence suffers and their pathologies become more apparent. A theory that can create generic models of pathologies be will be explored in terms of the knowledge cybernetics schema. One of the outlying consequences of such a model is the realisation that many social collectives are sociopathic, working for their own perceived benefit (and sometimes duplicitously so) against the viable interests of the society in which they exist. This is not just a problem of ethics and many might suggest, but extends to ideology that ethics serve.

Keywords: Social collectives, complexity, coherence, pathologies, knowledge cybernetics schema, ideology, ethics, sociopathology.

INTRODUCTION

In this paper we shall explore the pathologies and sociopathologies that can develop, using theory that comes out of the knowledge cybernetics paradigm. Modern theory of social collectives argues that they are not, as the old theory would have told us, stable structures that manage to maintain equilibrium, but rather they survive as bounded unstable structured, maintaining their survival because they use energy to maintain their organisation and reverse the entropic processes that erode them. This process is also represented in the theory of viable systems, in which 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. So what is variety and requisite variety? The variety of an environment is determined by the more or less distinguishable entities (elements, events or states) that occur within it, and can be expressed in terms of time, space or purpose. These distinguishable entities may: (a) be constrained through relatively stable causal relationships between them in time and space, and (b) appear to have a lack of constraint or be chaotic, when they appear to be loosely related such that one event or state cannot be clearly associated with another.

The idea of variety is central to VSM. The variety of a system can be defined (Beer, 1979, p3) as the number of possible states that the system is capable of exhibiting. The basic condition of the complexity of a system is determined by its variety. Variety can therefore be seen to act as a measure of complexity. As environmental variety changes, so will environmental complexity. Organisational and social problem situations are often seen to arise with changes in complexity. We often see this as a natural development with, for example, the rise of new technologies and their consequence for existing labour mechanisms.

The context of a situation that exhibits variety is important when discussing complexity. Thus, what we mean by variety will be dependent upon the context within which the system is placed by an inquirer. In this light we can say that when we talk of the number of possible

states in a situation that defines variety, then we are also talking about the weltanschauung of an inquirer.

Requisite variety is the variety that a system must have in order to deal with environmental variety. The VSM paradigm is perceived to have three requirements that are needed to achieve requisite variety (Jackson, 1992, p102). These can be expressed as follows: (i) the organisation should have the best possible model of the environment relevant to its form, and (ii) the organisation's information flows should reflect the nature of that environment so that the organisation is responsive to it; (iii) communications that link different functions within an organisation are important.

In the cybernetic theory of organisations, the ability of social collectives to survive as they generate requisite variety is called viability. Viewed from a systemic perspective, they are also called viable systems. It is therefore appropriate to explore the nature of viable systems.

AXIOMS OF VIABILITY

One interest in this paper is to develop a generic model that can explore viable autonomous social collectives in terms of their pathologies. This can be initiated through the creation of two axioms of viability. It is possible to do this by proposing axiom 1:

> A1: Autonomous systems existing in a testing environment are viable by virtue of the innate operative intelligence that they possess.

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. This proposition is represented as primitive ontology in Figure 1.

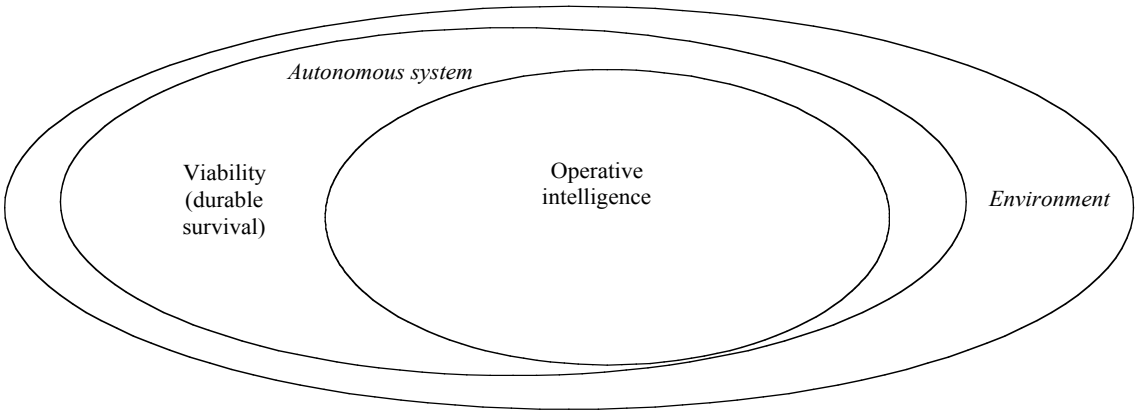

Figure 1: Primitive ontology representing the P1 axiom, showing the connection between viability and its imperative operational intelligence, based on the propositions from Beer and Piaget

Operative intelligence has been well explored by Austin (2005) in terms of explanations provided by Piaget's (1950) theory of child development, as posited by Demetriou et al (1998). It is useful to first note Yolles's (2006) argument that Piaget's notions can be extended from the individual to the collective autonomous systems. To do this assumes 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 share.

A second axiom ties viability into operative management:

> A2: Operative intelligence is a condition that depends on the interaction between thinking and doing in overcoming a testing environment, and is couple is conditioned by believing.

This axiom can also be expressed through a primitive ontology. In Figure 2 we offer a model that connects both A1 and A2. 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 operaytive couple and can drive operative intelligence, and a second order {believing, {thinking and feeling}} focus that can drive viability.

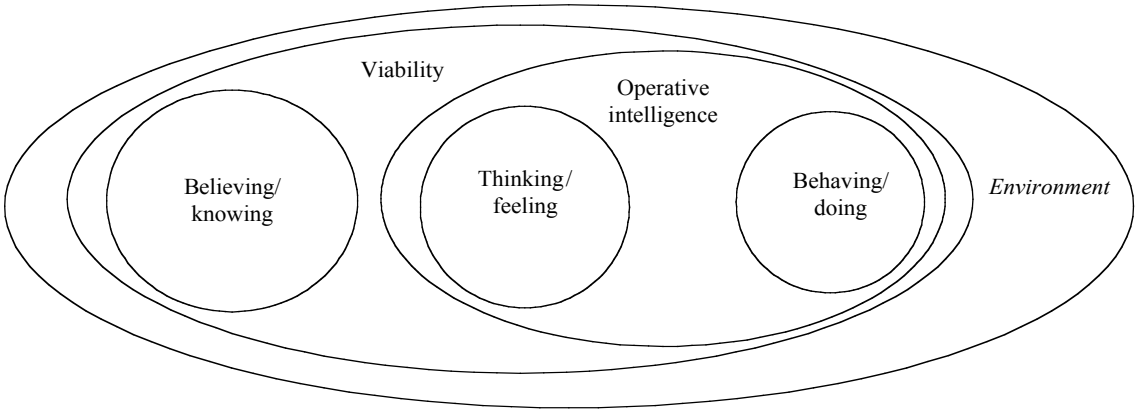

Figure 2: The two axioms (A1 and A2) are ontologically related, and connect viability with operative intelligence in a testing environment

Ontology must be seen as an analytic tool that enables us to distinguish different types of related reality to enable us as inquirers into better understanding what is going on. While ontology allows us to break down the world we see into manageable bits, it is through epistemology that we are able to gain knowledge about those bits and gain understanding about their natures.

There are cybernetic aspects associated with the ontological components of Figure 2, involving feed-back 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 illustrated in Figure 3.

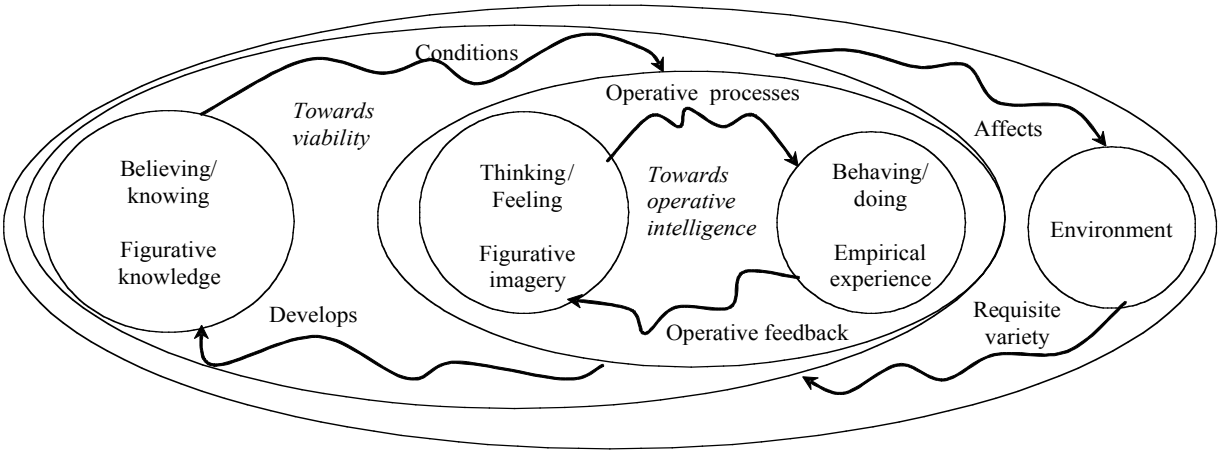

Figure 3: Piaget related relationships between three types of reality showing channels of epistemological migrations

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 assembles of belief/knowledge that we have called figurative knowledge. Interestingly, this model of intelligence can be related directly to Beer's (1979) Viable System Model that has been used to diagnose organisational pathologies.

A GENERIC MODEL TO EXPLORE PATHOLOGIES

Pathology influences the capacity of a social collective to be coherent. It does this by impacting on its ability to operate effectively and efficiently, and interfering with its possibilities to function as a whole according to its needs. Since coherence has referential significance for pathologies, it may be worth exploring this briefly.

Coherent social collectives operate through normative processes that encourage the development of a shared way of thinking and behaving. Coherence can be thought of as a general condition that enables a collective to operate as a "global" whole. If the global whole can be distinguished into a set of arbitrarily defined local parts, then it is coherent when its localities can be described in an orderly and consistent set of definable relationships that manage to withstand adverse interferences. When such interferences originate internally to the collective it is likely to experience local pathologies that work against the interests of the global whole. These pathologies may inhibit a collective from behaving in a way that enables it to implement its structures, and can limit its capacity to act effectively and efficiently in connection with its perceived interests, intentions, or purposes.

There are a variety of approaches to the notion of coherence, for instance in philosophy (BonJour, 1985) or strategic management (Foss and Christensen, 1996). However, our

interest lies more in the tradition that extends from the 1950s work of Talcott Parsons. He produced a theory based on the three "systems" of Culture, Personality and Society, and connected them together in what he referred to as the lifeworld (Schutz and Luckmann, 1974; Habermas, 1987). Lifeworld is the vehicle for coherence, and can be seen as a cultural space of purposeful actors who interact together in order to reach agreement over issues. It is a global place that within a given context enables purposeful communications to be undertaken, and where people maintain their proprietary local worldviews and communicate with intention over a theme. In so doing they create messages that are knowledge laden. Since the lifeworld comes into being only through its worldviews composition, there is some use in exploring the nature of the latter a little further within the context of the former. It is possible to define worldviews as independent worldview spaces that interact in the lifeworld through *semantic* communication processes that involve the *meaningful* exchange of messages. Each locality has its own knowledge content that enables it to maintain a capacity to develop meanings, and through its interaction to create mutual local understanding that offer a potential for the formation of common agreements.

While it is the lifeworld that enables social collectives to come together as a coherent whole, it is communication that is its commodity and that is the facilitating global social construct that enables collectives to emerge as a whole. Communication may have a global potential, but it also has manifestations that satisfy local purposes and interests. The capacity for a collective to operate as a global whole is limited by the problem of knowledge migration (Yolles, 2006), which recognises that the knowledge content of a message is understood differently in distinct localities of a collective because of the knowledge differences in worldview. This is a topic that is at the core of the paper "Manageable Inequalities" by Slawek Magala in this issue of the journal. It also provides one reason to explain why pathologies usually have a local as opposed to global origin.

One of the important consequences of these considerations is that any impact on coherence must arise through pathologies that permeate the fabric of the lifeworld and result in communication problems. Whenever problem situations arise in a social collective, and communication is cited as one of its secondary pathologies, then the primary cause will be a perforated lifeworld that will indicate that coherence is not possible.

Knowledge cybernetics is a systemically based schema that: explores knowledge formation and its relationship to information; encourages a critical view of individual and social knowledge and their processes of communication and associated meanings; and seeks to create an understanding of the relationship between people and their social collectives for the improvement of social collective viability and an appreciation of the role of knowledge in this. In a coherent autonomous human activity system knowledge occurs in structured patterns. This provides the structure that enables the system to recognise its own existence, maintain itself, change, and develop manifestations that can be seen as being indicative of systemic content.

The schema derives from the work of Eric Schwarz (1997, 2001). In developing his notions he explains how persistent viable systems are able to maintain themselves, change and die. Viable social collectives participate in the self-development of their own futures, and are self-organising and adaptive to perturbations that arise in their environment. They have structures that facilitate and constrain their behaviour, and they are responsible for the manifestation and maintenance of that structure. A viable collective is able to support

adaptability and change while being able to maintained desired stability in its behaviour, and this is affected by incoherence and pathology.

Schwarz's (2004) approach was to create a general theory of viable autonomous systems, and its creation was stimulated during the preparation for a course of lectures on the "Introduction to Systems Thinking" at the University of Neuchâtel, in particular using Prigogine's dissipative structures theory, Erich Jantsch's Self-Organizing Universe, Maturana and Varela's (1979) autopoietic approach and of course cybernetic concepts. Schwarz tried to extract the basic common features of these different approaches and produce a unique metamodel that constitutes a transdisciplinary epistemo-ontological framework, from which other phenomenological models could be constructed through a combination of logical deduction and intuition. The metamodel itself has some internal dynamics, coherence and self-referential character, and it also had resonances with philosophia perennis. While many (phenomenological) models show that the evolution of systems go through the successive stages of emergence, growth, stability, and decay, the interest of this metamodel is its global coherence and its questioning of the foundations of the usual materialistic, dualistic, realistic, reductionist and mechanistic approach that, for Schwarz, provides the basis for a language for a new holistic paradigm.

Our intention here is to explain how a development of this metamodel, that we refer to as Social Viable Systems (SVS), can be established as a social geometry, noting that it is it's epistemological impact that leads to the notion of knowledge cybernetics. The SVS model as shown in Figure 3 derives from the general model of Schwarz (1997) and developed within the social context by Yolles (1999, 2006), and like the notion of the system it is metaphorical in nature and recursive in facility. Its metaphorical nature does not mean that it has no scientific significance (Brown, 2003), and its recursive nature means it establishes a relative theory of contexts (Yolles, 2006). This occurs because the knowledge that it claims to express is relative to changing contexts.

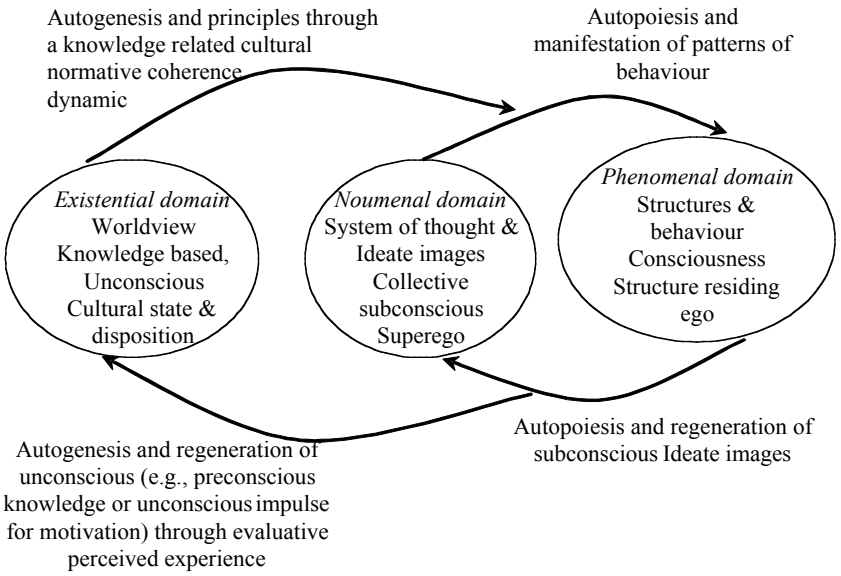

Figure 3: Social Viable Systems (SVS) metamodel defined in terms of three transitive domains that show an autonomous holon with both autogenesis and autopoiesis, expressed in terms of a social psychological context.

We regard SVS more as a *holonic* rather than systemic model. The term holon was proposed by Koestler (1967) to stress that the system is a whole and that it has associated with it a set of constituent parts which may themselves be sub-wholes; these sub-wholes are within their own (recursive) context also holons. The sub-whole "parts" were normally considered to be lateral to each other within a given ontological space, and this is consistent with talking about the relationship between a system and its component subsystems. However, this can be extended to the concept of transitive ontological parts, as in the relationship between a system and its metasystem. Now ontology is an analytical device that can be used to help simplify explanations of the nature of situations, and an understanding of the distinction between lateral and transitive ontological relationships might be worth developing further, as suggested by a reviewer of this paper. It is that the ontological nature of the SVS offers a description of different worldviews in different holons (a holistic view of systemically perceived organizations) in the sense of observations of them, and their formal laws and structures. Inconsistencies among observations, formal laws and structures within a holon can be illustrated with the help of the transitive model. Each holon does have its own set of rules (its epistemological content) which are as distinct from each other as their worldviews are distinct. This directs us to the lateral model which is based on an epistemological 'theory of interactive coherence'. Thus for instance when defining a definable set of (systemic) actors in interaction (within a suprasystem) over some purpose in a given context form which a common behavioural reality can be deduced, then we are referring to a lateral frame of reference.

The holon may best be regarded as a transitively extended system, constituted through a development of Schwarz's ontological schema. We constitute a social holon as a three domain model that defines distinct ontological 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 usage; the term noumenal is taken from the positivist work of Kant (e.g., see 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 epistemological properties that are expressible as varieties of knowledge classifications. The phenomenal domain has social interests adapted from Habermas's (1971) in a way explained by Yolles and Guo (2003). The other domain properties arise as an extension of this, are listed in Table 1, and draw on both systemic and cybernetic notions. There is a connection here to Schutz and Luckmann (1974) who are interested in narrative, in that the epistemological content of each of the 3 domains can be defined in terms of relevancies. The existential domain has thematic relevance that determines the constituents of an experience; the noumenal or virtual domain has interpretative relevance that creates direction through the selection of relevant aspects of a stock of knowledge to formulate ideate structures or a system of thought; and the phenomenal domain is associated with motivational relevance that causes a local conclusion through *action*. While this development is constructivist, an application of Table 1 has been successfully developed to empirically explore to how the pathologies and coherence of an organisation can be explored (Guo, 2006; Yolles and Guo, 2003).

The use of psychological expressions in Table 1 may be thought of as unusual, and questions may be raised as to whether terms that have been created in a psychology paradigm intended for the singular person with a personality are broadly applicable to the plural group with its sociality. This is something that Yolles and Guo (2003) and Yolles (2006) argue is possible at least metaphorically to draw out explanations of corporate behaviour. While the notions of conscious, subconscious and unconscious derive from Freudian psychology, they are here more connected to the ideas of Wollheim (1999) within a context supported by ideas of organisational psychology, as promoted for instance, by Kets de Vries (1991). Applying Wolheim's notions to a collective corporate context enables us to differentiate between cultural *state* and *disposition* (Yolles, 2006). *Cultural state* constitutes the impulses, tendencies and motivations that derive from the collective power group (often the executive) or the membership that composes it. In contrast *cultural disposition* constitutes the characteristic or tendency of collective Being representing the collective mental condition that embraces beliefs, knowledge, memories, abilities, phobias and obsessions, and has both duration, history and inertia.

Autopoiesis and autogenesis are of particular interest in SVS. Autopoiesis is constituted simply as a network of processes that enables noumenal activity to become manifested phenomenally, conditioned by autogenesis – a network of principles that constitute a second order form of autopoiesis that guides autopoietic processes. Adopting a term by Schwaninger (2001), autopoiesis may be thought in terms of processes of operative management, and autogenesis in terms of process of strategic management.

The notions of Marshall (1975) have also been applied. Her interest lay in exploring the way military personnel made decisions in the field. To progress her work she abandoned the traditional way of defining knowledge as procedural and declarative (Davis and Olson, 1984), and instead defined a new set of classifications. We have already referred to the relevancies of Schutz and Luckmann (1974), and this leads to the exploration of knowledge types which can be related to Marshall's classifications, resulting in Figure 4 and Table 2. Figure 4 occurs as a recursion of the SVS model, and it should be realised that recursions are defined within a host context (in this case the existential domain) which creates new meanings for the domains of the SVS model. Thus execution knowledge is a structured knowledge that relates to some form of behaviour, elaborator knowledge to systems of thought and images, and identifier knowledge is existential in nature.

Returning to the last column of Table 1, there is support for the now well known notion that if people in a collective are to contribute equitably to its development, then they need to have equitable access to the social goods that are available, and this includes: education, health, employment opportunity, information and knowledge.

Table 1: Domain cognitive properties that determine Social Orientation (sociality)

	Sociality		
Cognitive Properties	**Kinematics** (through social motion)	**Direction** (determining social trajectory)	**Possibilities/potential** (through variety development)
Cognitive interests	**Technical**	**Practical**	**Critical Deconstraining**
Phenomenal (conscious; ego) domain Activities Energy	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.	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.	Degree of emancipation. For organisational viability, the realising of individual potential is most effective when people: (i) liberate themselves from the constraints imposed by power structures (ii) learn through precipitation in social and political processes to control their own destinies.
Cognitive purposes	**Cybernetical**	**Rational/Appreciative**	**Ideological/Moral**
Noumenal (subconscious; superego) domain Organising Information	Intention. Within the governance of the social collective 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.	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.	Manner of thinking. Within the governance of the social collective an intellectual framework occurs through which policy makers observe and interpret reality. This has an aesthetical 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.
Cognitive influences	**Socio**	**Base**	**Politico**
Creating cultural disposition **Existential (unconscious; cultural state & disposition) domain** Worldviews Knowledge	Formation. Enables individuals/groups in a social collective 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 collective intentions and behaviours.	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 social collectives interact, and it influences their understanding of formative organising. A result can be an impact on the formation of social norms.	Freedom. Influences occur from knowledge that affect social collective 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 2: Types of knowledge

Knowledge type	Nature of Knowledge
Identification	Used to recognise pattern and states of being. Identification knowledge relates to situation awareness. It is the knowledge required to recognise the nature of situations. Effective identification involves recognising a situation by focusing on the particular configuration of features that are present in it. Such configurations, which tap into an individual's knowledge, allow decision makers to identify specific tracks of possible action, project future actions of those tracks, and ultimately assess their likelihood of success.
Elaboration	Used in the creation a system of thought or mental model about a situation or condition. Individuals need to elaborate their understanding and interpretation of a situation. To do so, they call on their already-existing knowledge of similar situations coupled with critical thinking and analytic reasoning to develop a better understanding of the current situation, and it is often task directed and strategically related. It enables systems of thinking and mental models of particular situations to be formulated. Effective elaboration involves applying previous knowledge to the current situation, such that the most reliable and acceptable hypothesis may be formulated with regard to the intent of a specific track.
Execution	Used to guide implementation and performance of action. Centres on how to execute intentions generated by system of thinking or mental models, and results from the application of tactical thinking that include the harnessing of structural roles and processes that enable intentions to be manifested.

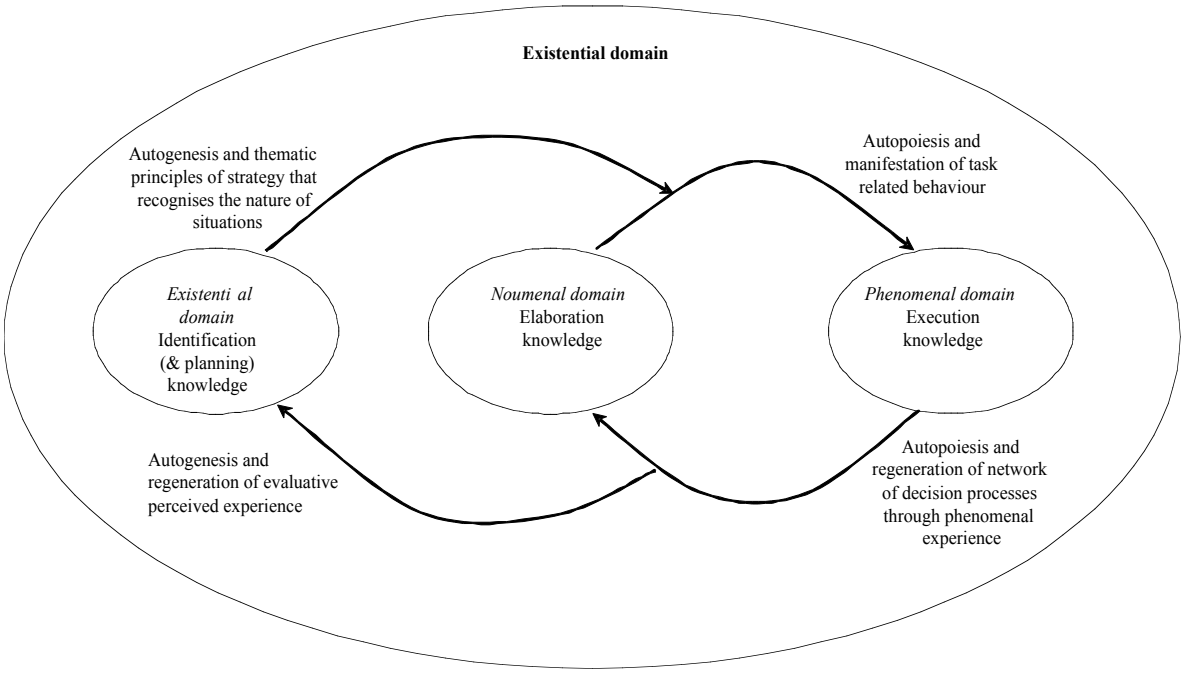

Figure 4: Distribution of the Types of Knowledge across SVS

Hence, the basis for social action ceases to be a collective decision making process, but is rather over-taken by steering media that create both a relief from the expenditures and risks of communication and as a conditioning of decisions (Habermas, 1987, p.276/7). Habermas in his theory of Communicative Action is interested in decision making through consensus, and for him media such as money and power can largely alleviate the costs of dissensus (or lack of consensus) since they uncouple the coordination of action from consensus formation in language and neutralise it against the alternatives achieved versus failed agreement. The transfer of action coordination from ordinary language to steering media has the effect of uncoupling interaction from lifeworld contexts (Habermas, 1987, p262). As steering media encroach on decision making processes, they affect opportunities to liberty and enable biased or prejudiced decision making.

It is political culture that represents values beliefs and attitudes; it is ideology and ethics that maintain them; and it is critical deconstraining that enables access to be facilitated through appropriate structural formulations and establishes the basis for liberty. In many social collectives social action concerning the distribution of social goods is steered by media, and this has the capacity to marginalise those who do not have access to a steering medium commodity. Illustration of this is possible simply by recognising the existence of plutocracies - which use money to steer political decision making.

A plutocracy operates as a governmental system in which wealth creates a significant basis for the access to power. We can identify three forms of plutocracy: (i) influence of the wealthy, (ii) oligarchy of the wealthy, and (iii) an economic despotism. In its *weaker* form it may be seen as creating a significant and undue *influence of the wealthy* on the political process in contemporary society. This influence can occur positively through direct financial contributions (that sometimes may be construed as bribes) or indirectly by accessing the influences held by the wealthy, or by encouraging favourable legislation that might better serve a social ethic if otherwise directed. Another negative indirect pressure occurs when antagonistic or non-cooperative behaviour occurs. A *stronger* form of the notion of plutocracy refers to the political control of the state by an *oligarchy of the wealthy*. An oligarchy is rule by a few members (the executive) of a social collective in which political power is invested, and who may or may not have been elected at some time.

The classical definition of oligarchy is of governance of the many by the few. In practice, a small minority of members run most social collectives. An example of oligarchic governance is the cooperative, where employees are shareholders who may vote in the executive periodically, but who are not normally consulted about issues nor have participated in decision-making. The executive may refer to its governance as being democratic since members have voting rights, but the membership might see that the voting process cannot contribute to decision-making. This is similarly the case in some law firms having partners and associates. The partners may have full participation in the policy decision-making while the associates have none. These types of governance are a development of the ancient Greek democracies that consisted of the democratic elite and token slaves or serfs. The slaves/serfs belonged to their masters in so far as they were tied to specific operations and were not able to participate in political processes. The distinction between slaves and serfs was that in the former case, masters were able to make decisions about the (at least metaphorical) life and death of a slave, but this was not the case for serfs (Belbin, 2001).

The extent and type of barriers impeding those who attempt to join this ruling group is also significant. When oligarchic plutocracies extend their processes such that all substantive

decisions that reflect on the distribution of social goods to all its population are determined through economic criteria, then we are likely talking of an *economic despotism*, the *strongest* form of plutocracy. Despotisms, we note, are an extension of authoritarian political ideologies and occur when political power and control favours obedience to authority that may be unrestricted by substantive legal or corporate constitutional process. In governing economic despotisms all substantive forms of social good, like education, health and opportunity are conditioned by wealth. When a political culture is established that permits one type of steering medium despotism, then under certain conditions it is quite feasible for other forms of despotism to be admitted. The major problem with these sorts of regimes is that they tend to marginalise those who do not have access to the steering medium, and this disadvantages not only the individuals, but the collective as well. Marginalisation taken together with substantive and durable suppression can also mobilise people to conflict, and there are arguments that much of the violence in the world today has this source (e.g., Collier, 2003, 2006).

There is another problem that relates to critical deconstraining. It is that most societies support hierarchical structures. Here power is distributed oligarchically, and it is often adopted by the executive of a collective as a personal attribute, rather than a way of serving the needs of the collective. For Foucault (1982) a feature of hierarchical structures is that those in power do not often involve themselves in communication processes that seek open public debate, exposure of issues, and processes that are able to effect agreement. Mostly what is sought is the compliance of subordinates to decisions that will affect functional behaviour in social collectives. The impulse for compliance is already embedded in the structures of our organizations that have linked to them rules that both guide and constrain behaviour. This type of orientation is typical of governing regimes that are orientated towards steering media as opposed to participative democratic decision making.

One of the problems of hierarchies is that power may be considered as a personal attribute awarded to an executive leader. This is in contrast to the view that decision making is the property of the collective that is simply led by the executive. This brings to the floor a discussion, for which there is no space here, of the nature of leadership and whether it should be power or knowledge based. It also bring to mind the role of executive decision making that in most democratic environments are an emergency facility and not a normal one. Those who gain hierarchical positions of power can be easily encouraged to abuses of power, and this can lead to at least temporary despotism. As an instance of this Beer (1979) introduces the primary notion of pathological autopoiesis in organisations, where members of the governing executive become more concerned with their own development at the expense of and rather than serving the operational interests of the organisation.

We have referred to political culture, which operates to create the collective worldview from which springs ideology and that manifests knowledge and myth. What, then, are the myths that ultimately shape the understanding of experiences? How are these used to create evaluations and judgments? What is mystified (e.g. a pastoral setting for cigarette smokers)? In response to such questions Lye (1997) refers to statements called *enthymemes* that generally exclude the expression of key assumptions that ground conclusions. We note that they may be purposefully excluded, or implied but not necessarily inferred in the communication process through a horizon of meanings. It is important to be able to see these enthymemes in the logic of a situation if a proper ideological analysis is to be undertaken. Style of communication also has a contribution to make to communications and the meanings that they hold. Thus, how does the style of presentation contribute to meaning? Finally,

ideology operates through a kernel of vision about the possibilities for people and social collectives. The "utopic kernel" as Lye calls it, lies at the heart of the understanding of an ideology. It assumes ethical visions that drive ideological perspectives and an image of the phenomenal world.

According to Mazlish (1990), ideologies become institutionalized when they are embedded in bureaucracies that control meaning and develop systems of administration. This is different from the more usual idea 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. When a bureaucracy upholds ideology such that it becomes prescribed as a doctrine, it may become linked with (conscious or non-conscious) cultural totalitarianism. This, following Franzer (2002), has a narrative that carries a fundamentally repetitive message or theme. If this is not complied with by an individual who is seen to be a member of the cultural group, it can "court nostalgia" with the social consequence of not engaging in the present or future. This can disable the possibility of behavioral engagement within the bureaucracy because no facilitating opportunity arises.

Cultural totalitarianism is the condition in which the social collective is tied into a single mode of expression. In Sorokin's (1937) terms, this often occurs because the culture has become exclusive to a particular cultural orientation (i.e., ideational or sensate identification knowledge). Thus for example, an ideational society would support the creation of new concepts, but not facilitate their practical sensate development; or a sensate society would support sensate (or commercially directed) developments of existing concepts, but not facilitate ideational innovation. In the same way in an ideational culture sensate personalities may not progress as well as ideational personalities and vice versa.

While ideology is a belief system used purposefully to manifest phenomenal behaviour, ethics is a value system (thus part of the belief system) that can be used to explore moral value judgments and create what a social collective may call justice. When we say explore judgments, we really mean that ethics is an analytical form of morality from which judgments are made. In particular ethics is "the general theory of right and wrong in choices and actions, and of what is good or bad in dispositions and interpersonal relations and ways of living" (Luhmann, 1995). Like ideology, "it thus comes under the scope of politics" (Mackie, 1977, p235). It can also be seen as the totality of conditions for deciding the bestowal of esteem or disdain (Luhman, 1995). It has ritual associated with it, this having a form of behavior independent of context, and involving stereotypical elements having symbolic expression of wider social concerns (Douglas, 1966; Leach, 1976).

Ethical considerations operate within social collectives, and it is often believed that they are objective. Within the subjective epistemology that we hold, the objectification of moral values must be explained, which we shall do briefly. Aesthetic values are logically related to moral ones with similar metaphysical and epistemological considerations (Mackie, 1977, p.43). However, they are less strongly objectified than moral ones. The words good and bad are subjective involving locally made decision processes that are susceptible to egocentric orientations.

All values are subjective, determined locally by worldview holder attitudes. However, ethical values take on an objective status in our social communities, so how do we explain this apparent contradiction. Moral qualities arise from the *projection* or *objectification* of moral attitudes, analogous to the "pathetic fallacy" of ascribing ones feelings into their objects of

attention (Mackie, 1977, p.42). It happens for instance when a viewer assigns the qualities of foulness to a fungus felt to be disgusting. Objectification in this sense refers to the process of externalising internal moral values that are attributed to other objects of attention.

EXPLORING PATHOLOGIES IN SOCIAL COLLECTIVES

Lyden and Klengale's (2000) have identified what appear to be a number of symptoms (secondary pathologies) of poor organisational processes, and these include: barriers to open communications, declining profits; decreasing productivity; increasing absenteeism; exclusively upper echelon in all decision making; lack of employee commitment to the organisation; low levels of motivation and morale; organisational reputation of no employee interest; existence of unethical behaviour; lack of goal setting; lack of mentoring; lack of development and training programmes; and lack of trust among employees. In a search for causes (the primary pathologies) for these problems, they sought an empirical approach by proposing that questions that derive from Human Resource Management theory, and that need to be put to the corporate workforce to obtain their view. These include: communication opportunities; employee participation and involvement; employee loyalty and commitment; staff morale; institutional reputation; ethics; recognition of employees' contribution; alignment of corporate, department, team as well as individual goals; leadership; employee development opportunities; and resource utilisation.

Claver et al (1999) within the context of the internal behaviour of public corporations argued that there is a tendency for pathological ailments that inhibit effectiveness. They list the following as pathologies: authoritarian management style with a high degree of control; little communication; univocal top-down management; limited scope for individual initiative with an orientation towards obedience and the provision of orders; centralised decision-making process that tend to be repetitive; reluctance to start innovative processes; high degrees of conformity; high level of resistance to change. Pathologies like authoritarianism and centralised decision making may appear to be primary pathologies because they are conditions of being that result in pathological situations being non-normative and therefore inequitable in nature. However they emanate from a transitive and more fundamental condition of authoritarian political culture that may be its primary source. An instance of a secondary pathology is *resistance to change*. The reason that this can be found from some comments by Watson (1969) and Zaltman and Duncan (1977), who explain that it is because individuals are faced with change situations that affects their security or stability. Hence to identify a source pathology one needs to determine what is the cause of the security and instability.

Habermas (1987) saw that a primary pathology within the context of a given lifeworld was what he referred to as its colonisation (e.g., Deflem, 1996*;* O'Donnell, 1999). The condition for this to occur is when individuals and groups are prevented from autonomously regulating their collective existence owing to the steering media like money and power that define issues and problems in their own terms and lock out other communicatively generated interpretations. Colonisation develops when communicative potentials for understanding contained within the lifeworld of a social collective are eroded, and the systemic imperatives of monetary and bureaucratic interventions overtake and dominate lifeworld processes. A consequence is that the association between the lifeworld and the collective's systemic processes become "uncoupled", and its internal semantic coherence is impaired. When a collective engages in equitable decision making processes it generates between its members patterns of purposeful semantic (or meaningful) communication, and it is this that constitutes

its lifeworld. When the lifeworld is disturbed sufficiently by a process of colonisation such that its reproduction of knowledge is endangered it can become pathological. Normal patterns of semantic communication thus become perturbed leading to a potential for marginalisation that result from inequitable and subjective decisions.

In the development of Drama Theory Nigel Howard (1995, 1999) identified a collection of four causative pathologies specifically within the context of conflict theory. These were intended to provide dramatic resolution to *episodes*, defined as an interaction in which a set of issues is at stake between a set of actors who may be seen as role playing *characters*. An uninterrupted successful episode ends in the *resolution* of those issues (which it does through a five-phase model). The four pathologies include: (a) communication failures, (b) aspiration differences that are contested and elaborated on to form conflicts, (c) conflictual inertia in which the characters of a conflict are locked in to it, and (d) unresolved settlement.

Another rather important approach to seeking primary pathologies was identified by Stafford Beer (1979) through his powerful Viable System Model (Beer, 1985). This has a transitive dimension in that Beer's model operates with an ontology in which reality is bifurcated into an operational system and a controlling metasystem. Unlike the ontological approach to be taken in this paper, its orientation is epistemological in approach.

Let us now come to our own approach. To develop our ontological model we define two types of pathology: transitive and lateral. Transitively based pathologies are primary since they arise as fundamental interconnections between a contextually defined set of ontological realities. Laterally based pathologies are epistemological in nature, and may be seen as primary (causative) or secondary (resultant). They occur in fixed behavioural contexts where there is no immediate access to the transitive dimensions of collective others with whom interaction occurs. Let us explore some of these terms further.

Epistemology is the study of the sources, nature, and limits of knowledge (and by implication its relation to truth and meaning) associated with those realities. It is through knowledge that what we see becomes meaningful. Ontology is used to help us simplify analysis by breaking down what we see as a complex phenomenal reality into differentiable types of relatable reality. While ontology defines a set of distinguishable realities, epistemology is therefore constituted as the content of the ontological divisions. In this construction, primary pathologies can be seen in terms of the imperatives that relate the ontological divisions. However, together with secondary pathologies they may also be expressed in terms of epistemologically based problem situations.

We will discuss these imperatives and see them as transitive ontological relationships that constitute the internal relationships between the ontological parts of an autonomous social holon. The primary pathologies are defined as inhibiting the migratory process between ontological connections. An illustration of these pathologies is provided in Figure 5, and explained in Table 3. In order to explain the nature of the pathologies that can arise here we shall use SVS as depicted in Figure 4 as a psychological metaphor, considering any social holon has been able to develop its own collective psychological profile. This gives us a frame of reference in which the phenomenal domain can be represented as an agent of consciousness, with awareness attached to behaviour and connected with corporate ego. The strength of the ego limits the capacity of a plural actor to adapt when it has the need, thereby establishing ontological pathologies that effectively constitute interactions between phenomenal and existential morphological conditions.

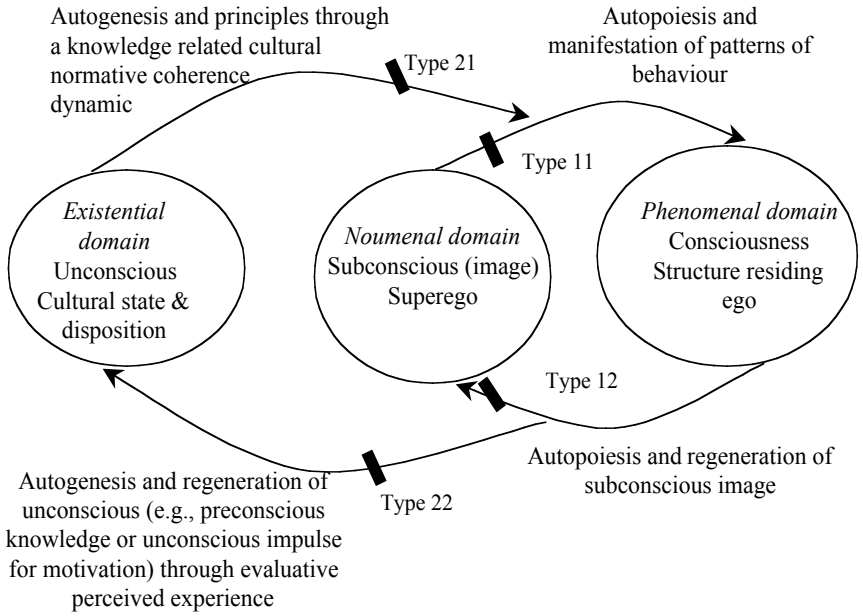

Figure 5: Transverse psychological model of the collective showing type 1 and 2 pathologies

Table 3: Types of Primary Pathology, and Possible Associative Relationships between Type Combinations

Pathology Type	Nature		
1 (11 and 12)	Can result in disassociative behaviour that has little reference to ideate images (or the subconscious). When this occurs, behaviour may be influenced directly by the unconscious. Type 11 relates to phenomenal image projection, while type 12 to an ability to have a feedback affect.		
2 (21 and 22)	No changes in the normative coherence can develop within the cultural fabric of the plural actor. In type 21 existing knowledge cannot have an impact on the autopoietic loop, while in type 22 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.		
	Associative Type Combinations		
	T11	**T12**	**T21**
T12	No phenomenal image projection or feedback resulting in direct link to existential domain		
T21	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.	
T22	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.

The first of the types of primary pathology (type 11 and 12) 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 type 21 and 22) that can occur is when autogenesis is blocked, so that normative coherence cannot develop within the cultural fabric of the plural actor, 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 ontological pathology, as illustrated in table 5, as types 11, 12, 21, and 22. An example of the type 11 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 collectives that have cultural instability (where their 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 collective. When type 1 and 2 pathologies occur together, behaviour is purely responsive and determined from structural capacities.

Let us now come to lateral pathologies. While it is normally possible to find a transitive cause for these, they are usually seen within a confined thematic contextual situation. Thus for instance, short term resolution to conflicts is normally connected with the stage of

behaviour, and termination of the conflict is sought through actions that will change conflictual behaviour (Yolles, 1999). Longer term resolutions to conflicts that may be concerned with the social psychological nature of the social collective are rarely sought. Since context is constrained, here primary pathologies are often assigned to an interaction or actors.

LATERALLY BASED PATHOLOGIES

In laterally based pathologies, our interests are restricted to epistemology and understanding from a knowledge perspective the nature of problem situations. Laterally based pathologies in particular relate to phenomenal situations that are either *autopathic* and primarily affect an individual collective endogenously, or *sociopathic* and affect others. While autopathology may have an unintended exogenous impact, it primarily affects the internal working environment of a collective including the capacity of individuals and groups to operate effectively and efficiently. Sociopathic collectives create pathologies within their exogenous environment, maintain egocentric as opposed to sociocentric behaviour, and have exogenously oriented attitudes that are likely to include callousness and a conscience defect.

We have already indicated that laterally based pathologies can be expressed in terms of a transitive model. It is possible to illustrate this by exploring the sociopathic collective in terms of its capacity for *associative projection*, an important property for any cognitive entity as we shall explain now. Yolles (2006) argues that a social collective can be considered as a psychological entity if it has the property of *associative projection,* and we shall postulate that this capacity is bounded when the collective is sociopathic. 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 it involves two kinds of properties: (a) an interrelation or coordination of viewing points; and (b) the possibility for deductive reasoning. Interest here is in (a), and 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 departicularise the focus of ones conceptual activities to consider and coordinate two more points of view.

One of the apparent facets of 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, and this has been explored by Foucault (see Rabinow, 1984) and the process of subjectification – seen as 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, and 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 Yolles (2006) has formulated Figure 6, where we have applied the pathology types 1 and 2 from Figure 5. This suggests that when one of the types is activated, a collective is experiencing a primary pathology and is incapable in some way of normally relating the noumenal 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 exogenous to its own behavioural system. As a result any of the type 1 or 2 pathologies or their combination constitutes a condition of collective sociopathology. There is an obverse of this proposition. Taking it that associative projection is a normal attribute of those who populate a social collective, this occurs through the normative processes of the collective as a whole. 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. Hence it can be realised that a development of Figure 6 provides a basis for the exploration of sociopathic social collectives, with the possibility of leading to diagnosis and interventional "treatment". It may be realised that the image of the object as depicted here is represented through the social collective's ideology, and its ethical position reflects this and leads to behavioural responses.

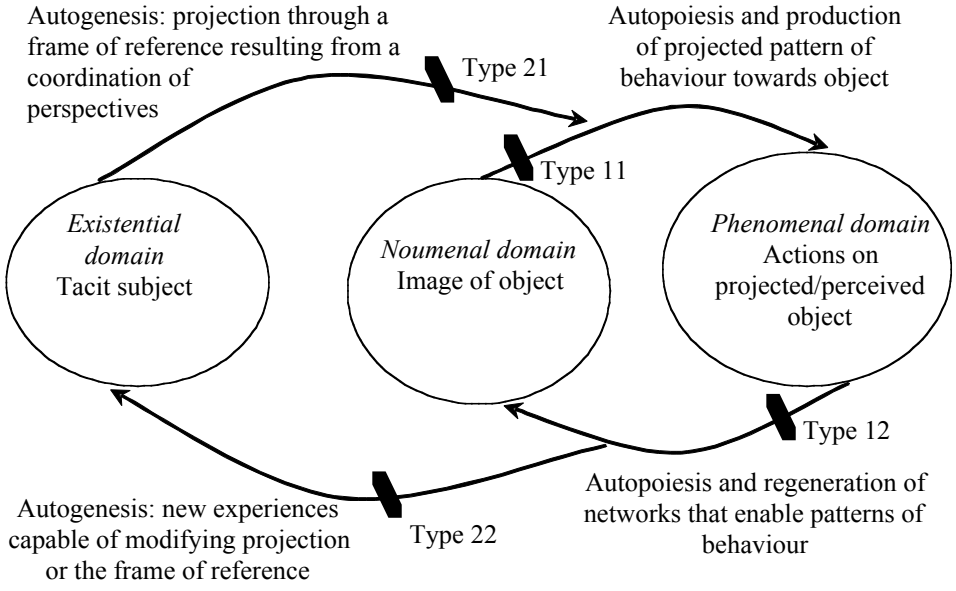

Figure 6: Interpretation of Piaget's notion of the relationship between subject and object

It may now be useful to look at practical autopathic and sociopathic situations. An example of an autopathic situation was intimated earlier when we introduced the problems posed by Claver et al (1999), and for which we can reflect that one reason for the development of secondary social pathologies can be explained because of the hierarchical nature of organizations with authoritarian governance and relationships operating through power based leadership roles, and this likely to constitute a more primary (causal) form of pathology.

Sociopathic situations are often less obvious, but since they affect the social environment they may have more impact because they can affect more people. 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 laizzez-faire capitalism meets the diagnostic criteria of a 'psychopath'" (Ackbar et al, 2005, p.2).

This idea is supported by Joel 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" (or should we rather say sociality?). 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. Kurt 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 actors to internal conflict because of contradictory intuition or knowledge. It happens when distinct groups or factions in a plural actor 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 actor 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 tend 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 (see for instance 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 US 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 autopoietic pathology. 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 ITT undertook some actions in Chile in the early 1970s to contribute to the destabilisation of its economy in collusion with the 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 Sept. 11, 1973. The US Government, it appears, saw its own interests more closely aliened with despotic regimes than with democratic ones.

The US, 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 an 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 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 US 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. So when the US President used the excuse of terrorism, after the 11th September terrorist attacks in 2001, with the 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. More, collusion between the US 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, and known only at lower levels of administration from which the filtering upward of information failed.

CONCLUSIONS

Beginning with the idea that pathology can be distinguished into transitive and lateral classifications, we have proposed two models to explore collective pathologies, transitive and lateral. Transitive representations of pathologies can be useful in identifying primary causes for problem situations. Since situations are thematic and contextual in nature, the fundamentally recursive model always has the potential to represent the primary pathologies of a given problem situation.

Lateral pathologies are more complicated, and involve the need to distinguish between autopathology and sociopathology. 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.

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 they are 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 US it is money that chases power.

REFERENCES

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

Bakan, J., 2005,The Corporation: The Pathological Pursuit of Profits and Power, Free Press, New York.

Beer, S., 1975, *Platform for Change*, Wiley, Chichester.

Beer, S., 1979, *The Heart of the Enterprise*. Wiley, Chichester, UK

Beer, S., 1985, *Diagnosing the System*, Wiley, Chichester.

Belbin, M.R., 2001, Managing without Power: Gender relationships in the story of Human Evolution, Butterworth Heinemann

BonJour, L., 1985."The Elements of Coherentism." Chapter 5 of The *Structure of Empirical Knowledge*. Harvard. Pp 87-110

Brier, S., 2006, Systemic Problems in the Post-modern Power-struggle between the Generalized Media in the Agora: The Lomborg Case of Environmental Science and Politics, Systems Research and Behaviour Science, *Sys Res & Beh Sci*. 23, pp

Brown, T.L., 2003, *Making Truth: Metaphor in Science*, University of Illinois Press

Claver, E., Llopis, J., Gascó, J.L., Molina, H., Conca, F.J., 1999 Public administration: From bureaucratic culture to citizen-oriented culture, *International Journal of Public Sector Management,* 12(5) 455,464

Cobain, I., 2006, FO paper reveals British knowledge of torture flights, The Guardian Newspaper, UK, 19th January, p.10

Collier, P., 2003, B*reaking the Poverty Trap*, World Bank, Oxford University Press, Oxford.

Collier, P., 2006, Nations Zero, World Bank Documentor, www.wbcsd.org/web/complus/documents/nationzero.pdf

Davis, G.B., Olson, M.H., 1984, *Management Information Systems: Conceptual Foundations, Structure, and Development*. McGraw-Hill, New York.

Deflem, M., 1966, *Habermas, Modernity and Law*. Sage, London. Also see www.sla.purdue.edu/people/soc/mdeflem/zhablaw.htm, accessed December 2002.

Douglas, M., 1966, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. Ark, London.

Foss, N.J.,Christensen, J.F.,1996. *A Process Approach to Corporate Coherence*, Danish Research Unit for Industrial Dynamics WORKING PAPER NO. 96-7, Department of Industrial Economics and Strategy, Copenhagen Business School, Nansensgade 19,6, 1366 Copenhagen K Denmark.

Foucault, M., 1982. The Subject and Power, *Critical Inquiry*, 8: 777-795. Also in Dreyfus, H., Rabinow, P. (Eds.), *Michel Foucault: Beyond Structuralism and*

Hermeneutics. University of Chicago Press, Chicago. Also in Faubion, F. (ed.), 2000, Power, New Press, N.Y., Translated by Robert Hurley.

Franzer, J., 2002, Voices in the Wilderness, *The Guardian Newspaper*, UK, 28 September. The essay was an extract from: Franzen, J., 2002, "Why Bother", Fourth Estate.

Fresneda, C., 2006, Al Gore Accuses Bush of Breaking the Law Repeatedly and Persistently, El Mundo, Spain, 17th January, p.25.

Guo, K.J., 2006, *Strategy for Organizational Change in State-Owned Commercial Banks in China: A Developing Organizational Development View*. Doctoral Thesis, Faculty of Business and Law, Liverpool John Moores University.

Habermas, J., 1971, Knowledge and Human Interests, Beacon Press, Boston

Habermas, J., 1987, *The Theory of Communicative Action*. Vol. 2, Polity Press, Cambridge, UK

Heidegger, M., 1927, *Being and Time*, Transl. Macquarrie J. and Robinson E.S., in 1962 edition, Harper and Row, London.

Hofstede, G., 1991, *Cultures in Organizations: Software of the Mind*. McGraw-Hill, London

Howard, N., 1995, *Oedipus, Decision-Maker: A Theory of Drama with Applications to Politics, Business and Life in General*. Personal communication in 2003.

Howard, N., 1999, *Confrontation Analysis: how to win operations other than war*. CCRP Publications, Washington. &. www.personal.u-net.com/~drama/Newtheory.htm, accessed May 2002.

Husserl, E., 1950, Ideen zu einer reinen Phanomenolgie und phanomenologischen Philosophie, vol.1, in *Husserliana*. Also see Husserl, 1950-, XIX. 1911: Philosophie als strenge Wissenschaft, Logos, vol. 1. English translation by Lauer, Q., 1965, *Husserl*, Harper and Row, New York

Jackson, M.C., 1992, *Systems Methodologies for the Management Sciences*. Plenum, New York

Jung C.G., 1933. *Modern man in search of a soul*. (Translated by Dell, W.S., Baynes, F.C.). New York : Harcourt, Brace & World.

Kets de Vries, M.F.R., 1991, Organisations on the Couch: Clinical Perspectives on Organisational Behaviour and Change, Jossey-Bass Inc (a Wiley publication), NY, USA.

Koestler, A., 1967, *The Ghost in the Machine*. Picador, London

Kropotkin, P., 1898, *Anarchism: its philosophy and ideal*, Free Society, San Francisco

Leach , E., 1976, *Culture and Communication: The Logic by which Symbols are Connected*. Cambridge University Press, Cambridge

Luhmann, N., 1995, *Social Systems*. Stanford University Press, California. Translated from the 1984 German edition.

Lyden, J.A., Klengales, W.E., 2000, Supervising organizational health, *Supervision*, 61(12)3-6.

Lye, J., 1997, *Ideology: A Brief Guide*, Brock University, www.brocku.ca/english/jlye/ideology.html, accessed June 2005.

Mackie, J., L., 1977, *Ethics: Inventing Right and Wrong*. Penguin Books, London, UK.

Marshall, S.P., 1995, *Schemes in Problem Solving*. Cambridge University Press, Cambridge, UK,

Maturana, H.R., Varela, F.J., 1979, *Autopoiesis and Cognition*, Boston Studies in the Philosophy of Science, Boston

Mazlish, B., 1990, *The Leader, the Led, and the Psyche: Essays in Psychohistory.* University Press of New England.

New York Times, 2005, Fixing the Game, Editorial, 5th Dec., http://www.nytimes.com/2005/12/05/opinion/05mon1.html, accessed December 2005.

Nonaka, I., Reinmoeller, P., Senodo, D., 1998, The ‚ART' of Knowledge: Systems to Capitalise on Market Knowledge, European Management Journal, vol. 16, no. 6, pp 673-684

O'Donnall, D., 1999, Habermas, critical theory and selves-directed learning, *Journal of European Industrial Training*, 23(4/5)251-261

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. 1977. *The Development of Thought: Equilibration of Cognitive Structures*. Viking, New York:

Rabinow, P., 1984, *The Foucault Reader: an introduction to Foucault's thought*. Pantheon Books, NY.

Raboy, M., Landry N., 2005, *Civic Society Communication and Global Governance: issues from the world summit on the information society*, Peter Lang Publishing Inc, New York)

Schutz, A., Luckmann, T., 1974, *The Structures of the Lifeworld*. Heinamann, London.

Schwaninger, M., 2001, Intelligent Organizations: An Integrative Framework, *Sys. Res*. 18, 137-158.

Schwarz, E., 1997, Towards a Holistic Cybernetics: From Science through Epistemology to Being, *Cybernetics and Human Knowing*, 4(1)17,50.

Schwarz, E., 2001, Anticipating Systems: an Application to the Possible Futures of Contemporary Society. Invited paper at CAYS'2001, *Fifth International Conference on Computing Anticipatory Systems*, Liege, Belgium, August 13-18.

Schwarz, E., 2003, Is Consciousness Reality or Illusion? A Non-Dualist Interpretation of Consciousness, *Computing Anticipatory Systems: CASYS'03 - Sixth International Conference*, Liege (Belgium), 11-16 August.

Sorokin, P.A., 1937-1942, *Social and Cultural Dynamics* (in 4 volumes). Amer. Book. Co. N.Y. Re-published in 1962 by Bedminster Press.

Vonnegut, K., 206, Custodians of Chaos, The Guardian Newspaper, Review article on 21st Jan., and extract from his forthcoming memoirs.

Watson, G., 1969, Resistance to Change. In Bennis, W.G.,, Benne, K.F., Chin, R., (eds), *The Planning of Change*. Holt, Reinhart, Winston, New York.

Weed, L., 2002, Kant's Noumenon and Sunyata, *Asian Philosophy*, 12(2)77,95, July.

Wollheim, R., 1999, *On The Emotions*. Yale University Press.

Yolles, M.I., 1999, *Managment Systems: A Viable Approach*. Financial Times Pitman, London

Yolles, M.I., 2006, Organisations as Complex Systems: An Introduction to Knowledge Cybernetics, Information Age Publishing, Inc., Greenwich, CT, USA..

Yolles, M.I., Guo, K., 2003, Paradigmatic Metamorphosis and Organizational Development, *Sys. Res*., 20, 177-199

Yolles, M.I., 2006, Organisations as Complex Systems: an introduction to knowledge cybernetics, Information Age Publishing, Inc., Greenwich, CT, USA, 600 pages.

Zaltman, G., Duncan, R., 1977, *Strategies for Planned Change*. Wiley, New