Accountancy as an Autopoietic System: An Explanation of Recurring Regulatory Failure

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ACCOUNTANCY AS AN AUTOPOIETIC SYSTEM: AN EXPLANATION OF RECURRING REGULATORY FAILURE

by

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ABSTRACT

A recurring feature of the Australian corporate scene has been a cycle of booms and collapses. This, in turn, has been accompanied by a recurring cycle of regulatory failure, regulatory reform. In the wake of regulatory failure, it has not been uncommon for criticism to be directed towards accounting and the accountancy profession for the unexpectedness of some corporate failures. This criticism, in general, arises because the audited financial statements of the companies concerned have indicated the companies were profitable and well-managed. Subsequent investigation invariably has shown that the companies were, in fact, incurring losses and often faced severe liquidity problems. Reforms are invariably instituted to prevent a recurrence of such unexpected financial disasters. However, when the next inevitable economic collapse occurs, it is usually found that the reforms put in place after the last collapse were inadequate. This paper offers a reason why this inevitable regulatory failure, regulatory reform cycle persists. In particular, the paper argues that accountancy is an autopoietic system and as such, any changes, reforms, within the system are directed towards adapting and maintaining the autopoietic state. Such change may appear to be radical but, in fact, it is limited because the preservation of autopoiesis requires a continuous cycle of conversation, communication, conversation and compatibility within the structures of the system and between the system and its environment.
INTRODUCTION

Corporate and regulatory failures have been part of the Australian corporate landscape for at least one hundred years. McQueen, for example, refers to recurrent instances of both corporate and regulatory failure in Australia from as early as the 1870s (1991, pp22-23). Sykes has argued that corporate collapses in Australia are "... a recurrent malaise and endemic to the private enterprise system as it presently functions" (1988, pX). Similarly, Justice Rogers of the New South Wales Supreme Court has characterised the Australian economy as a "recurring cycle of booms and collapses" arising from the regulatory system's inability to institute effective measures to halt the cycle (1991, p1). While this, in itself, is disturbing, the unexpectedness of some corporate collapses is more so particularly as far as the implications this has had for the public perception of accounting and the accountancy profession and accountancy's role in the regulatory system. In Australia, the regulatory system comprises the accountancy profession as a whole, the legal profession, State and Federal Parliaments as representatives of the public interest, regulatory authorities such as the Australian Securities Commission, the stock exchange and corporations. At a broader level, industry representatives, preparers and users of financial statements and others could also be seen as members of the regulatory system.

Accountancy's role in the regulatory system has historically been seen as serving the public interest. This has been the catch cry of the accountancy profession since the formation of the first professional accountancy associations last century. Just what this meant was not spelled out in the Royal Charters of incorporation or documents detailing the objectives of these associations. However, later evidence suggests that the claim to be serving the public interest was directed towards creating a public perception that accounting is a task requiring specialised skill and training and, as such, should only be undertaken by those who qualify for membership of designated professional associations. For example, Thomas Brentnall, a foundation member of the
accountancy profession in Australia, implied a link between accounting and the public interest. This link was the relationship between Australia's need as a young country to borrow on favourable terms from overseas interests and the provision of reliable accounts to absentee lenders. Such accounts could be provided by appropriately trained and educated public accountants (Australasian Corporation of Public Accountants, 1910, p134). In more recent times, the profession in Australia has issued a series of statements of accounting concepts (SACs). These statements maintain that general purpose financial statements provide a means by which management is accountable for the resources entrusted to them. This narrow stewardship focus is extended to accountability to the general public. It is claimed that when general purpose financial statements provide relevant and reliable information, resource providers will use this information to facilitate an economic allocation of resources (SAC 2 Objectives of General Purpose Financial; Reporting, paragraphs 26, 27; SAC 3 Qualitative Characteristics of Financial Information, paragraph 5). An economic allocation of resources will benefit the general public because resources will only be directed to those entities that will use them efficiently and effectively and in compliance with any rules laid down for their use (SAC 2, paragraphs 12, 13). Laudable as this sounds, history shows that accounting and the accountancy profession have played a key role in the boom-collapse cycle. In particular, accounting and accountants have invariably been implicated in the unexpectedness of many corporate failures.

The Victorian land boom and collapse of the 1880s, 1890s, provides evidence of accountancy's role in the unexpectedness of some corporate failures. Michael Cannon, for example, has stated

The falsifying of balance sheets, the payment of dividends from non-existent profits and the publication of misleadingly optimistic forecasts were among the shocking features of the crash (1972, p28).
Sykes provides evidence that such practices have continued up to the present time. For example, in a study of the major corporate collapses to occur in Australia since the formation of the first Australian company, Sykes came to the conclusion that poor accounting systems and practices were among the main dangers facing top management because these could mean that management was given misleading information as to the profitability of the company (1988, pp549-550). This view was later reaffirmed but in the context of investors rather than management:

As receivers and investigators gradually strip bare the recent corporate scandals in Australia, one factor becoming apparent is that the accounts of the companies concerned have been unsatisfactory, to say the least (1990, p43).

This is not to say that no action has been taken to address these issues. In fact, the boom-collapse cycle has been accompanied by a cycle of regulatory failure, regulatory reform. Regulatory reform has taken many forms including corporations legislation prescribing the annual publication of audited financial statements and the content of those statements; the introduction by professional accountancy bodies of statements of recommended practice to guide the preparation and audit of financial statements; the replacement of these optional guidelines with accounting standards binding on members of the professional bodies; statutory backing of approved accounting standards; attempts to develop an accounting conceptual framework; and the establishment of regulatory bodies such as the Australian Accounting Standards Board (AASB) and the Australian Securities Commission (ASC). In spite of these activities, the regulatory failure, regulatory reform and boom, collapse cycles have continued.

Justice Rogers has argued that the primary flaw in the corporate regulation arena is the difficulty and cost of gathering evidence to prove an infringement (1991, pp1-3). Support for this is available from Australian regulators such as Henry Bosch (1985;
1987a, b) and Ian Langfield-Smith (1987, 1990) who have consistently maintained that flexibility in accounting standards made it difficult to prove conclusively that financial statements did or did not present a true and fair view of a company's state of affairs. Similarly, Chambers has argued

The practices that companies have adopted have generally been permissible under the statutes, regulations and technical rules of accounting . . . The trouble has been that the laws, regulations and rules have been vague, toothless and often self-contradictory (1973, Preface, Securities and Obscurities [no pagination]).

As a consequence, management and company auditors have been able to claim that even though what had been reported as profits subsequently proved to be losses, the financial statements had been prepared in accordance with prevailing accounting rules and, therefore, a successful prosecution could not be launched against them.

As noted previously, regulatory reform has been initiated to address the problem of unexpected corporate failures but with little apparent success. What is apparent is the recycling of financial accounting issues and a failure to find lasting solutions to the propensity to manipulate financial information to portray seemingly profitable and well-managed organisations when this is far from being the case. As Lee has pointed out, this has occurred even though the problems were well-known and had been the subject of research by the profession (1990, Introduction and Explanation, [no pagination]). Briloff provides evidence of this in a review of the activities, or non-activities, of the accountancy profession in the USA and their consequences between 1972 and 1993:

All of the problems which were festering then, and to which the US accounting profession was committed to resolving had, in fact, exacerbated; the aberrations which were noted back then were in the range of millions, or less. They have now been extrapolated exponentially to billions and tens of billions (1993, p301).
Sykes' 1988 study provides evidence that the causes of the major collapses of
Australian corporations in 1970s and 1980s bear a striking resemblance to the
collapses of the last century and has implicated accounting and accountants in those
failures on the basis of the inaccurate accounts issued by those corporations (1988,
p551). Similarly, Walker has identified similarities between the Australian corporate
failures of the 1960s and those of the 1980s as well as the relationship between
accounting and the concealment of impending failure (1993, pp97-98). Clarke and
Dean maintain that misleading financial statements have been as much the result of
compliance with accounting standards as non-compliance (1992, p186).

The devastation to investors in Australian corporations is on a par with those revealed
by Briloff. For example, the collapse of the Reid Murray Group in 1963 resulted in a
loss of some $40 million (Victoria, 1966, p78). This was an Australian record at the
time (Sykes, 1988, p322). However, this amount pales significantly when compared to
failures of the 1980s and 1990s. Clarke and Dean, for example, cite evidence from the
AMP Society which estimates that corporate failures of the late 1980s and early 1990s
have cost shareholders some $8 billion (1992, p181).

Evidence such as this appears to be the basis of a question posed by Lee (1990) and
which this paper attempts to provide the starting point for an answer:

... why a socially-valued and financially well-rewarded profession
such as accounting should have, and be content to have, a relatively
static body of knowledge in which major problems are investigated
but not resolved; alternative theories remain theories; and research
is desired but its findings are largely ignored (1990, Introduction
and Explanation, [no pagination]).

In other words, a vast regulatory structure has been erected but apparently to no avail
as far as preventing unexpected and spectacular corporate failures is concerned. This
appears to be particularly true where audited financial statements have indicated the
companies concerned were profitable and well-managed but subsequent investigation in the wake of collapse show a contrary view. The fact that this calls forth criticism of the profession does not seem to have any great impact because the reforms instituted in response to this criticism repeatedly are shown to be ineffective. As indicated above, the profession has progressively issued recommended accounting practice statements, accounting and auditing standards and concept statements binding on members of the professional bodies and, with the backing of federal corporations legislation, approved accounting standards. A number of regulatory, or quasi-regulatory bodies, have been established to develop accounting standards and concepts. These include the Australian Accounting Research Foundation incorporating an accounting standards board, and the Accounting Standards Review Board which has been replaced by the Australian Accounting Standards Board.

Why then, in the face of so much regulatory reform has so little been achieved in real terms? This paper will argue that the answer lies in viewing accountancy as an autopoietic system that, by definition, is autonomous and absolutely dedicated to the preservation of its autopoietic state. As the following discussion will show, uncertainty is essential to the maintenance of autopoiesis as is compatibility within the system and between the system and its environment. For these reasons, definitive solutions to accounting and regulatory failure will not be forthcoming even if such solutions appear to be found and implemented in the short term. History will repeat itself, unexpected and spectacular corporate failures will send shock waves through the community and the regulatory failure, regulatory reform cycle will start again.

It is acknowledged that uncertainty in accounting standards and practices is but one of the contributors to the regulatory failure, regulatory reform cycle. Nonetheless, it is a significant source given that accounting is the means by which management is made accountable to those who deal with corporations and, thereby, to the public through the allocation of resources. It is also significant that often in the wake of regulatory
failure, deficiencies in accounting have been implicated in the unexpectedness of some corporate collapses. As stated earlier, corporate regulation is the relevant environment in which accountancy as an autopoietic system exists. The other participants in the field of corporate regulation, that is, the elements sharing the regulatory environment with accountancy include the legal profession, State and Federal Parliaments as representatives of the public interest, regulatory authorities and corporations. The regulatory failure, regulatory reform cycle can be seen as a consequence of the relationships or structural coupling between all of these elements. Support for this contention can be found in a Parliamentary debate in the Senate in 1992. The speaker made reference to an article in the financial press regarding comments made by Henry Bosch about corporate transgressors and highfliers. According to Bosch, for every one of these there were thousands of professionals including lawyers, accountants and auditors who followed them (Australia, 1992, p2205).

As will be discussed in detail shortly, the identification of a relationship between accountancy and the other participants in the regulatory system does not necessarily imply collusion. The relationship is much more subtle. For example, because accountancy derives its statutory power to develop and approve accounting standards from the government, it could be argued that it is a part of the legal system constituted by acts of parliament. However, it is contended here that accountancy imports only its powers from acts of parliament. Its output or conversation and communication in the form of accounting standards is developed within the autopoietic system. As an autopoietic system, it is cognitively open and is responsive to triggers from other elements in the system including the law and corporations, if such responses are necessary to its survival. In this sense, it may also import information such as reactions to proposed standards or perceived needs for standards on particular topics. The foreign currency translation standard will be discussed briefly later to demonstrate this point.
Before continuing, it should be made clear that the subject of this paper is Australian accountancy as an autopoietic system. There is no suggestion that the concept is generalisable across accountancy throughout the world. However, it is probable that accountancy in the United Kingdom and the United States of America could also be described as autopoietic on the basis of the similarities between accountancy in Australia and those countries.

**AUTOPOIESIS**

The term autopoiesis was derived by Maturana and Varela (1988) to explain living systems which recursively reproduce themselves. The original theory was established in the discipline of biology where the living systems under analysis consisted of cells and organisms. These cells and organisms were said to be operationally or organisationally closed in that they produced their own boundaries, processes, structures and all other elements needed for existence (Maturana & Varela, 1988, p46; Bednarz, 1988, p59). Autopoiesis occurs where the elements produced recursively reproduce the system itself.

While autopoietic systems are organisationally closed, they are, at the same time, cognitively open (Maturana & Varela, 1988, p95). In other words, the autopoietic system does not exist in a vacuum "... it ... is born in a particular place, in a medium that constitutes the ambience in which it emerges and in which it interacts" (p95).

In order to survive, the cells and organisms have to be compatible with their environment. Compatibility is determined by what Maturana and Varela term structural congruence or coupling in that there must be congruence or compatibility between the structures of the autopoietic system and the structures of its environment (p95). If this compatibility ceases to exist, the autopoietic system also ceases to exist.
This is not to say, however, that the environment actually has any input to the autopoietic system or vice versa (Luhmann, 1986). The system is autonomous and, as such, specifies its own rules, laws and its very existence (Maturana & Varela, 1988, p48; Luhmann, 1988a, p15). The environment can trigger changes in the autopoietic system but the system itself will determine what changes actually occur within its structure (Maturana & Varela, 1988, p95). Any changes which do occur are aimed solely at maintaining autopoiesis (p99).

There have been a number of attempts to extend the concept of autopoiesis to social systems in general (eg. Luhmann, 1986; Bednarz, 1988; Mingers, 1989a, b) and particular social systems such as law (eg. Teubner, 1988a, b; Luhmann, 1988a, b) and accountancy (Robb, 1991). The attempt to extend the notion of autopoiesis is fraught with difficulty and has led writers such as Robb (1991), Lempert (1988), Kennealy (1988) and Mingers (1991) to suggest the need to speak of "virtual autopoietic systems" (Robb, 1991, p218) or apply the concept in terms of metaphor (Mingers, 1991; Lempert, 1988; Kennealy, 1988). A way out of this dilemma has been proposed by Luhmann (1986, p172-173) who has developed a multi-level approach whereby the upper level consists of a general theory of self-referential autopoietic systems while the lower levels comprise psychic systems, living systems and social systems. This approach overcomes one of the major difficulties of applying autopoiesis in a biological sense by divorcing human actions from the concept of autopoiesis in social systems. The difficulty lies in characterising an autopoietic system as autonomous. If a social system is autopoietic, it is by definition, autonomous in that it creates its own boundary, components, reality and rules. Creation of humans lies in the biological system and thereby, humans cannot be a component of a social system.

To overcome this difficulty, concepts of cognition, conversation, meaning and communication have been adapted to explain the interaction between components of a social system and also between a social system and its environment. Maturana and
Varela refer to cognition as "bringing forth of a world" or as an "effective action" that will facilitate the continued existence of a living being within the environment in which it has established itself (1988, pp28-30). Cognition, used in this sense, can be seen as thought processes and is linked with knowledge or ways of knowing how to survive or conserve structural coupling (p174).

Communication is the means by which social systems achieve and conserve their autopoiesis. It is the coordination of behaviours (Maturana and Varela, 1988, p193). However, this is not to say that this coordination is in any way conscious or that it consists in the transmission of information as is commonly understood to be the process of communication. Communication is the basic element of social systems (Luhmann, 1986, p174). It is created by the system, exists only within the system and is self-referential (p175). Robb terms communication as "the use of meanings in linguistic interactions" (1991, p219).

Interaction within a social system is via communication (Teubner, 1988a, p3) or communicative acts (Robb, 1991; Luhmann, 1988a, b; Bednarz, 1988) rather than through physical forms of interaction. Communication is thus the basic element of an autopoietic social system (Teubner, 1988a; Luhmann, 1988a, b; Robb, 1991).

Robb (1990) has extended the idea of communication in social systems to include conversation. Communication still has all the properties listed above but, in line with Pask's (1980, p.144) view of communication, is further seen as the "... sending of signals between participants ... " (Robb, 1991, p219). The signals sent between participants are the result of conversation which is defined as "... the medium of social integration" (1990, p23) and "... the mechanism of conflict resolution" (p15). Robb uses conversation in terms of the creation of shared meanings within the cognitive domain (1991, p219). Conversation is, therefore, contextual. Meanings are also contextual with the result that the creation of new meanings depends on the
existence within the cognitive domain of already shared meanings such as terms, definitions, assumptions, intuitions and rules (p219). As indicated, the view adopted by Robb is based on the interpretation placed on the term "conversation" by Pask. For Pask, shared meanings or concept sharing implies agreement or consensus (1980, p147) which Pask maintains is arrived at through "commanding and obeying or questioning and answering" (p144). In this sense, conversation is a process of conflict resolution (p151). The means by which concepts are shared include requests, commands and persuasion (p147). Concepts can also be seen as skills such as knowing how to perform specified tasks or understanding rules such as geometry (p147).

Communication is essential to conservation of autopoiesis because it calls forth further conversation which, in turn, founds new meanings to be communicated. This process of conversation, meanings and communication within the cognitive domain of the autopoietic system may cause boundary, structural and component changes within the system, it may even extend the boundaries of the system but these will only be contextual changes designed to maintain autopoiesis.

This interpretation of conversation and communication is the key to the application of autopoiesis to social systems. For example, Luhmann describes autopoietic social systems as meaning-using systems to distinguish them from living autopoietic systems (1986, p173). This is similar to the approach adopted by Robb who argues that social systems are not "assemblies of human individuals" but are systems of shared meanings (1991, p219).

**Autopoiesis and the Accountancy Profession**

As indicated above, a major difficulty in applying the concept of autopoiesis to social systems such as accountancy is that autopoietic systems only produce themselves and
use elements created by the system to reproduce the system. Humans do not recursively produce and reproduce themselves and, therefore, cannot be part of an autopoietic system. They can, however, be part of the environment within which the autopoietic system exists. Systems created by humans also cannot be part of an autopoietic system because they have not created themselves. Mingers refers to systems designed by humans as heteropoietic (1989a, p164). Allopoietic systems produce something other than themselves (Robb, 1991, p216; Mingers, 1989a, p164). Heteropoietic and allopoietic systems can also be part of the environment in which autopoietic systems exist.

Robb states, however, that autopoietic systems can also be allopoietic systems (1991, p216). Autopoietic systems are organisationally closed but cognitively open so that they import energy, information and material. These imports may be transformed by the autopoietic system to create something other than the components and structures which make up the system. In this way, the autopoietic system exports energy, information and material (p216). In this sense, professional accounting associations, research and standard setting boards, conceptual framework projects and accounting and auditing standards can be seen as the output of accountancy as an autopoietic system.

On the other hand, accountancy may be viewed as an autopoietic system by using autopoiesis as a metaphor or to abstract from the allopoietic and heteropoietic systems and view accounting and auditing standards, conceptual framework projects and even professional associations as forms of communication and organisation. In Robb's view,

An autopoietic social system is one in which meanings arise from conversations and are acted upon through communication and in which that communication gives rise to conversation to form new meanings (italics in original) (p220).
This, of course, does not overcome all of the difficulties in applying autopoiesis to accountancy. Other difficulties will be addressed in discussion dealing with determination of the boundary of the accountancy system and its interactions with other systems within its environment including society which will be viewed as the overall system within which accountancy exists.

In spite of the difficulties encountered in the application of autopoiesis to a social system such as accountancy, viewing the accountancy system and its components as abstractions, in the form of conversation and communication, from their physical counterparts, including professional associations, practitioners, researchers and academics, removes the problem of imputing values or rationality to the actions of human participants. It is impossible to discover what really prompted particular behaviour in an individual and even harder to discern the underlying reason for the behaviour of a group. What is discernible is the outcome. For example, public outcry against the contents of SAC 4 and the mandatory status of SACs (APS 1 “Conformity with Accounting Standards”) resulted in a review of both by the Australian Accounting Standards Board and the Australian Accounting Research Foundation and the two professional bodies. In the context of this paper, SAC 4 and APS 1 would be communications between the autopoietic system and its environment. Dissatisfaction with both was communicated to the autopoietic system from elements of the environment, including business interests. The review of SAC 4 and APS 1 are forms of conversation resulting, in part, in communication to the environment that the mandatory status of the SACs had been withdrawn. The validity of the arguments for and against SAC 4 or the mandatory status of the SACs was irrelevant. Perturbations in the environment of the autopoietic system are a threat to survival and survival is paramount even if this means that successive communications are in direct contradiction with previous ones. No further explanation of particular actions or activities is required.
The Boundary of Accountancy

If an autopoietic system creates itself as well as all the elements which make up the system and relationships between them, the questions must be answered as to how, where and when a particular autopoietic system emerged. Teubner (1988b, p223), Luhmann (1988a, p26) and Maturana and Varela (1988, p40) shed some light on how these questions may be answered. Teubner, for example, maintains that the products of a system and even the processes which produce the products can exist initially in the absence of a completely autopoietic system. The recursive reproduction of the system by its own productive processes is one indication of the emergence of an autopoietic system.

Maturana and Varela identify an autopoietic system as a unity created by an act of distinction. In other words, the system takes on an identity separate and distinct from its environment. It, therefore, has a boundary created by the system within which it produces the other components of the system. Maturana and Varela describe a boundary as a membrane which "... not only limits the extension of the transformation network that produced its own components but it participates in this network" (1988, p46).

The unity thus created can be said to be self-determined. To be autopoietic, the system must also be self-reproducing or self-referential, that is, it refers to itself in the reproduction of its elements (Luhmann, 1988a, p26). The act of distinction implies the system and the function it performs is unique or, in Luhmann's terms, the system has "exclusive orientation to a function" (p26). System unity extends beyond the determination of the system to the final elements and processes which the operations of the system combine (p14).
Accountancy appears to meet these criteria to a certain extent. Some of the products of accountancy, for example, double entry bookkeeping, which Baecker (1992) argues is a self-referential system, audited financial statements, bankruptcy and liquidation work and cost accounting, existed before accountants attempted to achieve exclusive practise of these functions. Indeed, prior to the mid-nineteenth century, accounting in Scotland, which has been designated the place of origin of the accountancy profession, was seen as a sub-set of the law (Carr-Saunders and Wilson, 1933, p209).

By forming professional associations, accountants endeavoured to not only separate the practice of accountancy from the law but also to ensure that only those with the requisite training undertook work of an accounting nature. However, there are a number of professional accountancy associations representing different branches of accountancy or types of accounting practice. Membership of a professional association is not necessary to undertake many aspects of work of an accounting nature. In the absence of one definitive professional accountancy association or statutory recognition, of what constitutes a "professional" or "qualified" accountant, for example, an accountant's registration board, it is difficult to see the boundary of accountancy. The extension of accountancy into activities such as management consultancy services and information systems compounds this difficulty.

This difficulty is not insurmountable. Robb suggests looking at systems where it is difficult to distinguish a boundary as "virtual" autopoietic systems or thinking of them "as if" they are autopoietic systems (1991, p218). The distinguishing element will be the presence of mutual causal feedback loops which must exist and be organisationally closed so as to sustain autopoiesis. Similarly, Luhmann talks of partial systems where there is not a complete differentiation between the system in question and its environment.
Indeterminacy in that which belongs to a system always means incomplete differentiation, or in other words dependence on an overall social basis of operation which is not ordered as the difference between partial system and environment (1988a, p26).

Accountancy, and in particular, the regulation of corporate financial reporting, does not operate in isolation from the rest of the regulatory framework. In Australia, the provisions of the Corporations Law requiring the audit of financial statements and the true and fair view prescription which now extends to compliance with the provisions of the Act and Australian accounting standards, means the accountancy profession is, in part, dependent on the law for its existence and legitimacy. The law itself must operate within the confines of society as a whole as must accountancy.

Nonetheless, the accountancy profession through the Australian Accounting Research Foundation and the Australian Accounting Standards Board does perform a unique function in that it dominates the determination of accounting practices. Mutual feedback loops between the system and its environment are evident in the events which trigger the decision to develop a standard dealing with a particular accounting practice and also in the mechanisms whereby the standard is developed, modified and ultimately issued and becomes operative.

The process does not cease once the standard is formally issued and operative. The impact of the standard is monitored and, if necessary, the process of development and modification are re-instituted. Even if the standard is not subject to question or modification, the feedback loops are still operative because the scope for interpretation which is built into accounting standards allows for the exercise of professional judgment on the part of the accountant advising management on the application of the standard to a particular transaction. In addition, the auditor is required to determine whether the interpretation and application of the standard is appropriate to the particular circumstances of transactions.
This interaction may extend to the legal system and regulatory authorities in the event of a dispute between the appropriateness of a particular application of a standard which impinges on the truth and fairness of the resulting financial statements. The result of all these interactions may be a referral back to the accountancy system regarding the efficacy of a particular accounting standard. Hence, there are mutual causal feedback loops between accountancy, accounting practitioners who are not part of the autopoietic accountancy system but components of its environment, the legal system, the corporate system, regulatory authorities and society in general.

**Autonomy of Accountancy**

Another element which may help distinguish the boundary of an autopoietic system from its environment and identify it as an autopoietic system is autonomy. Autonomy, in this context, means that the system is self-determined in that it produces and reproduces itself by organising itself in such a way that it alone determines what is part of the system and the relationships between its elements or components (Maturana and Varela, 1988; Bednarz, 1988; Teubner, 1988b; Luhmann, 1988b). In this, the notion of autonomy extends beyond being able to determine its own operations or self-regulation. Luhmann (1988b) uses the concept of operational autonomy to describe the autonomy of autopoietic systems. Operational autonomy means that the autopoietic system makes use of its own operations to produce its own operations, that is "...they can reach forwards and backwards to operations of their own in order to produce operations of their own" (p345).

Autonomy is, therefore, essential to an autopoietic system since without it, the system would not be self-determined and self-perpetuated. This is the key difference between an autopoietic system and one which is not autopoietic (Mingers, 1989a, p166; Bednarz, 1988, p58; Maturana and Varela, 1988, p48). Luhmann describes
autopoietic systems as "sovereign" in that "[t]hey do not create a material world of their own. They presuppose other levels of reality" (1986, p174).

Achieving this requires the appropriate organisation of the components or elements of the system. Organisation establishes the relationships between the components or elements of the system. It is the organisation of the components or elements and the relationships between them which place the system in a particular classification. Mingers uses the analogy of the organisation of components and their relationships and properties which characterise or define a car (1989a, p163). Maturana and Varela use a chair to make the same point (1988, pp42-43).

A profession can be defined in a similar fashion. The attributes or identifying elements or components of a profession are often said to include a body of esoteric knowledge, a code of ethics, self-regulation and exclusive practice of a particular function. These attributes require the establishment of support mechanisms such as at least one professional association, or better still, statutory recognition such as a registration board, to identify the qualified and thereby exclude the unqualified; researchers to discover and extend the body of esoteric knowledge; academics (who may also be researchers) to impart knowledge to the would-be qualified; and practitioners to provide training facilities for aspiring professionals and also supply the professional service to the public. It is important to note here that professional associations, researchers, academics and practitioners are being used in an abstract sense not as human individuals. From the perspective of autopoiesis, these "components" or "elements" have to be viewed in terms of "meaning" or, following Robb, "shared meanings":

Social systems are assemblies of shared meanings, rather than assemblies of human individuals or even the acting out of social roles as they are often defined (1991, p219).
This notion of shared meanings will be elaborated in the following discussion of the structure of the accountancy system. For present purposes, the importance of "meaning" is provided by the interpretation of Luhmann by Bednarz

Meaning is . . . the basis upon which, or rather the vehicle by which, certain kinds of systems are organised - it is the counterpart of life in the physical domain . . . it is the basis upon which system unity is established . . . meaning is essentially a relation (italics in original, 1988, p62).

**Structure of the System of Accountancy**

Organisation is necessary to the autonomy of the autopoietic system because it provides the mode of operations which establish and maintain the system's autopoiesis. However, organisation is not sufficient to maintain autopoiesis. Organisation provides the characteristics of a broad classification. Structure provides the specifics which identify or specify particular characteristics of the system. Mingers, for example, extends the car analogy to specifics that make the distinction between a car as opposed to a "rusty blue mini" (1989a, p163). Hence, structure can be used to specify a particular profession such as accountancy. The distinction between organisation and structure is important. As Bednarz notes

While organisation is necessary to establish system unity . . . structure is necessary because different domains place different demands upon system components (1988, p59).

Structure thus confers meaning on the components or elements of a system and the specific relations between them. In an autopoietic social system, structure is not a physical attribute but a process of conversation and communication (Robb, 1991, p220).
By the processes of conversation and communication, the system creates its own reality in that it does not import concepts as such from outside its own boundary (Teubner, 1988a, p9; Luhmann, 1986, p174). Instead, it takes information, material and energy from the environment. The system itself determines how these will be used. For example, accountancy has effectively created its own reality by the use of everyday terms such as assets, liabilities, income, expenses, profits and so forth and giving them specific accounting meanings determined within the system itself.

The system of accountancy takes the conceptualisation of double entry bookkeeping and the meanings developed for terms within the double entry system further by developing rules for when and how an asset, liability, expense or revenue will be recognised by the system. It determines what transactions will be recorded and which will not. In external financial reporting, the purpose of these processes is classification and measurement in the balance sheet and determination of accounting profit. Some of these items are tangible, others are intangible but nonetheless given a "thing like" quality that accounting purports to "measure". Profit, goodwill, depreciation and provisions for doubtful debts all fit into this classification. The creation of its own reality lies in part in that what accountancy sees as an asset, for example, may not be seen as such by those outside the accountancy system. The non-accountant may have difficulty in seeing how part of income tax to be paid for the current period can constitute an asset called Future Income Tax Benefit or how an anticipated foreign exchange loss can also be an asset in the same way as an item of plant, a building, inventory or a vehicle is an asset.

The structure of accountancy determines the meaning allocated to these accounting terms. The professional associations or the research groups appointed or created by them play a major part in determining the meaning attached to accounting concepts. In Robb's terminology these meanings are the result of "conversations" (1991, p220). The outcome of these conversations, meanings, are communicated to other
components of the system and also to relevant systems in the autopoietic system's environment. Responses from both within the autopoietic system and from its environment trigger further communication between the system, its components and the environment. Further conversation takes place giving rise to new meanings and the process of conversation, communication, conversation continues.

The development of an accounting standard follows this pattern and it is this pattern of conversation, communication, conversation which both identifies and maintains accounting as an autopoietic system.

**Structural Change, Communication and Autopoiesis**

Autopoietic systems are organisationally or operationally closed but they are cognitively open in that they must be compatible with their environment if they are to survive (Maturana and Varela, 1988, p95). If a social system is a system of "shared meanings" (Robb, 1991, p219) and "communication" is the sending of signals to system participants who share meanings, there must be acceptance of meanings between participants of individual systems and relevant systems in the environment. When meanings are not shared or accepted by all parties, even those within the system under consideration, further communication and conversation take place to establish new meanings. In this way the structures of an autopoietic system may change. When one component of a system changes, there will be correlative changes throughout the system (Maturana and Varela, 1988, p116).

Maturana and Varela refer to changes in the autopoietic system and the environment as a structural (p102) or natural drift (p117) and use the term *ontogeny* to describe the history of structural changes within an autopoietic organisation (pp74-75). This structural or natural drift is the result of adaptation and conservation of autopoiesis (p117). Teubner (1988b) sees this as an evolutionary process occurring through three
evolutionary and necessarily communication mechanisms: variation, selection and retention. Teubner (following Luhmann) considers these three functions can be related to social systems as follows

... normative structures take over variation, institutional structures (especially procedures) take over selection, and doctrinal structures take over retention (p228).

While Teubner elaborates on the meaning of these terms within the context of the legal system, it is contended here that the terms and meanings so ascribed have general application to other social systems including accounting. Therefore, variation refers to changes in the structural configuration of an autopoietic social system. These changes or "structural transition" are specified by the structure of the autopoietic system in response to perceived social pressures arising from either internal or external factors (p233). Selection is the process of determining the nature of structural change. The system itself identifies the possibilities and preconditions for change based on the "diverse expectations" created within it (p234). Retention is seen by Teubner as a "stabilizing function" which guarantees system-internal mechanisms (p234). In other words, the system is self-referential in that it "remembers" past interactions and, in particular, what was successful and what was not (p234). In this way, the system learns to survive which is essential to the maintenance of autopoiesis.

While the system itself determines or selects the nature of structural change, the influence of the environment cannot be denied. Teubner, for example, maintains there is a process of coevolution in that variation, selection and retention are influenced in an indirect or mediatory way by autopoietic subsystems and society (pp235-236). In other words, the impetus or pressure for structural change or variation is triggered by interactions between autopoietic subsystems (p236). Selection of the new structure of the system is influenced by the expectations of the various subsystems. This is not to say that the new structure is consistent with the philosophies or requirements of each
subsystem. As Teubner points out, the different philosophies or requirements may "collide with each other" (p237). However, given that the purpose of structural change is the adaptation and conservation of autopoiesis, interactions aimed at adapting the multiplicity of philosophies and dogmatics will continue until a level of compatibility is achieved. This is the process of retention (pp236-237).

The interactions between the components of the autopoietic system and between the system and its environment can be seen as communication and, by using Luhmann's refinement of the role of communication in an autopoietic system (1988a, pp16-18), can be seen as consistent with Teubner's view of coevolution. According to Luhmann, communication is not simply the act of sending signals but is the synthesis of information, communication and comprehension (p17). In order to establish the boundary of an autopoietic system and maintain its autopoiesis, it is essential to control or at least partially control the communication process as well as determination of meanings communicated or in Robb's terminology, conversation (Luhmann, 1988a p18; Teubner, 1988b, p222). If reproduction of the conversation and communication processes is to continue, the information or meanings must be understood or comprehended (Luhmann, 1988a, p16). This is essential if further elements are to be produced and identified within the system.

Similarly, Maturana and Varela use the term, structural coupling, to describe the recurrent interactions between the system and its environment (1988, p75). The changes which take place in the system as a result of these interactions are not determined by the environment but by the structures of the autopoietic system (p95). This is a two-way process in that the autopoietic system can trigger changes in the environment but cannot determine what those changes will be (p95). In addition, if a change takes place in one system as a result of interactions between systems, there will also be changes in other participants in those interactions because structural coupling is mutual (p102).
The foregoing makes it clear that structural changes occur as a result of interactions between the components of the system or between the system and its environment. It is also evident that the interactions between the autopoietic system, its components and environment are double edged because an autopoietic system must be compatible with its environment if it is to survive. Perturbations within the system and between the system and its environment have the potential to destroy autopoiesis if compatibility is not maintained. At the same time, however, these perturbations provide impetus for conversations which give rise to new meanings and may open up new avenues of communication. Furthermore, since the operations of the system are aimed at reproducing the elements of the system and maintaining autopoiesis, change is limited. The structure may change but the autopoietic organisation remains unchanged. This is almost axiomatic because the system is organisationally or operationally closed. In an autopoietic system, selection is determined by the norms, meanings, conversations institutionalised by the system itself. In other words, change is not initiated nor determined by the environment but by the autopoietic system itself. However, this does not mean the system cannot extend beyond its own boundaries and import concepts from other systems or its environment. It can do both through "shared meanings". Double entry bookkeeping provides an example of the manner in which structure and boundary changes may occur through "shared meanings".

Double entry bookkeeping made a distinction between assets and liabilities, debits and credits. As double entry bookkeeping was progressively adopted by business concerns, the meanings given to assets and liabilities or the distinction between them, became part of the language of business. As the nature of business changed, and with the progressive separation of ownership and management, double entry bookkeeping became accounting (Baecker, 1992). This change was facilitated in part by the law. Accounting shared its meanings with other members of the environment. It took energy from its environment and new concepts or distinctions emerged such as
permanent capital and the going concern. By these means, double entry bookkeeping extended its boundaries and progressively made the transition to accountancy.

Other changes in accountancy such as the conferral of statutory backing on approved accounting standards occurred in a similar manner and demonstrate that while accountancy is operationally or organisationally closed, it is cognitively open. Mingers (1995) provides an explanation of Luhmann’s concepts of operational closure and cognitive openness in terms of the rights of a new-born child. The rights of the new-born child are not part of the autopoietic system. They are normative expectations about what should happen even though these expectations may not be met. On the other hand, failure to comply with laws specifying, for example, the registration of a birth or the proper care of a child may become part of the conversation and communication within the legal system. Such conversation and communication will, in turn, generate further conversation and communication in the form of legal decisions or new laws. It is in this sense that the autopoietic legal system can be seen as cognitively open but operationally closed (1995, pp158-159).

A similar analogy can be made in accountancy. Rightly or wrongly, there is an expectation that a company’s financial statements are a fair approximation of its profit or loss and its financial position. This can be described as a normative expectation. Where subsequent events, such as unexpected failure of the company, show that this is not the case and, furthermore, that provisions of specific accounting standards or the lack of a standard have been used to create a misleading impression of the company, disturbances within the regulatory environment are likely to give rise to conversation and communication within the accountancy system to address the issues raised. The result of the conversation and communication process may be a new or modified standard or even a new research or standard setting organisation. However, because the system is operationally closed, the outcome will have been determined within the system itself without reference to elements within the environment.
IMPLICATIONS OF AN AUTOPOIETIC ACCOUNTANCY SYSTEM

While it is clear that an autopoietic system must be operationally closed, the system is, as indicated above, nonetheless, subject to change as a result of interactions within the system itself and with its environment. However, it is important to remember that the environment does not determine what change takes place within the autopoietic system. The environment can only trigger responses which are determined by the system itself. Similarly, the autopoietic system only triggers responses from the environment.

Responses within the system and with the environment are given meaning through a process of conversation which is then transmitted by a process of communication. Maintenance of autopoiesis is contingent upon control of the processes of conversation and communication. Furthermore, the processes of conversation and communication must be continuous or the system will disintegrate. This paper maintains that over time, accountancy has also developed to the stage of at least a virtual or partial autopoietic system in that it determines its own boundaries, elements, components and relationships between them. It also uses its own processes to recursively reproduce itself. This is evidenced by the continual recycling of accounting issues and the continual pattern of regulatory failure-regulatory reform which has characterised the corporate scene since its inception more than 100 years ago.

Indetermination arising from flexible, vague and ambiguous accounting standards are part of this process as is the failure of the accountancy profession to develop an agreed conceptual framework and both are essential to the maintenance of the autopoiesis of the system of accountancy. There are two reasons for this. First of all, the recurring pattern of conversation, communication, conversation is essential to maintaining the
autopoietic state. If a definitive solution could be found in the form of a conceptual framework or in explicit accounting standards dealing with particular issues, conversation and communication would stop and accounting would cease to be an autopoietic system. It would no longer have exclusive orientation to accounting work or the creation of accounting structures because any system or subsystem that had the ability to apply given criteria would be able to undertake these functions. Uncertainty in what constitutes an asset or liability in a given situation creates the necessity for professional judgment on the part of the accountant preparing the financial statements as well as on the part of the auditor. The removal of uncertainty removes the need for a professional and all the related structures which give rise to a profession. This uncertainty also provides the mechanisms for change within the structures of accountancy without altering its autopoietic organisation. Without this exclusive orientation to the accountancy function and conversation and communication, the system would no longer be autopoietic and would disintegrate.

The second reason why indetermination arising from flexible, vague and ambiguous accounting standards and the lack of an agreed upon conceptual framework are part of the recurrent cycle of regulatory failure, regulatory reform and the maintenance of autopoiesis is structural coupling. As noted earlier, the survival of an autopoietic system is contingent upon its ability to maintain compatibility between its own structures and the structures of its environment. One of the ways in which the accountancy profession seeks to maintain compatibility between itself and other components of the regulatory system is due process. Part of this procedure provides for interested parties to have input into the development of proposed accounting standards and concept statements through formal submissions. These formal submissions can be seen as conversation and communication between the autopoietic system and elements of its environment.
There is evidence in Australia to suggest that formal submissions have had an impact on the standards developed to date (Coombs & Stokes, 1985; Morris, 1986; Gavens, Carnegie and Gibson, 1989). There is no evidence to suggest, however, that the views of particular industry groups have been favoured. This is consistent with the view put forward earlier with regard to the manner in which change, or coevolution, is achieved. The system itself determines the nature of structural change but the processes of variation, selection and retention are influenced by other systems and society. The due process procedures adopted in the development of accounting standards and concepts whereby exposure drafts are issued for comment, revised on the basis of the comments and reactions of interested parties and reissued for further comment are evidence of the recurring interactions between accounting as an autopoietic system and the elements of its environment. While each subsystem may have different philosophies and dogmatics, the process of retention will ensure that interactions between the various parties will continue until compatibility is achieved. In the case of accounting standards and concepts, the result tends to be a reduction in diversity in accounting practice but the maintenance of sufficient flexibility, vagueness and ambiguity to permit the exercise of judgment in individual circumstances. Accounting has maintained compatibility with its environment and preserved its autopoietic state.

The Foreign Currency Translation Standard - Autopoiesis in Action

The development of an Australian accounting standard dealing with foreign currency translation provides evidence of the foregoing. The length of time taken in this process is testament to the contentious nature of the topic not only within the membership of the accountancy profession but for business interests. The first exposure draft was issued in 1973. In 1985, two standards on foreign currency translation were issued: ASRB 1003: Foreign Currency Translation - Disclosure and AAS 20 - Foreign Currency Translation. This, however, was not the end of the story. In 1987, an approved accounting standard, ASRB 1012: Foreign Currency Translation was
released. At that time, ASRB 1003 was withdrawn and action taken to amend AAS 20 to make it compatible with its ASRB counter-part. Furthermore, both the Australian Accounting Research Foundation and the Australian Accounting Standards Board stated that the issue of speculative dealings would be addressed and added to AAS 20 and ASRB 1012 possibly in 1988. Seven years later, and the foreign currency translation standards still do not address this issue. This omission from the standard is further evidence of the contentious nature of the topic.

In addition to the length of time taken to develop the foreign currency translation standard, the contentious nature of the topic is evidenced by the different acceptable approaches to accounting for foreign currency translation put forward by the standard setters in successive exposure drafts. The 1973 exposure draft, *Translation of Amounts in Foreign Currencies*, advocated the use of the current rate method for the translation of foreign currency financial statements with any gains or losses on translation being recognised in the profit and loss account as incurred. The 1979 exposure draft, *Translation of Foreign Currency Transactions and Foreign Currency Financial Statements in the Context of Historical Cost Accounting*, represented a substantial change in viewpoint albeit a short-lived one.

In 1979, the second Australian exposure draft argued for the temporal method of translating foreign currency financial statements while gains and losses on translation were to be deferred and amortised. The temporal method was argued for on the basis that the underlying accounting principles adopted in the preparation of the foreign subsidiary’s financial statements should be the same after translation as before (para 25). The current rate was method was explicitly rejected because it did not achieve this purpose (Appendix 1). However, this approach did not survive. In light of activities in other countries, most notably the FASB’s announcement of the review of a number of standards including FASB 8 *Accounting for the Translation of Foreign Currency Transactions and Foreign Currency Financial Statements* (which also...
advocated the temporal method), the Australian Accounting Research Foundation deferred further consideration of the foreign currency issue pending the outcome of the deliberations in the USA, UK and Canada (Stevenson, 1980, p10). Four years later, a further exposure draft was issued. Once again, its provisions were consistent with the latest FASB pronouncement on foreign currency translation (SFAS 52 Foreign Currency Translation).

The exposure draft issued in 1983, Foreign Currency Translation, introduced the concept of functional currency on the basis that the translation method used should "reflect the financial and other operational relationships which exists between the reporting entity and its foreign operations". This objective justified the use of different accounting methods in different circumstances (para 14) and represented a radical departure from the objective of the 1979 exposure draft. Under this approach, foreign subsidiaries were to be classified as either self-sustaining or integrated operations. This classification then determined the translation method to be used and the treatment of translation gains and losses. The standard effectively allowed companies to choose between the current rate method for self-sustaining operations and the temporal method for integrated operations. The accounting treatment of translation gains and losses was based on the same classification. Under the current rate method, gains and losses were taken to a translation reserve (a method specifically banned in the 1973 exposure draft). Adoption of the temporal method meant that translation gains and losses were recognised immediately in the profit and loss account. These provisions have been incorporated in the current foreign currency translation standard.

Another contentious area of the foreign currency translation debate was the treatment of gains and losses on foreign currency transactions. The 1973 exposure draft prescribed immediate recognition in the profit and loss account on the basis that this was the only method to provide 'adequate accounting and disclosure'. However, the exposure drafts issued in 1979 and 1983 and AAS 20 permitted the defer and amortise
approach. The release of ASRB 1012 and the amendment of AAS 20 in 1987 saw a return to the immediate recognition philosophy but in a modified form. Both standards introduced the concept of a qualifying asset, a method of accounting for gains and losses on foreign currency loans used to finance the purchase of assets by including them in the cost of those assets. This approach was in direct contradiction of the separate transaction philosophy set forward in the 1983 exposure draft.

The present standard is an improvement in that it has reduced the number of acceptable methods of translating the accounts of foreign subsidiaries and accounting for translation gains and losses. The 1973 and 1979 exposure drafts described four translation methods and five alternative treatments of translation gains and losses. There are now two acceptable translation methods, the current rate method and the temporal method, and effectively three methods of accounting for translation gains and losses being immediate recognition, transfer to a translation reserve or inclusion in the cost of a qualifying asset. Flexibility has been reduced but not eliminated.

Flexibility has been enhanced because no quantitative guidelines have been provided in the standard to determine the classification of subsidiaries as self-sustaining or integrated. Similarly, the concept of a qualifying asset leaves ample scope for flexibility in that the standard provides that exchange differences arising in respect of monetary items reasonably attributed to qualifying assets are to be included in the cost of acquisition of the asset. Once again, no quantitative guidelines are provided.

There are two potential risks of such flexibility. First, it provides management with the means to manipulate financial statements to achieve a desired result. Second, as noted in the introduction, flexibility in accounting standards can be used by management to avoid prosecution where regulatory authorities consider selective application of the provisions of an accounting standard has produced misleading results. The regulatory authorities must prove beyond reasonable doubt that the accounts are misleading.
When this comes down to a matter of professional judgment, history has shown that prosecutions are unlikely to be undertaken or, if undertaken, are unlikely to succeed. This is one way in which flexibility, vagueness and ambiguity in accounting standards can contribute to the regulatory failure, regulatory reform cycle.

The development of the foreign currency standard and, in particular, the inherent flexibility in the provisions dealing with translation methods and the treatment of gains and losses, are examples of the workings of an autopoietic system and the outcome of the interactions between the components of the system and between the system and its environment. The failure to extend the standard to speculative dealings is a further example. While a full examination of the historical factors shaping the present foreign currency translation standard is beyond the scope of this paper, a brief overview will be provided.

A number of factors can be readily identified as giving rise to the need for an accounting standard dealing with foreign currency translation. To begin, the '70's saw a rise in foreign investment and in foreign trade including financing arrangements in Australia and other countries (exposure draft 1973 Translation of Amounts in Foreign Currencies, paragraph 1, Lorensen, 1972, p1). These changes coincided with radical changes in the international monetary system such as the abandonment by the USA of the exchange of gold for dollars as a means of maintaining the stability of world currencies (pp4-5; Kenley, 1972, p47); the realignment of major currencies in the wake of the USA decision and the “Smithsonian agreement in Washington DC in December 1971 under which currencies would be permitted to “float” within 2 1/4 per cent, as opposed to the former 1 per cent, of the official rate set by the International Monetary Fund (p47; Lorensen, 1972, p3; Parkinson, 1972, Preface). and the progressive unrestricted floating of many of the world’s major currencies.
In the absence of any authoritative guidelines, a number of methods of accounting for foreign currency translation were used as evidenced by a survey by Kenley in 1972. Kenley (1972) surveyed six Australian companies and found diversity in accounting for foreign currency translation across companies and within companies. One company used the current rate for translation of all assets, liabilities and profit and loss items except for one long term liability which was translated at the historic rate. Some companies adopted immediate recognition of gains and losses in the profit and loss account but even then companies were not consistent as some companies disclosed translation gains and losses as extraordinary items while others included them in operating profit. Others deferred recognition until realisation either by taking the relevant amounts to a foreign currency reserve or to a liability account. As further surveys by Kenley showed, diversity in accounting for foreign currency translation continued throughout the seventies. In addition to diversity, these surveys revealed an increasing trend for companies to change accounting methods from year to year (1978, p40).

Apart from accounting researchers reporting on the diversity in practice, the financial press played a key role in creating public awareness of the impact of currency fluctuations on the fortunes of companies involved in transactions denominated in foreign currencies. For example, in the early 1970's when the Australian dollar was strong relative to other world currencies, several companies reported windfall gains arising from overseas loans repayable in foreign currencies. These gains were duly reported in the financial press (eg. Bougainville Mining Ltd: $9.2million, Dawson-Grove, 1972, p16; Lombard Australia Ltd: $6.5million, The Australian Financial Review, 1973, p31). In September 1974, the Australian dollar was devalued. This turn of events saw a consequential reporting of foreign exchange losses on overseas borrowings and translation of financial statements. Once again, the financial press reported on these losses (eg. Ciba-Geigy Australia: $1.6million, The Australian

The diversity in accounting practice coupled with the impact of foreign exchange fluctuations on the financial statements of some Australian companies brought criticism of the profession for its failure to produce a standard dealing with accounting for foreign currency translation (Kenley, 1978, p38; Pierpont, 1977, p88). This criticism was heightened because of the failure of the profession to make progress since the issue of the first Australian exposure draft in 1973. Kenley suggests that one reason for the failure of the 1973 exposure draft to proceed to the standard stage was the change occurring in the international monetary and exchange system which began in the late 1960’s and gained momentum throughout the 1970’s (1978, p38). Corsi was more cynical and considered the urgency of developing a standard abated in line with the decline in volatility of the exchange market which had characterised the early 1970’s (1987, p8). This meant that the issue could be deferred thus avoiding the problems inherent in achieving consensus on what was becoming a highly contentious issue.

It would appear that criticism of the profession and the issue of FASB 8 in the USA prompted the release of a further exposure draft in 1979. As noted previously, this exposure draft was consistent with FASB 8 and prescribed the temporal method of translating the accounts of foreign subsidiaries. As with the 1973 exposure draft, the 1979 exposure draft did not give rise to an accounting standard. The failure of the provisions of the 1979 exposure draft to be formally adopted in an accounting standard appears to be related to opposition to the temporal method in both Australia and the USA.

It is difficult to classify Australian opposition as significant on the basis of formal submissions. Uther (1983) conducted a study of submissions dealing with the 1979
exposure draft and found that 19 of 72 submissions stated a preference for the current rate method (p62). It is recognised that submissions are only one form of lobbying activity and 19 negative submissions do not represent substantial opposition. However, surveys in 1974-75 and 1978-79 clearly showed the current rate method was favoured by a majority of Australian companies (Corsi, 1987). In contrast, Kenley’s survey of 100 Australian companies for the 1975-76 financial year found only one company using the temporal method (1978, p40).

The opposition of companies in the USA to FASB 8 was clearly significant both to standard setters in the USA and Australia. The overall criticism of FASB 8 was that when currency fluctuations were erratic profit patterns were also erratic and the adjustments required under FASB 8 were confusing to users of financial statements (Merjos, 1976, 1977; Forbes, 1976; Rodriguez, 1977; Copeland and Ingram, 1978; Staunton, 1978). In addition, it was argued the impact of the provisions of FASB 8 on the financial reports of multinationals would deter investment in those corporations (Forbes, 1976, p40; Barrons, Editorial Commentary, 1976, p8). In the wake of such criticism, the FASB abandoned its commitment to FASB 8 and appointed a task force to consider amendments to it (News, 1979, p12). This was in spite of research evidence sponsored by the FASB itself that FASB 8 did not have adverse economic consequences on companies caught by its provisions (Dukes, 1978; Evans and Folks, 1979). In December 1981, SFAS 52 was issued and, as noted previously, introduced the concept of functional currency. Depending on whether a subsidiary was classified as an integrated or self-sustaining operation, two methods of translating foreign currency financial statements were now permitted. The notion of uniformity was abandoned. The Australian exposure draft issued in 1983 and AAS 20 issued in 1985 adopted the same concepts.

Management had achieved two things. Firstly, it achieved flexibility in the application of translation methods to foreign operations. Secondly, and perhaps more importantly,
for companies adopting the current rate method on the basis that its subsidiaries were independent or self-sustaining, management had achieved a method of reporting gains and losses which would tend to show gains rather than losses even if the domestic currency was weak compared to the currencies of foreign subsidiaries. This arises because, under the current rate method, the risk associated with currency fluctuations is measured in terms of the net investment or net assets of the subsidiary. This figure is usually positive which means a foreign currency translation gain would be reported. Whether a gain or loss is recorded, the profit and loss account is not affected because the activities of self-sustaining operations are not considered as part of the operations of the group and are therefore taken to a foreign currency fluctuation reserve. On the other hand, the temporal method, which would be appropriate for companies whose subsidiaries were classified as integrated, measures risk in terms of net monetary assets. For a net borrower, net monetary assets would be negative and a foreign currency translation loss would be recorded when the parent company's domestic currency weakens relative to that of the subsidiary. When the functional currency of the subsidiary is deemed to be the domestic currency of the parent, foreign currency translation gains and losses are included in the calculation of profit or loss. It is obvious that management could have a clear incentive to classify subsidiaries as self-sustaining.

The issue of the treatment of gains and losses on long term monetary items was still an issue for Australian standard setters and was not settled until 1987. Both the 1983 exposure draft and AAS 20 permitted the deferral and amortisation of such gains and losses. FASB 8 and SFAS 52 required immediate recognition and it seems inconsistent that the Australian standard setters were prepared to accept the functional currency argument for translation of financial statements but not the treatment of gains and losses on foreign denominated loans and debts. However, structural coupling between accountancy and business interests explains this inconsistency. Nonetheless, ASRB 1012, issued in 1987, also required immediate recognition and AAS 20 was
subsequently amended to be consistent with the approved standard. As will be discussed shortly, it appears a compromise was reached.

The defer and amortise saga does not appear to have been as heated as the lead up to the 1979 exposure draft or the question of the current rate method versus the temporal method. Nonetheless, the impact of the approach on financial statements brought criticism of the profession in the financial press particularly given an increasing propensity for Australian companies to raise foreign debt (Minchin, 1986) in spite of a consistently downward trend in the Australian dollar. For example, an article in the *Business Review Weekly* highlighted the inherent problems with the deferral and amortisation of gains and losses on foreign debt (Thomas, 1986, p125). The article reported that Alcan Australia had written-off $69 million of its unamortised foreign exchange losses incurred on overseas borrowings. It was implied that the defer and amortise approach permitted management to conceal increasing foreign exchange losses (p125). Jukes described AAS 20 as a "lenient standard" because it permitted the deferral and amortisation of unrealised losses which was "out of kilter" with overseas practice (1986, p144). Furthermore, Jukes claimed "confusion reigns" because some companies were writing-off the "now common" losses to clear the deck so to speak before AAS 20 became operational at October 31, 1986 (p144). There would have been less confusion if all companies were using the same method but this was not the case. Alcan wrote its losses off to reserves (Thomas, 1986, p125; Jukes, 1986, p146). Other companies wrote-off losses through the profit and loss account but did not include them in operating profit.

The move towards the abolition of the defer and amortise approach gained momentum with Release 411 *Foreign Currency Translation - Key Issues Questionnaire* issued in December 1986. The questionnaire addressed several issues including the treatment of unrealised and realised foreign exchange gains and losses. Twenty of thirty submissions on Release 411 supported the defer and amortise approach but six of these
twenty considered there should be an option to adopt immediate recognition where a major and permanent realignment of the Australian dollar occurred. In March 1987, the ASRB held a meeting with what was described as a “select group of respondents” to Release 411 (Killen, 1987a, p14). The purpose of the meeting was to discuss contentious issues arising out of accounting for foreign currency transactions (Killen, 1987a, b) in particular, the defer and amortise method.

A month later, the Accounting Standards Review Board issued Media Release 87/1 which requested the profession-sponsored Australian Accounting Research Foundation resubmit a foreign currency standard providing for immediate recognition of gains and losses on long term monetary items. The Media Release stated its decision was based on consideration of international accounting standards, especially those of the USA and the UK and submissions received in respect of Release 411 and at the discussion forum held in March (ASRB 1987a, p1). On September 30 1987, ASRB 1012 was approved. AAS 20 was re-issued by the Australian Accounting Research Foundation in December 1987. Both standards prescribed the immediate recognition of gains or losses on long term monetary items.

At a superficial level, it could be argued that ASRB 1012 and AAS 20 have eliminated further conversation and communication by prescribing the immediate recognition method. It could also be argued that this is not consistent with structural coupling between accountancy and some elements of its environment, namely business which appeared to prefer the defer and amortise approach. However, both arguments can be refuted. It does not appear that there was an overwhelming preference for the defer and amortise approach as evidenced by the submissions cited previously and Media Release 87/1. Also, the original AAS 20 introduced the concept of a qualifying asset, an innovation adopted for purposes of ASRB 1012. This innovation provides scope for flexibility in the application of the immediate recognition method. The actual source of the innovation is unclear. However, it is almost identical to a proposal put
forward in a submission in response to the 1983 exposure draft. It is possible that support for this compromise between the defer and amortise method and the immediate recognition method gained ground in the restrictive circulation exposure draft of AAS 20 and in formal and informal meetings between standard setters and interested parties. Accountancy avoided conflict with elements in the environment and maintenance of autopoiesis was ensured for the time being.

Apart from allowing flexibility, the concept of a qualifying asset leaves scope for further conversation and communication in at least two ways. First, conversation and communication may take place to determine whether a particular asset actually is a qualifying asset. Second, should the concept lead to manipulation of financial statements that subsequently becomes public knowledge through, for example, unexpected corporate failures or the reporting of unexpected losses, the process of conversation and communication will begin once again to find yet another acceptable solution. Communication in the form of ASRB 1012 and AAS 20 will, in time, bring forth further conversation and communication.

As noted in the discussion of the boundary of accountancy, one of the distinguishing features of an autopoietic system is the presence of mutual causal loops. The foreign currency debate provides evidence of the existence of such loops between accountancy and its environment. For example, changes in international monetary markets and systems gave rise to the problem of accounting for foreign currency transactions and translation of financial statements. The diversity of accounting methods which emerged in the absence of a standard as well as the impact of volatile exchange rates on financial statements brought criticism of accountancy by researchers and the financial press. These could be seen as triggers from the environment resulting in conversation leading to the development of a series of exposure drafts, that is, communication, dealing with the foreign currency issue. Responses to exposure drafts were conversation and communication between elements in the environment and
accountancy. The activities of the FASB in response to criticism of FASB 8 were further triggers from the environment even though the FASB is not part of the regulatory system in Australia. The autopoietic system learns what is necessary for survival and the experiences of other systems may well be relevant in the process of coevolution. The flexibility inherent in the present standards can be seen as a result of the processes of conversation and communication between accountancy and its environment. Business interests were not prepared to accept a uniform approach but were prepared to accept compromises in the form of the functional currency approach and the concept of a qualifying asset. Accountancy succeeded in reducing diversity but maintained compatibility with its environment. By institutionalising flexibility, the possibility of further conversation and communication has been kept open. The negative aspect is that the possibility of manipulation of financial statements and unexpected corporate failures or losses still exists.

CONCLUSION

It is unlikely that the cycle of regulatory failure, regulatory reform discussed at the outset of this paper will end in the foreseeable future. While it is admitted that accounting standards and concepts are but one source of regulatory failure, they are a significant source and the autopoietic nature of the accountancy system will ensure the status quo is maintained. This is not to say that this is a conscious decision, it is not. The major objective of the system is preservation of the autopoietic state. This means that the processes of conversation and communication must be maintained within the system and between the system and its environment. For this reason, lasting solutions will not be found and implemented because such solutions would ultimately destroy the structures of accountancy.
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