

PROFESSIONS IN SOCIETY

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ABSTRACT

Actuaries should seek to understand the phenomenon of ‘professions’ because much of our working life is influenced by the belief that we are a ‘profession’. This paper considers various theories as to why professions exist — do they arise naturally to fulfil functions in society, or are they created by the efforts of the occupational groups which aspire to become professions? Professions are shaped by the society of which they are a part. Ongoing changes in society are affecting professions in general, and the actuarial profession in particular. The difficulties which the actuarial profession will face as it seeks to expand beyond its traditional territory are discussed. Finally the author speculates on what institutional forms might replace professions in the twenty-first century.

KEYWORDS

Abstract Theory of Actuarial Science; Accountants; Actuarial Profession; Cultural Differences; Future of the Profession; Objectivity; Wider Fields

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1. INTRODUCTION

1.1 Actuaries believe that our occupation is ‘a profession’. This belief influences the way that we behave. In addition, our interactions with people and organisations outside the actuarial profession are influenced by their belief that actuaries are members of a profession. It is important, therefore, to understand where this idea of ‘a profession’ is headed in the future. To do so, we also need to understand where the idea came from.

1.2 Why do professions exist as a special category of occupation? What are the forces which shape professions? How are professions affected by changes in society? This paper draws on studies which have addressed these questions, and explores the implications for the actuarial profession.

1.3 The various approaches to the study of professions have been classified by some scholars into two categories: the naïve and the cynical. Naïve studies accept that professions have qualities such as skill and ethical standards, and

examine how these qualities are achieved. Cynical studies consider that professions are self-interest groups, and examine how they manage to get away with their claims of skill and ethical standards. This paper seeks a balance between the two extremes: neither naïvety nor cynicism, but a healthy scepticism.

1.4 Some of the examples in this paper are drawn from the Australian actuarial profession. The author believes that the lessons drawn from these examples should also be relevant to actuaries in Britain and elsewhere.

2. SOURCES OF THEORY ABOUT PROFESSIONS

2.1 There is a discipline known as the Sociology of Professions. The first major study in this discipline, by Carr-Saunders & Wilson (1933), traces the historical development of many professions, including the actuarial profession. Carr-Saunders & Wilson, and many of the observers who followed them, saw professions almost as a natural phenomenon, a form of organisation which arose spontaneously to meet the needs of society. Larson (1979) brought a new perspective by arguing that a profession does not just arise, it is created by the efforts of its members in making connections with the traditional sources of status in society, in a process she called the 'professional project'. Abbott (1988) analyses how professions succeed in controlling an area of expertise. Burrage (1990) offers insights into why professions are different in different cultures. Porter (1995) describes the modern drive for quantification, and takes the accounting and actuarial professions as case studies.

2.2 Economic theories of contracting and regulation have been applied to the actuarial profession in two papers by actuaries, Sherris (1987) and Booth (1997). These economic theories tend to emphasise the beneficial economic functions that professions can provide. Other economists, for example Friedman (1962), attack professions as opportunistic monopolists.

2.3 Psychological theories about group behaviour also provide insights into the ideology of professions.

3. THE DEFINITION OF 'PROFESSION'

3.1 Any discussion of 'profession' normally starts by defining the term, and this is not a simple task. Different people use the term to mean different things. It is a value-laden label, not just a description: to describe oneself as a member of a profession is to claim certain qualities, not simply to state a fact about oneself such as being right or left-handed. Many varied occupational groups aspire to the label, and the definition, therefore, tends to be tailored to fit the characteristics of the group which is doing the defining.

3.2 If one were to compare all the definitions of 'profession' ever written down, the list of required elements could be distilled into three main strands: cognitive, normative and organisational. Cognitive elements include specialised

knowledge and long training. Normative elements include such things as ethical standards and a commitment to provide a service for the public good. Organisational elements, such as a national body with disciplinary powers, support the cognitive and normative aspects.

3.3 All of these elements can be found, for example, in the definition of 'professional body' in Duncan Ferguson's Presidential Address (Ferguson, 1997). Another, shorter, definition was quoted by a President of the Society of Actuaries, Walter Rugland (1993):

"A profession is a vocation founded on specialized educational training, the purpose of which is to supply disinterested counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gain."

This definition lacks the organisational aspect, but Rugland immediately added:

"This definition implies that, for a profession to be recognised as a profession, it first must be organized within a professional body."

3.4 Rugland's definition introduces another element: recognition that an occupation is a profession. This is an important issue, as claims to be a profession tend to be met with scepticism by the public. Section 5 considers why some occupations are recognised as professions and others are not.

3.5 While the full version of the definition of profession encompasses all three strands — cognitive, normative and organisational — there are other less comprehensive versions in common use. For some people 'profession' simply means a paid occupation, and so professional sportsplayers would be considered members of a profession. Other people would encompass only the cognitive aspects in their definition, and so would consider computer programming a profession. Teaching has cognitive and normative aspects, and some people would include teachers in their list of professions, but exclude computer programmers. Others would exclude teaching if teachers were not considered to have a controlling professional body, as distinct from a trade union. This paper considers the phenomenon of 'profession' using the full definition, but it is important to be aware that there are other definitions in use. This can explain why different commentators reach different conclusions about the current status and future prospects of professions.

3.6 There are certain characteristics which tend to appear in an occupation which is recognised as a profession, but which do not usually appear explicitly in definitions. For example, members of recognised professions are usually well paid. This fact may explain why ministers of religion, one of the three first 'learned professions' described in Section 4, have dropped off most lists of professions. Another characteristic is that professionals are usually allowed more autonomy in their work than other occupations, and are self-regulated rather than being subject to detailed legislation.

4. THE ORIGIN OF THE IDEA OF 'PROFESSION'

4.1 Freidson (1986) has traced the semantic history of the word 'profession'. The oldest English usage was "avowal or expression of purpose". It implied religious and moral motives to dedicate oneself to a good end. Even at this early stage, societal distrust of these claims was indicated by attaching connotations of deceit. These survive today in the use of the verb 'to profess' to mean "to claim insincerely, to pretend".

4.2 By the sixteenth century 'profession' had been extended from its original religious connection and was used for all three of the university-educated occupations of divinity, law, and medicine. These three occupations were 'learned', and hence associated with the elite, who held the monopoly over formal learning. They were also carried out by high born men, generally in the service of members of the elite. These occupations, thus, had high status. They shared other characteristics. All three were concerned with the wellbeing — spiritual, financial or physical — of individuals, who were obliged to put their trust in members of these occupations if they wished to consult them. Thus their work carried an aura of special importance, distinguishing them from occupations which supplied more mundane needs. The requirement of trust encouraged further development of the normative elements.

4.3 The ongoing commercialisation and industrialisation of Britain in the eighteenth and nineteenth centuries created new skilled occupations. These included jobs such as actuary, accountant and engineer. The three 'learned professions' provided an established category into which members of the new occupations could be fitted.

4.4 By the middle of the nineteenth century the term 'profession' was being applied to a range of occupations and carried the cognitive and normative connotations referred to above. The organisational aspects followed. Carr-Saunders & Wilson (1933) describe a 'wave of association' in which all sorts of learned societies and professional organisations were founded in Britain between about 1840 and 1890.

4.5 The English idea of a 'profession', in the sense defined in Section 3, was therefore formed by the end of the nineteenth century. Other societies do not entirely share the English model of the professions, as discussed in Section 6. In England the idea has been refined, and challenged, but has more or less survived to the end of the twentieth century. Sections 7 and 8 consider the current pressures on the professions from changes in society.

4.6 It has been argued that the professions trace their ancestry back to the medieval craft guilds. In the European middle ages, all major crafts were organised into guilds which regulated their own affairs and controlled entry to the craft. With the growth of centralised forms of government, and a commitment to free markets, the powers of these guilds were swept away. Some commentators believe that the professions alone of the guilds survived into the modern era. Others argue that the professions arose as a new phenomenon of the modern era,

and that there is no continuity with the older guilds. Which view is correct is not particularly relevant here. What is worth noting is that at other times, the power of self-regulation was not restricted to the select group of occupations that are recognised nowadays as professions. Also, it should be noted that the early modern state moved against the old monopolies, and yet the modern professions were allowed to build monopolies. So, it cannot be taken for granted that certain select occupations have the status of professions, with self-regulatory monopoly powers, and other occupations do not have this status. The distinction between professions and non-professions has to be explained.

5. PROFESSIONAL FUNCTION OR PROFESSIONAL PROJECT: WHY DO PROFESSIONS EXIST?

5.1 It is generally agreed among sociologists and economists who study the professions that professions have a monopoly over an area of work. The question is how this is achieved. Does it arise naturally, in answer to a need in society, or is it achieved by the efforts of the professions?

5.2 Carr-Saunders & Wilson viewed the emergence of professions in the nineteenth century as a natural and mostly benign process. As new work activities arose, those who found themselves working full-time in a new area of activity would naturally form associations with others in the same line of work. The motives of the founding members of these associations included a desire to share the company of like minds, to improve status by formal qualifications, to lobby governments or to carry out joint projects. For example, actuaries first associated together to collect life insurance mortality statistics.

5.3 The association might remain simply a learned society or a club. However, by existing, it provided a mechanism which could be used for the capture of control over an area of expert work. In such a case it would become the professional body of a new profession.

5.4 The mechanism worked as follows. Practitioners who were particularly skilled in the latest techniques and observed the proper practices in their work could use their membership of the association to prove their high quality. They would admit to the association only those practitioners who met their standards. Then clients could be confident that all members of the association would deliver work of a high standard. However, the association would probably find its members competing with non-members who claimed to offer an equal service. The association would then lobby government to exclude non-members from practice. The association's argument would be that it was in the public interest to protect uninformed clients from the damage caused by unskilled practitioners. Occupations, such as actuaries, which served a restricted clientele rather than the general public, could campaign directly to their clients rather than lobbying government.

5.5 If the association was successful in its campaigning, it would achieve a

monopoly for its members over their area of work. The members would now be in a position to reduce competition among themselves, by, for example, setting minimum fee scales or refusing to take clients away from fellow members. The professional organisations would justify such anti-competitive behaviour as necessary to maintain the high quality of service which the public must have in such an important area of work. The normative connotations which the idea of the professions had already attracted were essential in this process.

5.6 Our profession does not exactly fit the standard professional model, because originally most actuaries were employees of life offices, whereas other more typical professionals were not employees. However, parts of the model do apply to the consulting arm of the profession. In Australia, at least, when actuarial consulting was becoming established in the years after World War II, the actuarial society set a scale of minimum fees (Bellis, 1997). The actuarial profession also had the restrictions on advertising and poaching of clients which were typical of professions until the strengthening of anti-monopoly legislation.

5.7 *The Economic Perspective on the Function of Professions*

5.7.1 Some economists also seem to accept the process outlined in ¶5.4 as a natural process which serves a beneficial function for society. For example, consider the following definition from a textbook on the economic theory of professions (Foley, Shaked & Sutton, 1982):

“[a profession is] a group of individuals who are granted monopoly powers in the provision of certain labour services, with the object of ensuring a supply of services of a higher quality than would otherwise be achieved - a definition which presupposes imperfect information on the part of consumers as to the quality of service offered by any particular individual, at least ex-ante, but possibly ex-post also.”

5.7.2 Membership of the professional body is thus seen as providing a market signal that the member will deliver a service of the promised quality. It indicates more than just initial ability and knowledge, which academic credentials also serve to signal. Continuing membership indicates continuing competence in practical skills, the updating of skills and knowledge, and compliance with an ethical code of conduct. The profession can (in theory) be relied upon to be self-policing, ensuring that all members deliver the promised quality, because a failure to do so will destroy the reputation of the professional body, and hence the value of membership for all the other members.

5.7.3 The cynics among the economists have collected evidence that, in practice, professional bodies are very slow to discipline or expel non-complying members. For example, Friedman (1962) delivers a scathing attack on the claims made by the American medical profession. It is indeed hard to find a pure example of a profession fulfilling this sort of market signalling role. There are plenty of occupational organisations which attempt it, whose members display certificates declaring them to be full members of the National Association of panel beaters, funeral directors, manicurists, etc., but the certificates of these

organisations rarely achieve much significance in the market for their members' services. The advantages that the recognised professions have in the market generally derive from the granting of some degree of monopoly by the state. Why the state grants monopolies to some groups and not to others is more easily explained by sociology or political science than by economics, and we shall therefore return to sociological theories in Section 5.8. Most economic studies in the 'cynical' mode attempt to measure the effects of professional monopolies rather than explaining how some occupations manage to achieve them.

5.7.4 Nonetheless, economic theory can be invoked to explain the existence of certain particular professions, notably accountants and actuaries, by expressing their function in terms of the theory of agency and transaction cost economics. Sherris (1987) analyses the role of the actuary in participating life insurance business in this way. Traditional participating policies had a right to participate in profits which were unknowable at outset. An efficient solution to the problem of resolving these incompletely specified contracts was to delegate the allocation of profits to a person whom both parties (the company and the policyholder) agreed was independent, expert and impartial. This person would also signal that the company was soundly managed, relieving the prospective customer from the need to study insurance science before choosing an insurer. This highly significant person was, of course, the actuary, whose independence, expertise and impartiality were vouched for by membership of the professional body.

5.7.5 This function of the actuary was fully developed in Britain by 1848. This is evidenced by the rules drafted for the AMP Society, a mutual life office modelled on British practice, which was established in Australia in that year. The AMP had no immediate need for actuarial advice, as it set its premium rates by averaging those charged by the existing British offices. However, its rules provided that, at the end of every five years, the policies would be valued by "some Professional Actuary or Accountant", who would also certify that the surplus was divided equitably among the members (AMP, 1848). The AMP's founders did not know whether they needed an actuary or an accountant, but they knew that they needed a person with the standing of a 'professional' to signal that all was done properly. The fact that this function was in existence by the time the professional association, the Institute of Actuaries, was formed in 1848, is some evidence that it arose spontaneously rather than being promoted by the profession.

5.7.6 Another function provided by professions is their role in regulation. Governments delegate much of the detail of the regulatory process to professions, for example to doctors in controlling access to prescription drugs, or to accountants in auditing the profit figures on which tax is payable. There are various economic theories of regulation. Booth (1997) discusses how these may apply to the role of the actuarial profession in the regulation of financial services. He argues that the British actuarial profession "would still appear to be a spontaneous product of the market, which has evolved to meet the special problems [of] the financial services industry". In the United States of America,

by contrast, the position of the actuary was damaged by the system of official valuations of life offices, which “displaced a market structure which could have achieved the same purpose more effectively.” Booth argues, from the Austrian school of economics, that no government regulator could have developed the “sophisticated mechanism of professional standards” by which actuaries regulate life insurance.

5.7.7 While Booth may be correct that the British actuarial profession’s regulatory function arose spontaneously, the fact that in the U.S.A, and even more so in Continental Europe, actuaries did not achieve the same professional role in regulation, suggests that economic theories do not fully explain why professions come to exist. Sociological theories, as set out in Sections 5.8 and 6, can shed some further light on this question.

5.8 *The Sociological Theory of the ‘Professional Project’*

5.8.1 Larson (1979) explains the ‘professional project’ through which an occupation establishes itself as a profession in terms of Weber’s sociological theory of interest groups. Broadly, the theory is as follows. Social behaviour and structures arise from conflict between individuals seeking to maximise power, wealth and status. The individuals do not have to be consciously seeking their own interests, because the most important social interactions are in ritual form, which produce beliefs and ideals within any group of individuals acting together. Group members believe in their own ideologies as they press for advantage against other groups. Occupational groups do not just react to the dynamics of the market for their labour, but attempt to shape the market in their favour, through ideology.

5.8.2 Specifically, when new occupations arose in the nineteenth century, the workers in those occupations subconsciously sought an ideology which would enable them to take a place in society at the highest possible level of power, wealth and status. They had before them the model of the ‘learned professions’ of divinity, law, and medicine. As mentioned in ¶4.2, these three occupations had high status through their association with the elite. They involved trust, which was another source, or at least a justification, of status and financial reward — the man of comfortable means was regarded as more trustworthy than a poor man, who, it was assumed, could not afford to be honest. (For evidence of this belief, note that nineteenth century businesses did not permit junior clerks to marry if they did not earn a salary sufficient to support a family, to ensure they would not be exposed to the temptation to cheat their employers.) The new occupations could tap into these positive connotations by describing themselves also as ‘professions’.

5.8.3 The new professions also had before them the model of the ‘English gentleman’, which entailed a sense of *noblesse oblige* and an unspoken, but understood, set of attributes, such as integrity, dignity, an avoidance of trade. They associated themselves with this model, and used other devices to draw status from the traditional sources. One such device was the Royal Charter, which

was keenly sought by the Faculty and the Institute of Actuaries, among other professional bodies. The Charter no longer had the practical legal effect of conferring a monopoly, as it had in the medieval and early modern periods, but it carried enormous status. Devices could be trivial in themselves, but powerful symbols. For example, professional men charged their fees in guineas, while tradesmen charged for their work in shillings and pence, and pounds if they were lucky.

5.8.4 The elite would only allow pretensions to status if the claimants were reasonably similar to themselves. Manual occupations were excluded. Occupations with a high proportion of female members would struggle to be accepted.

5.8.5 The ideology of the 'learned profession/English gentlemen' conveyed many practical advantages for the occupational group. Commercial activities, such as advertising and fee-cutting, were condemned, not as exposing the group to the stresses of competition, but as being ungentlemanly. Professions were originally exempt from much of the legislation against anti-competitive practices because they were not seen as engaging in trade or commerce.

5.8.6 The traditional sources of professional ideology may, perhaps, explain why 'public interest' is usually one of the normative elements included in the definition of profession. The three 'learned professions' all dealt with matters which, at the time, were of great importance to their elite clientele, and the religious overtones mentioned in ¶4.1 still lingered. The English gentleman's sense of duty towards the less fortunate characterised as *noblesse oblige* is also a form of public interest ideology. The belief that one serves the public interest is agreeable in its own right, as well as being useful when it comes to lobbying for a monopoly, as mentioned in ¶¶5.4 and 5.5. It is thus an area where some scepticism and self-examination should be exercised.

5.8.7 If a profession relies on traditional sources for its status, it will be in trouble if society, as a whole, rejects those traditions. This rejection is occurring as hereditary class systems yield to meritocracy (in principle, if not in practice), and as modern ideas of scientific knowledge replace traditional beliefs. Professions have already felt the effects of this shift in society. Their exemption from rules about monopolies has ended, so that they have been forced to abandon many of their anti-competitive rules. Their professional decisions are no longer accepted with the same unquestioning faith in their authority. Section 7 considers how the modern mode of rationalist knowledge actually challenges the whole concept of the professions.

5.8.8 The professions can protect themselves by seeking status from new symbols, which are still held in esteem by society. For example, the accounting profession in Britain has recently pushed to become a graduate-only profession, and there has been a debate among actuaries in the U.S.A. about the merits of requiring a university degree for membership. This is an interesting development, as the professions in Britain have historically been distinct from those in European countries, where the universities were one of the first sources of status

embraced by the professions, with the U.S.A. being in between. It is ironic that this shift comes just as university degrees may be losing status through their ubiquity, but, perhaps, that is also a part of the reason. When occupations of traditionally lower status, such as child-raising and hotel-keeping, are claiming professional status with university degrees in child development and hospitality management, the traditional professions are forced to have the same university-level credentials as a minimum.

6. CULTURAL DIFFERENCES IN THE MEANING OF 'PROFESSION'

6.1 The concept of 'profession', in the full version with all its cognitive, normative and organisational elements, is strongly located in an Anglo-American context. In fact, some observers have argued that in its most traditional form it is specifically English. Actuarial work, like other professions, is organised some what differently in different countries. We can make the following broad generalisations:

- In Britain, and in countries such as Australia which derive their institutions from Britain, the actuarial occupation is well organised, with a large extent of self-regulation, and with the education and examination of students firmly under the control of the profession itself. In these countries the governments have, historically, left considerable authority to the actuarial organisations and to individual actuaries in matters such as the valuation of life insurance liabilities.
- In Continental Europe actuaries are regulated more by the state than by their own organisations, and education and examination are also under the control of the state-run universities.
- The U.S.A. represents somewhat of an intermediate position. The governments of the individual states have historically retained more control, and the actuarial bodies have not been strongly organised nationally. However, the model has grown closer to the British model in recent years.

6.2 These geographical differences are, of course, blurring with the trend to globalisation. The historical reasons for these differences can, however, help to illuminate the current model of professionalism. The differences also serve as a reminder to actuaries of Anglo-American background that the concept of themselves as professionals, that they may take as universal and self-evident, is, in fact, an outcome of a specific set of historic circumstances. In this context it is interesting to note the reference of a Swedish sociologist to "occupations which can hardly be accepted as professions. For instance, in Sweden, [such obvious non-professions] would include actuaries with insurance companies, ships' officers, lorry and bus drivers, electricians, and welders" (Åmark, 1990).

6.3 Burrage (1990) explains the different development of professions in England, France and the U.S.A. in terms of the political history of these

countries. His hypothesis can be summarised as follows. Until the seventeenth century, occupations were organised in a similar way across Europe. All crafts and trades were organised into self-regulating, anti-competitive guilds. The learned occupations had a higher status, as mentioned in ¶4.2. As centralised monarchies became stronger in England and France, there were attempts to reduce local power and privileges, including those of the guilds. In France, the monarchy became an absolute power. The revolution which swept away the French monarchy also led to a very centralised government. The French revolutionaries abolished the corporate institutions of both manual and learned occupational groups, because such institutions were seen as antipathetic to the ideals of egalitarianism and the sovereignty of the people. These ideals persisted in the public consciousness and created resistance to attempts, by the lawyers for example, to regain their privileges of self-regulation. When the need for trained expertise was identified, the government itself established schools of medicine, engineering and law. The old ideas of a self-regulating occupational group controlling entry by apprenticeship largely disappeared from the French professions.

6.4 In England, the attempt by the central government to monopolise power was partially reversed by the 'Glorious Revolution' and the accession of William and Mary, who promised to protect existing liberties and privileges. Because there was no major radical upheaval comparable to the French Revolution, medieval structures survived into the modern age, and, unlike the French, the English had no popular ideology of equality and individual rights. The old professions, such as law, continued with self-regulating structures and entry by apprenticeship, and this model was followed by the new professions. Education in professional subjects was only slowly transferred to the universities, and the process is still incomplete.

6.5 The English professional ideal was imported into the U.S.A., but met with resistance from the populist ideology, which opposed the elitism inherent in the professions as anti-democratic. The professional bodies were weaker than their English counterparts, and more subject to government intervention. Burrage argues that the apparent success of the American Medical Association, for example, which is often cited as the world's most powerful lobby group, has been overestimated by many observers. The AMA has no direct control of medical schools, and has to persuade its member bodies to follow its policies, having no disciplinary powers over individual doctors.

6.6 The different patterns identified by Burrage in England, France and the U.S.A. seem to fit well with the differences in the organisation of actuarial work in these countries. The lesson we should draw from this is that there is no single, immutable concept of a 'profession'. The model to which we are accustomed has been created by past events in society. It will continue to be shaped by changes in society. Some of these processes have been under way for a long time, but have not yet fully worked their way through to impact on our idea of the professions. Burrage and Larson would argue that many of our ideas about

professions reflect a medieval structure — and one would only have to consider the London home of the actuarial profession to find some support for the importance of medieval symbolism. Modernisation of society may have started several hundred years ago, but it is still in progress. The next section considers the effect that this may have on the professions.

7. THE EFFECT ON PROFESSIONS OF THE MODERNISATION OF SOCIETY

7.1 Modernisation involves a shift from traditional to scientific/rational forms of knowledge. Traditional knowledge was based in institutions, such as the tribal elders or the church hierarchy. While such knowledge served practical uses, one of its important purposes was to ensure cohesion of the social group. Rational knowledge, on the other hand, is not controlled within institutions, but is accessible to all individuals, who are also able to develop new knowledge by direct observation and experiment. The scientific method requires that knowledge be submitted to questioning, while the traditional method forbade such challenges as a danger to the belief system which held society together.

7.2 For the professions, the modernisation of British society has placed increased emphasis on their technical expertise, as a more educated and rationalist society is inclined to question and reject claims based on the traditional sources of status. The application of science has also created a large body of knowledge which can be applied to professional work. In the nineteenth century, British medical doctors were respected because of their gentlemanly connections, and not because their treatments could be demonstrated to be effective — in fact Victorian medicine could be a health hazard, and the introduction of effective technology such as antiseptics was often resisted by the medical establishment. In the U.S.A., where an egalitarian, populist ethic opposed the traditions of the gentleman, the professions were more accepted by twentieth century society than they had been in the nineteenth century.

7.3 Brint (1994) argues that there has been a shift from 'trustee professionalism', where the professional worker claims to serve an objective public good, to 'expert professionalism', where the professional worker sells his or her expertise to serve the client's ends. Brint thus sees the diminution of some of the normative elements, particularly in the engineering profession on which his study focuses. Along with this has come a greater acceptance of commercial features among professions. For example, rules about the incorporation of firms and the advertising of services have been relaxed.

7.4 This suggests that professions will be affected by modernisation, but will survive in a slightly different form. There are, however, tensions between the modern form of knowledge and its organisation within professional organisations. Some sociologists have argued that the concept of professions will disappear altogether if the shift to rationalism becomes complete. The idea of a profession involves a monopoly of knowledge — the medical profession claims that only a

doctor can decide which drugs should be prescribed for a particular set of symptoms, as the actuarial profession claims that only an actuary can decide whether an insurance company is solvent. This is counter to the nature of modern knowledge, which, in theory, is open to all. Professions have to justify themselves and find their monopolies increasingly under pressure.

7.5 On the other hand, the sheer growth of modern knowledge means that no one can know everything, and this reinforces the strength of the professions in providing specialist expertise. The nature of this expertise, however, may be different. There may in future be much less scope for the personal form of expertise which is epitomised as professional judgement.

7.6 Professional judgement has, in the past, been a significant factor in deciding whether an occupation was a profession. Sociologists of the professions have observed that, for an occupation to be recognised as a profession, it must contain the right balance between the application of technique and the exercise of personal judgement fostered by training, experience and socialisation in the profession. If an intellectual skill is all objective technique, it can be codified and followed by anyone armed with a set of instructions, or it can potentially be performed by a computer. The expert will then be regarded as a 'mere' technician, not as a full professional. If a skill is all subjective judgement, then the skill will not have the rigour which will achieve recognition as a profession. This can explain the difficulty of empathetic occupations such as art or social work in establishing their status as professions.

7.7 The perceived need for the exercise of personal judgement may be the reason why society has tended to give the professional person autonomy in working, and the professional body the power to be self-regulating. The professional person fully involved in a particular case is considered to be able to achieve a better solution in non-standard situations than a voluminous set of rules and regulations could provide. Only other members of the profession, once armed with all the facts of the case, can say whether the solution adopted was the correct one. Freidson (1988) regards the achievement of autonomy by an occupation as the key indicator that the occupation has succeeded in establishing itself as a profession.

7.8 Actuaries consider the exercise of professional judgement to be fundamental in their work. Every discussion of the education syllabus, for example, re-emphasises the importance of testing judgement. Without denying that actuarial work does require the exercise of judgement, the fact that judgement is critical in achieving the status of a profession, and that achieving that status is a desirable thing, means that would-be professions have an interest in claiming that judgement is essential. We need, therefore, to be on our guard against the temptation to demand the right to exercise judgement for its own sake. An additional temptation is that autonomy is a reward in itself — work over which we have control is more enjoyable, satisfying the human need for self-actualisation. Autonomy is also a justification for other pleasant things like status and financial reward. A job which involves 'responsibility' usually attracts higher

remuneration than one which involves following instructions. It is worth examining our private motivations when we rush to defend the role of 'actuarial judgement' from the encroachment of set standards.

7.9 Even where we are satisfied that professional judgement is essential, we have to expect this view to come under attack, and be prepared to defend it. The concept of professional judgement is in conflict with modern scientific rationalism, which requires that scientific methods be verifiable, and believes that knowledge is accessible to all who have the intelligence to learn. The next section argues that our ability to apply professional judgement will face increasing opposition, and compares our profession with the case of accountancy.

8. OBJECTIVITY VERSUS JUDGEMENT: A COMPARISON WITH THE ACCOUNTING PROFESSION

8.1 Porter (1995) explores the modern emphasis on objectivity through quantification, referring to both accountants and actuaries in his analysis. His view is that the modern era has seen an ever-increasing emphasis on quantification because of the distance between parties engaged in joint endeavours and the complexity of modern networks of relationships. Local knowledge has become insufficient. Commodities and services have to be standardised so that they can be bought and sold at a distance, by parties who do not know each other. We have all become accustomed to this standardisation, and have learned to place more trust in numbers than in experts. Numbers, then, provide legitimacy for administrative actions, because they provide standards against which people measure themselves, whether in examination scores or in standard accounting measures like return on capital.

8.2 Porter uses the cases of accountants and actuaries as "stories of professions that, in varying degrees, abandoned their open reliance on expert judgement in the name of public standards and objective rules. It was never a voluntary sacrifice, but emerged always from a scene of intense pressure or even bitter rivalry." He shows that the accounting profession has had a continuing theme that mere numbers are not enough, without skilled interpretation. This theme emerges as early as 1849 in evidence given to a Parliamentary select committee that auditing is a matter of judgement and 'no dry arithmetical duty'. An article from the 1965 *Accounting Review* is quoted: "The accounting profession's prime asset is an attribute known as professional judgment. Judgment, professional or otherwise, is a product of the mind. If judgment must be made synonymous with subjectivity, we cannot have objectivity and a profession at the same time. Clearly we cannot accept such a view of objectivity. Rather, we must show that the exercise of professional judgment and the desire for objectivity are complementary propositions." A 1987 article on management accounting lamented an increasing tendency to management "by the numbers".

8.3 The accounting profession at first succeeded in avoiding standardisation

by having auditing services provided by large independent elite firms, which were clearly separate from the companies being audited, thus meeting the public demand for demonstrated objectivity. Porter argues that the shift from reliance on an elite disinterested profession to reliance on standardisation started to gather momentum in the U.S.A. in the 1930s, with the introduction of a new regulatory bureaucracy to restore investor confidence by strict reporting. "The shift toward objectivity meant a loss of autonomy, and was a failure of the profession. To fend off an imminent bureaucratic intervention, the American Institute of Accountants established its own mechanism of standardization. In 1934 it voted to establish six 'rules or principles' of accounting. In 1938 it established the Committee on Accounting Procedure, which was replaced by the Accounting Principles Board in 1949 and then by the Financial Accounting Standards Board in 1972. These have acted almost like governmental agencies."

8.4 Accountants knew that the rules did not necessarily produce answers which gave the clearest view of the 'real' state of a company, but they were also aware that following rules was their strongest defence against bureaucrats and other meddlesome outsiders. Porter comments that "their willingness to insist on standardizability, even where it violates the best judgement of expert practitioners, will rarely be found except in fields that are highly vulnerable to criticism from outsiders. The reluctance of accountants in many situations to admit the exercise of personal discretion is evidence of their public exposure." The public exposure resulted from the importance of the things which accountants were required to measure — for taxation, for attraction of investors, etc. By accepting the need for standardisation, but keeping the process of standard setting within the profession, the accountants avoided the complete loss of autonomy that would be represented by having outsiders set the rules.

8.5 Porter's actuarial example comes from the attempts in mid-nineteenth century Britain to set a minimum valuation basis for life insurance. The various parliamentary committees pressed the actuaries giving evidence to concede that there was some standard against which life insurance companies could be measured. The actuaries were generally of the view that each company had to be assessed on its merits by an individual actuary who was well acquainted with its own particular experience of mortality, investments and expenses. Porter observes "In Victorian Britain and 20th century America alike, the campaign for objectivity was led by the government, and opposed by mathematical actuaries and accountants ... In place of precision they offered a profession."

8.6 The difference was that the actuaries 'won' their battle. Porter explains this in terms of the different societal contexts in which the battles took place. "The potential regulators they [the actuaries] faced were not very insistent, in part because they feared they were intruding into the proper domain of free enterprise. Also, the actuaries' argument that they deserved to be trusted as experts and gentlemen had then a force that is now almost lost to memory."

8.7 Porter does not revisit the actuarial profession since its early days. However, his reasoning can readily be applied to our subsequent development.

Actuaries have historically escaped 'public exposure'. There used to be little scrutiny of the numbers that actuaries decided on through the exercise of their judgement. Few people were interested in the methods and assumptions of life office valuations as long as they were sufficiently conservative that offices rarely failed. Pension fund contribution rates were a private matter for the sponsoring employer. There was thus little pressure to reduce the room for professional judgement.

8.8 This situation has changed dramatically for the actuarial profession in recent years. Life insurance is now a business, with profit to be reported rather than surplus to be managed. Pension benefits are seen as a form of remuneration, about which the employees have the right to be informed, rather than the private domain of a benevolent employer. Actuaries have gained a place in general insurance, where their estimates impact directly on reported profits. For example, at the time of writing, an Australian general insurance office has just reported a massive loss and a halving of its share price only months after its directors persuaded the numerous small individual shareholders not to accept a takeover offer. The financial press is speculating that the huge discrepancy between predicted and actual profit figures relates to the revision of actuarial estimates. Lawsuits are looming, and the actuarial methods and assumptions can be expected to come under intense public scrutiny.

8.9 The actuarial profession has responded to the public demand for demonstrated objectivity by issuing professional standards and guidance notes. We can expect this to intensify, and the standards to become more precise and prescriptive. There can still be a role for judgement in cases which do not fit the exact scenarios of the prescriptive standards, but there will have to be a high degree of certainty that ten different actuaries, faced with the same non-standard scenario, would each separately combine judgement with technique to arrive at something acceptably close to the same answer. Naturally we would hope that this proved, at least on average, to be the right answer, but this is probably not as important in avoiding litigation and maintaining a reputation for expertise as having the same answer.

8.10 It is interesting that Porter sees the accountants' surrender to the need for standards as a "failure of the profession". It could be argued that accountants are now the strongest profession, having bent with the winds of change which are blowing towards ever greater quantification, rather than trying to hold firm and being broken. They have established their reputation as *the* profession which supplies the numbers, in a society which craves the apparent objectivity of numbers. As one actuary, who is also CEO of an insurance company, remarked after a discussion at the Institute of Actuaries of Australia touched on the role of actuaries and accountants: "From the CEO's point of view, the accountants keep you out of gaol"(Atfield, 1997).

9. OTHER CHANGES IN SOCIETY WHICH AFFECT THE ACTUARIAL PROFESSION

9.1 *Technology*

9.1.1 Actuaries are well aware of the impact that computing technology has had on our work, but perhaps the deeper implications for our science have not been fully appreciated. Much of the development of actuarial science in the nineteenth century involved finding ways to facilitate the calculations involved in projecting expected cash flows and then discounting them back. Such discounted cash flow calculations can now be performed easily with very user-friendly software such as spreadsheets. The tools which could be identified as uniquely actuarial — the commutation column, the assurance and annuity functions and the whole panoply of symbols codified in the International Actuarial Notation — have been swept away. We are now replacing them with techniques developed in other disciplines, and trying to find a way to establish that the combination of these techniques is somehow uniquely actuarial.

9.1.2 Technology has also shaped the life insurance contracts which once formed the major part of actuarial responsibility. Paragraph 5.7.4 refers to Sherris's (1987) view on the role of the actuarial profession in determining and distributing the surplus under traditional life insurance policies. He says:

"If contracts can be inexpensively made more complete by pre-specifying the sharing rules to cover future contingencies then the actuary will not be needed to determine the sharing. The actuary will still be needed to price risk transfer contracts, but the role of the actuary in risk sharing contracts will diminish. ... In life insurance the traditional participating contract is being replaced with the unbundled and universal life insurance contracts. ... This is an example of an alternative contracting mechanism replacing the actuary in part of the contract of life insurance."

9.1.3 The consequences for the profession of the new style of policies was recognised as far back as 1969, when Melville wrote: "The unit-linked approach ... rejects the traditional role of the actuary as the all important and mysterious custodian of surplus" (Melville, 1969). Advances in computing technology made possible the provision of the new policies, but the demand for them arose from another significant development in society: individualism.

9.2 *Individualism*

9.2.1 Western culture has seen a shift to a greater focus on individual rights and away from systems of pooling and sharing which underlay traditional communities. The need for actuarial services in risk sharing, as distinct from advice on risk transfer, depends on the right combination of individualism and sharing. If there is total emphasis on returning to individuals what they have put in, or what they have been contractually promised under a risk transfer arrangement, then there is no room for risk sharing. On the other hand, communities which share totally — i.e. which follow the precept "from each according to ability, to each according to need" — also do not need actuaries to

oversee the sharing process. For example, the early friendly societies survived without actuarial advice, by adjusting benefits to what contributions could cover, and also were protected by the willingness of their members to forego their rights to claim if they could afford to do so. The peak combination of individualism and sharing, so far as the need for an actuarial profession was concerned, was found in the traditional participating life insurance policy and the defined benefit pension scheme. Together these institutional forms employed the great majority of actuaries until recently.

9.2.2 In Australia savings through life insurance and through superannuation are both moving rapidly towards the individual account form, which either has no sharing at all or very limited smoothing of individual experience. The trend may not be occurring so rapidly in Britain, but to the extent that it reflects a fundamental shift in society's attitude towards sharing versus individualism, it is probably inevitable in the longer term. As with technology, actuaries may notice the immediate impact of these changes on their work, without absorbing the subtler implications. Some of the normative connotations of our profession, such as the emphasis on equity (in the sense of fairness), arise from our involvement in risk sharing arrangements. Are they still relevant in our new work environments?

10. THE ACTUARIAL PROFESSION'S RESPONSE TO CHANGES IN ITS TRADITIONAL WORK AREAS

10.1 The profession has responded to the reduction in work related to risk sharing in its traditional areas by finding new work to do in these areas, as well as finding new areas of work. For example, in life insurance, actuaries now focus on the risk transfer side, such as measuring the profitability of the various contracts which companies now offer. This has obvious extensions to other institutions involved in other types of long-term contracts. Consulting actuaries working in superannuation emphasise that the decline of defined benefit plans does not mean a decline in their workload, as they offer other services to their superannuation clients, such as remuneration advising and investment analysis. Actuaries are trying to widen the application of their long-term risk perspective by ventures such as the launch of the RAMP (Risk Assessment and Management for Projects) methodology.

10.2 The problem for the profession is that, although individual members may find opportunities to apply their skills in these areas, there is often no convincing reason why an actuarial qualification is necessary to perform such work. Within the traditional actuarial strongholds of life insurance and superannuation, the actuarial qualification still commands the respect which has been earned by past actuaries. In new areas the actuarial qualification cannot be expected to carry the same competitive advantage. If there are alternative ways in which an individual can secure the right to carry out the work, rather than the

fairly tortuous route to actuarial qualification and the not insignificant annual subscriptions for that qualification, then why would that individual choose to enter the actuarial profession? This brings us to the question of how professions manage to secure recognition for their professional qualification in particular areas of work.

10.3 *The Competition between Professions for Areas of Work*

10.3.1 Abbott (1988) argues that professional groups operate within a system, in which each profession has command over a distinct set of tasks or problems, its 'jurisdiction'. The way in which individual professions are born, develop, and sometimes die, can primarily be explained in terms of the competition between professional groups to take and hold areas of jurisdiction. He also argues that a jurisdiction is normally exclusive. A situation where two or more professions are carrying out the same work is unstable, and will normally lead to the formation of a new profession which specialises in the joint area. Alternatively, professions may share an area by having one profession dominant over the other, as for example the medical profession dominates the nursing profession, delegating certain tasks, but maintaining a higher level control.

10.3.2 The core of Abbott's theory is that a profession asserts its right to a particular jurisdiction through the development of an abstract system of knowledge. "Any occupation can obtain licensure (e.g. beauticians) or develop an ethics code (e.g. real estate); but only a knowledge system governed by abstractions can redefine its problems and tasks, defend them from interlopers, and seize new problems — as medicine has recently seized alcoholism, mental illness, hyperactivity in children, obesity, and numerous other things." Abbott contends that the lack of such an abstraction explains why some occupational groups, such as plumbers and automobile mechanics, are not considered to be professions, despite sharing many of the characteristics of the recognised professions. In his view, auto mechanics would constitute a profession if they had an abstract theory and used this as a basis for taking over all work relating to internal combustion engines.

10.3.3 Let us consider how the abstract theory underlying the jurisdiction held by actuaries has evolved. The term 'actuary' meant at first the chief official of the Society for Equitable Assurances on Lives and Survivorship, founded in 1762. William Morgan, who occupied that position from 1775 to 1830, also performed the necessary mathematical work for the Equitable, and thus 'actuary' came to mean life insurance mathematician/financial manager. The earliest recorded use of the term for a person not employed by the Equitable was in the Friendly Societies Act 1819, which required friendly society tables and rules to be approved "by two persons at least, known to be professional actuaries or persons skilled in calculation". The immediate practical effects of this clause were close to zero. There were both insufficient actuaries to perform the calculations and insufficient data to support the calculations, and the clause was abolished in further legislation ten years later (Eagles, 1998).

10.3.4 While the practical effect was small, the symbolism of the clause is highly significant. Daykin (1992) suggests that Morgan was probably influential in securing this reference to actuaries in the legislation. Morgan, in effect, was asserting that the problem of calculations for friendly societies fell within the actuarial jurisdiction. In addition, in 1800 Morgan had been consulted on the calculation of annuity prices when the National Debt Office began its sale of life annuities, and when an official was appointed to this Office in 1822 the position was named 'Actuary and Principal Accountant of the Check Department of the National Debt Office'. Thus, by the 1820s there was some degree of official recognition that actuaries' skills applied to the problem of calculations for life insurance, for friendly societies and for the sale of life annuities.

10.3.5 The abstraction which linked these problems was the valuation of future payments dependent on the contingencies of human life. The major contingencies for life insurance and annuities were the probabilities of living to a certain age, or dying before that age. In the case of friendly societies, there were also the contingencies of being in good health or being too sick to work. Nineteenth century insurance policies could be bought to cover such things as the chance that a person would remarry or die without issue. These contingencies, also, were accepted as being amenable to estimation by actuaries.

10.3.6 Morgan took the first steps in developing an actuarial abstraction and making jurisdictional claims, but from 1848 these tasks were co-ordinated by the Institute of Actuaries. Abbott argues that professions attempt to define their abstraction as widely as possible, and also that the impetus to professional organisation comes from the pressure of competition from other professions. Both these features can be observed in the formation of the Institute of Actuaries in 1848, as recounted by Simmonds (1948).

10.3.7 The discussions preliminary to establishing the Institute talked of "the question of forming an Institute or College of Actuaries for the study of the theory of Life Contingencies", at this stage limiting the scope of the abstraction to life contingencies. An anonymous circular advocating a professional body argued that "The establishment of a College of Actuaries would in time prevent Attorneys and ignorant Accountants or Auctioneers presuming (as they now do) to advise parties on the value of contingent or reversionary property or money payments." The abstraction was soon widened, as indicated by the second of the following objects adopted at the formation of the Institute of Actuaries of Great Britain and Ireland:

"The development and improvement of the mathematical theories upon which the practice of Life Assurance is based, and the collection and arrangement of data connected with the subjects of duration of life, health, and finance.

The improvement and diffusion of knowledge, and the establishment of correct principles relating to subjects involving monetary considerations and the doctrine of probability.

The nearer approximation to uniformity of practice, official and professional.

The settlement of points of professional and official usage, and protection generally to the members of the profession and the public.

The elevation of the attainments and status of the members of the profession.
The formation of a library, and the establishment of rooms for reading and conversation.
The free interchange of opinion and counsel in matters of difficulty, whether theoretical, official, or professional.”

Later in the year the objects of the Institute were described in a press article as being:

“to elevate the attainments and status of all who are engaged in occupations connected with the pursuits of an actuary; to extend and improve the data and methods of the science which has its origin in the application of the doctrine of probabilities to the affairs of life, and from which life assurance, annuity, reversionary interest, and other analogous institutions, derive their principles of operation; and as their peculiar province they undertake the investigation of all monetary questions involving the consideration of interest and probability, either in their combined or separate relations.”

The article went on to say how advantageous the formation of the Institute would be for friendly societies, who had been rashly relying for advice on “the legal advisers merely, who with that self-reliance for which the profession has earned so well-merited a reputation, have attempted to regulate the delicate machinery which the practical actuary is alone competent to deal with”.

10.3.8 In forming the Institute, actuaries were asserting a claim to all questions falling under the abstraction of life contingencies, thus cementing their place, already well established, in life assurance, and strengthening their competitive position against the ‘Attorneys and ignorant Accountants or Auctioneers’, who valued interests under wills, and the legal profession, who advised on the structure of friendly societies and other institutions dealing in life contingencies. They were also laying down a basis for future expansion, if it should be desired, by claiming, not just life contingencies, but “the investigation of all monetary questions involving the consideration of interest and probability” as “their peculiar province”.

10.3.9 Actuaries have maintained a firm hold on the jurisdiction covered by life contingencies. Calculations for defined benefit pension schemes, developed in the nineteenth century, but not proliferating until the twentieth century, fell, without much contest, into the domain of actuaries, who added contingencies related to employment — the chances of gaining promotion or of remaining with an employer, retiring or resigning — to the other life contingencies in which they were accepted to be expert. The first entry of actuaries into general insurance came via the establishment of workers’ compensation insurance, which depended also, to some extent, on contingencies of human life.

10.3.10 From time to time the actuarial profession has attempted to extend its jurisdiction by invoking the wider definition. Lewin (1998) describes one such attempt, made soon after the First World War. The President at the time proposed enhancing the training of actuaries in statistics, economics and finance, so that “not only will the actuary retain unchallenged and indeed unchallengeable his position in the insurance world”, but would also be capable of success “in any of

the higher walks of life" as a "scientific financier". In 1925 Menzler coined the expression 'the wider field' for these aspirations. The Institute began to make some public noises about expanding the actuarial role. This provoked a vigorous response from the accounting profession, who declared: "Accountants have not the slightest desire, nor, indeed, have they the training, to encroach on the sphere admirably filled these many years past by the learned members of the Institute of Actuaries; but they feel that they are justified in asking, in return, that their own sphere, in which severe training qualifies them to serve, shall be held inviolate from encroachment by the members of a distinct, if sister, profession." The episode closed with the actuaries beating a hasty retreat.

10.3.11 Perhaps the actuaries of the 1920s withdrew so quickly from the battle because there was no great pressure on them at that time to expand their jurisdiction. Their heartland in life insurance was secure, and they were expanding without difficulty into pensions advice. The situation at the end of the twentieth century is quite different, as the traditional strongholds are changing in ways that make them less secure as employers of actuaries. Once again the profession is attempting to expand into new territory.

10.3.12 If Abbott's theory is correct, then this attempted expansion will be accompanied by efforts to widen the abstract theory underlying actuarial science so that a new set of problems can be claimed to lie within its scope. This is, indeed, occurring. Note the North American profession's attempts to define broad principles of actuarial science (Bell *et al.*, 1998). The Australian actuarial profession's invocation of the 'Actuarial Control Cycle' is worth examining as an example of the process.

10.3.13 The 'Actuarial Control Cycle' was proposed to the Australian profession in 1994 as the name of a new subject in the education process. Instead of requiring students to take Fellowship examinations in all four subjects of life insurance, general insurance, superannuation and investment, the new subject would draw out what these different practice areas had in common. Students would complete the new subject and then specialise in just two subject areas. The 'control cycle', a phrase taken from a British actuarial paper of 1985 (Goford, 1985), was the framework in which different practice areas could be found to have common themes. The control cycle was made up of the process of identifying the problem, designing a solution, monitoring the experience and adjusting the solution accordingly.

10.3.14 The new subject was introduced in 1996, but the 'Actuarial Control Cycle' soon developed an existence beyond its educational role. Consulting actuaries found it useful in presenting their services to clients. It began to appear in the Australian actuarial literature. A quick scan of papers presented at sessional meetings and the biennial conventions of the Institute of Actuaries of Australia since 1996 uncovered the phrase used in papers with the following titles:

- Customer value management;
- Internet strategies of financial services companies;

Financial management and the evolving actuary;
 Management in the funds management industry;
 Long-term care insurance; and
 Healthcare actuaries and their environment.

10.3.15 It is no coincidence that these papers all deal with areas which do not fall within the traditional heartland of actuarial territory. By applying the Actuarial Control Cycle to these problems, the authors demonstrate that they are really *actuarial* problems, solvable by the application of actuarial methods. The expression has also begun to appear in British actuarial literature. Paul Thornton's Presidential Address, for example, describes it as a way of explaining what we do to a relatively sophisticated audience (Thornton, 1998).

10.3.16 Can the actuarial profession expect to secure a wider territory by means of this redefinition? If we accept Abbott's theory, it is unlikely. Abbott argues that an abstraction with a lack of content, i.e. a model which can fit many subjects, can achieve only a weak hold over a jurisdiction of problems, even if the profession has effective treatments to apply to those problems. Such an abstraction will not capture the imagination of the prospective client group and ensure that the client's problems appear self-evidently to call for the services of the profession seeking to claim them.

10.3.17 The Actuarial Control Cycle, while it is useful as an educational framework, would seem to be the epitome of an abstraction which has been emptied of content. Indeed, it is interesting to compare it with Abbott's description of the way that *all* professions apply their abstract theory to claim a territory of problems: "the jurisdictional claims ... have three parts: claims to classify a problem, to reason about it, and to take action on it: in more formal terms, to diagnose, to infer and to treat. Theoretically, these are the three acts of professional practice. Professionals often run them together. They may begin with treatment rather than diagnosis; they may, indeed diagnose by treating, as doctors often do." This is remarkably close to the 'Actuarial Control Cycle'. To be fair to Australian actuaries, many of them have objected that the so-called 'Actuarial Control Cycle' is not uniquely actuarial at all. Nonetheless, the enthusiasm with which it has been embraced is indicative of the urgency of the search for a wider definition of the abstract theory of actuarial science.

10.3.18 Given that we need an abstraction which is less empty of content, can we go back to the original claim: that the province of actuarial science is "the investigation of all monetary questions involving the consideration of interest and probability"? The difficulty for actuaries is that others are already occupying this territory. One obvious example is option pricing theory, which was not invented by actuaries nor first applied by them, and which has only recently found a place in the actuarial syllabus.

10.3.19 If the actuarial profession is to be recognised as the source of solutions for all problems "involving the consideration of interest and probability", then it must either defeat the current practitioners in this area by

offering more effective solutions or a more persuasive variation on the abstract theory, or absorb them into itself. The British profession has made some move towards the second option, by resolving, in 1998, to extend Affiliate membership “to include professionals and academics in actuarially-related fields.” (Although the fact that the offer is of Affiliate status rather than Fellowship means that it does not go very far towards absorbing the practitioners into the profession.) The question which then arises is what such an offer of membership would mean. Would these experts want to join our profession? Do they need a market signal of their competence or of normative qualities such as independence?

10.3.20 Another problem is what effect a sizeable influx of such outsiders would have on the actuarial profession. This leads to the question of professional ideology.

11. THE IDEOLOGY OF PROFESSIONALISM

11.1 A profession’s ideology comprises its set of principles and teachings and also its myths and symbols. It is the whole set of conscious and unconscious beliefs and connotations which are invoked when a person says: “I am a professional” or “I am an actuary”. Ideology is intangible, but powerful. While there is scope to approach the subject from the point of view of moral philosophy, this paper will consider only economic theory and group psychology.

11.2 Ideology provokes a sense of shame in those who do not follow its principles. This has economic benefits. A sense of shame leads to self-monitoring and self-control, with considerable savings in monitoring and policing costs. In communities where there is a strong sense of shame about stealing, there is no need for non-productive expenditure on locks and other security devices. Shaming is more effective in a small community, or at least one where people know their neighbours/colleagues. The effects of ideology can be very strong, but can also be weakened by exposure to alternative ideologies — the ‘everybody else does it’ syndrome. Actuarial organisations endeavour to inculcate a professional conscience in new recruits, but this is unlikely to be heeded if it runs counter to the belief system of the wider community.

11.3 Actuaries have, in the past, had a strong sense of identity as members of the actuarial community, and this has helped to reinforce the professional ideology. Such a sense of belonging is created as much or more from shared experiences as from a common interest. Successful groups reinforce the shared experiences with initiation ceremonies and other rituals. The role of the examination system as an initiation ceremony should not be underestimated. The proliferation of alternative routes, such as different university courses, and specialisations, and the improvement of what in the past has been a gruelling process, while educationally desirable, will tend to weaken the bonding process. The movement of actuaries into different areas of work, as compared with the traditional environment of large life office or all-actuary consulting firm, also means that there are fewer shared experiences.

11.4 If the actuarial profession is to absorb people who are currently doing work which we would like to be seen as actuarial, as discussed in ¶10.3.19, it will be difficult to foster in them this same sense of community. They do not have the same shared experiences. Nor do they have the legitimacy of having passed the actuarial examinations. If the new-style Affiliates enter in significant numbers — as Section 10 would suggest they must if the profession is to assert its authority in the ‘wider field’ — the effect on the actuarial profession could be profound. We might find a proportion of the existing members closing ranks against the newcomers, which could, in turn, lead to a rift in the profession. Alternatively, if the Affiliates are fully accepted as part of the actuarial community, the trend towards greater diversity in that community and a weakening of the old loyalties will be accelerated.

11.5 A strong sense of community does have its disadvantages. Conformity is encouraged, and criticism can be seen as disloyalty. There is also protection in numbers. The claim that one was following standard actuarial practice can be sufficient defence against outside criticism — but only in the short term. It can easily lead to stagnation and complacency, and a profession which is out of step with wider public opinion.

12. SOME SPECULATION ON PROFESSIONS IN THE TWENTY-FIRST CENTURY

12.1 Most of the theory discussed in this paper remains in the fairly comfortable zone of explaining the past. It can be useful in understanding the present, and identifying trends which may be expected to continue, but what is the outlook for the professions in future?

12.2 *The Corporate Profession?*

12.2.1 The author would speculate that, just as the corporate form has become dominant in so much of human enterprise, it could well replace the professions. Professional bodies themselves have already become more corporatised — with a central paid bureaucracy and payment for service replacing some of the traditionally voluntary work. Stock exchanges, originally associations of individuals with common interests not unlike professions, have demutualised. Universities have shifted from a collegial to a managerial mode. Could we see an Institute of Actuaries plc, selling education services for a fee, providing a professional-rating service similar to a credit-rating service?

12.2.2 Alternatively, might the professional firms take over the functions of the professional body? Across the world, there are many consulting actuaries working in firms which have more actuaries than the founding membership of the professional bodies to which those actuaries belong. These firms have research departments, and hold seminars and training courses to keep their members up-to-date. They guard their reputations carefully. The selection process before a member is able to work as a credentialed member of the firm is every bit as

rigorous as gaining a professional qualification. In these ways the firms fulfil many of the functions for which the professions were formed.

12.2.3 The firms have moved into a managerial mode. This can be far more effective in operation than collegiate democracy. The firms are quick to expel members who do not measure up to their standards. They can also recruit quickly when new skills are needed. Consulting firms are increasingly interdisciplinary. For example, in Australia at least, the large accounting firms have actuarial teams. Large firms can take risks and invest effort in finding new areas of work in ways which individual professionals cannot. Although it has long been a dream of the actuarial profession to establish itself in the 'wider field' to such an extent that corporations outside the financial service sector would have actuarial employees (other than to supervise their superannuation arrangements), this has not really occurred on an individual basis (those individuals who have made the move generally ceasing to regard themselves as actuaries). The consulting firms have, however, had success in providing actuarial services to this market.

12.2.4 At the moment members of consulting firms are usually also members of professional bodies, but is this necessary? An accounting firm publishes rankings for international sportsplayers which are widely accepted — the formula is devised by a mathematician, but the name which endorses its accuracy is the name of the firm. A firm of management consultants has a far higher international profile than any professional body of management consultants has achieved.

12.3 *The Individual Professional?*

12.3.1 How would individuals operate in the corporatised world? At the moment, there are a number of actuaries in small or single-person consulting firms. Office technology makes such operations more viable than they were even ten years ago, so one could expect more such small firms. Also, the employment market has swung away from the job-for-life to hiring on short term contracts, so that individuals will move in and out of positions in large corporations. If there are no professions, what will these individuals have as their credentials?

12.3.2 Individuals will still have credentials from educational courses completed. These may have to be obtained more frequently than in the past, when a single educational qualification at the start of one's career was sufficient. They will have a portfolio of past work experience. In areas such as medicine, where there are many individual clients who cannot be consulted with regard to their views on a particular practitioner, the practitioner could acquire a practitioner-rating from some rating service. The accounting firms could probably devise some suitably 'objective' formula on which to award practitioners one to five stars.

13. SOME POINTS FOR CONSIDERATION

Section 12 indulges in some speculation about what could replace professions

in the future. Returning to the present, there are a number of points for consideration which we can draw from the theories about professions presented in this paper:

- The ideal of the ‘professional’ is an elusive and shifting concept. A recent President of the Society of Actuaries expressed disappointment at new Fellows who jokingly described their view of professionalism as “Show me the money!” (Holland, 1997). This apparent cynicism may reflect a change in the concept of the ‘professional’, which has shed some of its normative associations. Perhaps we should accept that the attributes of the English gentleman, who did not soil his hands with trade, have been supplanted by those of the modern expert, who sells her or his expertise for the highest possible price. It is at least wise to acknowledge that noble professional sentiments may have served in the past as a useful cloak for anti-competitive practices.
- The effectiveness of ideology in inducing self-monitoring may be weakened by such things as changing values in the community, the growing size of the profession, and changes to work and educational experiences. If our profession wishes to claim high standards, we may need to rely more on other forms of monitoring.
- Some, at least, of the functions of the actuary as a member of a profession, and not just as a technical expert, are disappearing, with changes in the traditional areas of employment, such as the diminution of participating life insurance and defined benefit superannuation, and with the movement of actuaries into new areas. This may reduce or change the need for some of the normative aspects of professionalism. We should cast a sceptical eye over our normative claims and make sure they can be justified.
- Universities have taken over from professional organisations most of the function of issuing initial credentials (in most areas to a greater extent than in British and American actuarial science). The unique credential which professions can offer is an ongoing warranty that the member is up-to-date. For this reason Continuing Professional Development procedures should be more rigorous. There has already been a move to more formal requirements, which is good, but, perhaps, more should be done. The examinations for new entrants to the actuarial professions have notoriously high failure rates, while the rate of expulsion from the profession for failure to maintain competence has so far been noticeably low.

14. CONCLUSION

This paper is not intended in any way to be an attack on the actuarial profession, of which the author is very proud to be a member. Nor is it meant to impugn the motives of those who seek to act in the public interest, or in other ways to behave responsibly and conscientiously, as our ideas of professionalism

dictate. The paper is an attempt to understand what being a 'profession' means, and what it may come to mean as society changes.

REFERENCES

- ABBOTT, A. (1988). *The system of professions*. University of Chicago Press, Chicago.
- AMARK, K. (1990). Open cartels and social closures: professional strategies in Sweden, 1860-1950. In BURRAGE, M. & TORHSTENDAHL, R. (eds), *Professions in theory and history*. Sage Publications, London and Newbury Park, California.
- AMP (1848, unpub.). Board minutes, AMP archives, Sydney.
- ATFIELD, R. (1997). Discussion after the President's plenary session of the centenary convention of the Institute of Actuaries of Australia. *Transactions of the Institute of Actuaries of Australia*.
- BELL, L.L., BRENDER, A., BROWN, R.L., DICKE, A.A., GRAMER, C.R., GUTTERMAN, S., HUGHES, M.A., KLUGMAN, S., LUCKNER, W., MCMURRAY, M.A., PHILBRICK, S.W., ROBERTS, J.N., TERRY, K.F., TAN, J.H., WALTERS, M.A., WOLL, R.G. & WOODS, P.B. (1988). General principles of actuarial science. *Transactions of the 26th International Congress of Actuaries, 1*, 145-170.
- BELLIS, C. (1997). *The future-managers: actuaries in Australia 1853-1997*. The Institute of Actuaries of Australia, Sydney.
- BOOTH, P.M. (1997). The political economy of regulation. *B.A.J.* **3**, 675-707.
- BRINT, S. (1994). *In an age of experts*. Princeton University Press, Princeton.
- BURRAGE, M. (1990). Beyond a subset: the professional aspirations of manual workers in France, the United States and Britain. In BURRAGE, M. & TORHSTENDAHL, R. (eds), *Professions in theory and history*. Sage Publications, London and Newbury Park, California.
- CARR-SAUNDERS, A.M. & WILSON, P.A. (1933). *The professionals*. Frank Cass, London.
- DAYKIN, C. D. (1992). The developing role of the Government Actuary's Department in the supervision of life insurance. *J.I.A.* **119**, 313-348.
- EAGLES, L. (1998). Friendly societies. In *Life, death and money*. Blackwell, Oxford.
- FERGUSON, D.G.R. (1997). For goodness sake. *B.A.J.* **3**, 1-26.
- FOLEY, P., SHAKED, A. & SUTTON, J. (1982). *The economics of the professions*. LSE, London.
- FREIDSON, E. (1986). *Professional powers*. University of Chicago Press, Chicago.
- FREIDSON, E. (1988). *Profession of medicine*. University of Chicago Press, Chicago.
- FRIEDMAN, M. (1962). *Capitalism and freedom*. University of Chicago Press, Chicago.
- GOFORD, J. (1985). The control cycle: financial control of a life assurance company, *J.I.A.S.S.* **28**, 99-114.
- HOLLAND, D. (1997). What it means to be a professional. Reprinted in *The Actuary*, August 1997. Staple Inn Actuarial Society, London.
- LARSON, M.S. (1979). *The rise of professionalism*. University of California Press, Berkeley.
- LEWIN, C.G. (1998). Earliest days. In *Life death and money*. Blackwell, Oxford.
- MELVILLE, G. L. (1969). The unit-linked approach to life insurance. *Transactions of the Institute of Actuaries of Australia*.
- PORTER, T.M. (1995). *The pursuit of objectivity in science and public life*. Princeton University Press, Princeton.
- RUGLAND, W. (1993). Assuming the mantle of professionalism. 1993 Valuation Actuary Symposium, U.S.A.
- SHERRIS, M. (1987). The role of the actuary and the theory of contracting. *Transactions of the Institute of Actuaries of Australia, II*.
- SIMMONDS, R. C. (1948). *The Institute of Actuaries, 1848-1948*. Cambridge University Press, Cambridge.
- THORNTON, P.N. (1999). Presidential address. Lessons from history. *B.A.J.* **5**, 27-48.

ABSTRACT OF THE DISCUSSION

Ms C. S. Bellis, F.I.A. (introducing the paper): As actuaries, we often use the word 'profession'. We talk about our profession, the need to behave professionally, and professional standards. We take for granted that we are a profession, and that certain consequences then flow from that. What I try to do in this paper is to take a step back, and ask why certain occupations, such as ours, are given this special status. Where does the idea of a 'profession' come from, and, more importantly, where is it going in the future?

I would like to take the opportunity of these opening remarks to clarify one point in the paper, in relation to ¶10.3.17. In that paragraph I express some scepticism about the profession's attempt to use the 'Actuarial Control Cycle' concept to redefine, more widely, the range of problems which are seen to fall within the domain of actuaries. Nonetheless, I would like to confirm that, as an educator, I find the concept very useful in providing a common framework for analysing the way in which actuaries approach related tasks in different areas of practice. I am not opposed to the Actuarial Control Cycle concept as a means of organising our thoughts about what we do. I am uncomfortable about relying on it to justify claims that a whole new set of problems and tasks are amenable to actuarial solutions.

Mr J. H. Webb, F.I.A. (opening the discussion, in a written contribution that was read to the meeting): The author's treatment of professionalism is wide, covering a full range of occupations and skills, and there is historical depth in tracing professional concepts back to their medieval roots. I particularly enjoyed the contrasts she makes between the situation on the Continent, where central state control stems from the regime following the French Revolution, and that of the United Kingdom, where the gradual evolution of modern practice enables some of the attitudes of the pre-Reformation professions to survive in discussions taking place under our hammer-beam roof.

The paper also ranges widely internationally, at least so far as the English-speaking world is concerned, and much of the most interesting material stems from academics, who are clearly truly independent, with no brief for defending the professions' commercial ambitions. A general theme emerges of the continuing struggle, over time and place, to maintain a balance between freedom and regulation. The monopoly of the professions in their core areas, which raises prices to allow their generally comfortable living standards, can be justified to the public by the assurance of high standards and the elimination of undesirable practices, and it is this that the professions must continually demonstrate and defend.

The paper draws attention to the contrast between the English-speaking world, with its tradition of largely self-regulating professions, and the remainder, where control is mainly exercised by national governments. The rapid move to globalisation in the commercial world — so that an increasing proportion of our clients are multinational companies, or groups of companies — has given an impetus to the development of the world-wide profession, which, if it can be fully grasped, can become self-regulated on English-speaking lines. World government, or even world financial regulation, seems unlikely to move at the same pace, and, for the foreseeable future, there is a gap in which we can build a credible structure.

As with so much else in the world of commerce, North America is of critical importance, and, as the author notes, the United States profession has recently moved more into line with the U.K. pattern. It was an initiative led by Paul McCrossan, a Canadian, and an Honorary Fellow of the Faculty, which saw the formation of the International Federation of Actuarial Associations, which later succeeded in a reverse take-over of the International Actuarial Association (IAA), and thereby set up, for the first time, a framework of an effective global professional body.

A recent development of great importance has been the IAA's formation of a Professionalism Committee under the Chairmanship of Chris Daykin, with a brief to set out the procedures for issuing international actuarial standards, where these are required. This initiative is at an early stage of development, and there are very real concerns about potential clashes between IAA

standards and those developed by national actuarial associations. Nevertheless, I consider that global business will require global solutions to its problems, and my prediction is that the focus of professional developments will move inexorably from national associations to the IAA in the coming years. We have already agreed a degree of uniformity in professional conduct standards, and I expect to see a similar development in technical standards. National governments will still continue to legislate, however, and national associations will need to issue guidance notes setting out the detailed application of international actuarial standards to fit in with the particular local legislation.

As particular areas of work decline, or become largely routine, a profession is bound to search for new areas of work which it can claim as its own. The paper is very interesting on this, and points out that the achievement of autonomy is the key to the establishment of a profession. It is highly unlikely that two professions will continue with a substantial overlap in a particular area of advice.

Section 10, on our response to changes in our traditional work areas, will, I hope, provoke a great deal of discussion. The reference to the failure of the original initiative during the 1920s, during which Fred Menzler coined the 'wider field' expression, is salutary. It sought to move on too wide a front, and to move into the jurisdiction of the accountants. We are most likely to be successful in natural developments from current core areas, which are new, and not within the core competence of other professions.

Option pricing is cited as a difficult area, despite the relevance of actuarial mathematics to its problems, as we were not involved in the original development. Our recent changes to the membership categories give us the ability to recruit those working in this and similar areas, but the author is sceptical about our chances of success, and makes the point that newcomers, who have not followed the traditional route, will not share our sense of community. In ¶11.4 she raises the possibility of a backlash from existing members. I consider this to be too pessimistic; we are offering Affiliate membership, not Fellowship, and only the latter allows the giving of actuarial advice. If we succeed in moving into such an area, we can hope that new practitioners will join us and that existing practitioners will upgrade their class of membership. If exemptions are available from all except the final examination for holders of specialist degrees, the route to Fellowship for upgraded Affiliates should not be seen as inconsistent.

The existence of disciplinary powers is included in the author's discussion, in Section 3, on the 'Definition of 'Profession'' as one of the essential organisational elements. The recent reorganisation of the IAA has included a requirement for each full member, normally a national actuarial association, to have an appropriate disciplinary scheme.

The actual operation of disciplinary schemes in the U.K. and elsewhere has proved difficult in the small number of cases that reach the stage of formal investigation. The introduction of lawyers, and the necessity to show that natural justice has been preserved, lengthens the time scale and increases the expense incurred, often totally disproportionately to the seriousness of the case concerned. We have to regard this as a necessary evil and part of the cost of maintaining a self-regulatory body not directly controlled by government. In retrospect, perhaps the situation when I entered the profession was ideal; we had thought ourselves a disciplined profession for over a century, but had never had an actual case. However, we had no idea how impractical our procedures, which then included an appeal to the whole membership, would prove in operation.

I am leaving it to others to comment on the description, in ¶10.3.17, of the Actuarial Control Cycle as: "the epitome of an abstraction which has been emptied of content". The author clearly regards it as an exercise bike, which may keep us fit, but does not take us anywhere.

Mr G. D. Clay, F.I.A.: The paper has caused me to review a number of concepts which I had always taken for granted. In particular, the normative and organisational aspects defined in ¶3.2 affect me in my capacity as Chairman of the Professional Affairs Policy Committee (PAPC), which is charged with the maintenance and updating of the Manual of Actuarial Practice (MAP), and, in particular, the professional conduct standards (PCS) incorporated in that. It seems to

me that the PCS are fundamental elements of the normative aspects, because it sets out the profession's ethical standards and our aspirations to provide a service for the public good. It also forms the foundation on which our disciplinary process is based. It has moved on from the time, as the opener wrote, about appealing to the whole membership. As the PCS are the basis of our disciplinary process and our aspirations, it is important that we strive to improve it.

As a profession, we are currently evolving from being principally concerned with risk sharing in with-profits life assurance or defined benefits pension schemes, which are areas of unchallenged actuarial expertise, to also encompass risk transfer, or, more generally, the wider fields, where actuaries are, in some sense, competing with other experts who may, or may not, be members of a profession in the full sense, as defined by the author.

As recognised in Section 2, this has potential to weaken the ideology and impact adversely on the effectiveness of self monitoring. As a profession we have, therefore, implemented the compliance review study, and the outcome of this will be discussed here and in Edinburgh on different days in February 2000. Has the profession understood that this extension is a quite probable consequence of our envisaged move into wider fields?

I introduce the term 'regulatory arbitrage' as shorthand for the possibility that a client will select an expert on the basis that he or she is lightly regulated by the profession, or, indeed, not subject to any such regulation, and is, therefore, able to give the advice which the client wishes to hear. Perhaps, more accurately, the adviser is unable to insist on giving advice that the client does not wish to hear.

We are accustomed to our statutory roles as Appointed Actuary or Scheme Actuary, which effectively preclude regulatory arbitrage in the risk-sharing areas. The PCS and their predecessors have, therefore, required members to conform to standards that may be commercially onerous, for example by insisting that, before a member accepts a statutory appointment, he or she must contact the incumbent — I think that the wording is: "if it is physically possible," that is that they are not dead or insane — to ascertain whether there is any reason not to accept the appointment, or if there are any areas that are potentially problematic. The profession has effectively applied similar standards to all actuarial work. That is where we are beginning to get some problems.

The PCS were introduced with effect from 1 July 1999, but they replaced long-standing earlier guidance contained in the 'Memorandum on Professional Conduct' and 'Advice on Professional Conduct.' The PCS seek to recognise that actuaries working in non-traditional areas, and hence in competition or co-operation with other experts, cannot be required to comply with similar professional requirements, because regulatory arbitrage would tend to preclude their employment. The PCS, therefore, introduced the concept of actuarial advice with a slightly difficult definition as: "advice given by an actuary, which the recipient reasonably believes to be given in a professional capacity as an actuary." This definition reflects the fact that it is not practical to define actuarial advice, either as: "all advice given by an actuary or firm of actuaries," or, alternatively, as: "advice which may by statute be given only by an actuary."

The PAPC is experiencing some practical problems with this definition, both in the traditional areas and in the wider fields, and we would welcome comments that may assist us to amend or interpret the PCS in a way that is both practical and also supportive of our position as a full profession, while we seek to extend our penetration into non-traditional fields.

The conundrum that we face is that, apart from statutorily defined actuarial duties, there can be no clear definitions of the boundary between advice which requires actuarial expertise and that which we believe can benefit from actuarial expertise. This reflects the reality that many other experts now can use actuarial techniques.

Mr S. A. Carne, F.I.A.: I read the paper at the time when I was starting to draft a strategy proposal for the profession's wider fields activity, so I found the paper very helpful in crystallising some of my thoughts. I wish to focus on the line in the profession's 'Visions & Values' statement which sets, as an objective for us, an increasing involvement in an ever widening range of businesses.

For the purpose of my analysis, I divide professions into two categories. The first category of profession is built around putting into practice recognised knowledge — which I shall call Type A professions. The second category of profession uses its knowledge base as a launch pad from which to build a wider range of skills — which I shall call Type B or ‘springboard’ professions.

For example, at the Type A end of the spectrum, the legal profession is built around the practice of law. Few clients would go to a law firm for anything other than legal advice. Medicine is another example of a Type A profession.

An example of a Type B profession is accountancy. It is a profession which is commonly entered into by individuals who wish to use the qualification as a springboard to a career in business. As we know, accountants’ careers do not generally depend on the core skills of recording, checking or budgeting transactions:

- Accountants in industry build their careers around the experience that they gain in managing and controlling businesses.
- Accounting firms have, over the past 25 years, branched out into an ever widening range of professional services.

In the actuarial profession, we have tried to get the best of both worlds:

- We generally describe ourselves in Type A language, but we ask the world to treat us as Type B when they hand out work or jobs.
- We educate ourselves for both Type A and Type B, and then we wonder why it takes so long to qualify.
- We have regulated ourselves as Type A, with only the minimum necessary concession to Type B activity, and then we are disappointed when those who build a Type B practice refrain from describing themselves as ‘actuaries’, for fear that they would put themselves in breach of the professional code if they did.

However, there is good news. As some of you already know:

- The profession’s brochure, *Making Financial Sense of the Future*, which is to be re-issued within a matter of weeks, is now written, unmistakably, in Type B terms.
- The Education Strategy Review is currently advocating a distinctly Type B approach — one which will equip future actuaries for an ever-widening range of businesses. Although there are some remnants of Type A thinking which may have unwanted consequences, I still hope to persuade the Review Committee to remove them.
- As you have already heard from Mr Clay, the difficulties in the professional conduct code have been recognised and are being addressed.

I take a positive view of all these developments.

Mr G. Ward (a visitor, Deputy President, Institute of Chartered Accountants in England and Wales): This is a very stimulating paper, and perhaps the reading of one or two paragraphs in the paper might indicate that, at some time in the past, our two professions have been somewhat antipathetic one to the other. I have never viewed it like that. I have viewed us as sister professions, working together on a number of common problems, the measurement and reporting of matters regarding life assurance, general insurance and pensions. We have worked together recently on the question of professional liability and on the drawing up of the Limited Liability Partnerships Bill, which is, at present, before the House of Lords. We have worked together closely on questions of professional regulation.

My thesis, now, is that professional bodies need a new style of relationship, both with their members and with the public, if they are to be relevant for the 21st century. I make some comments from the point of view of the Institute of Chartered Accountants in England and Wales, but there are, perhaps, some parallels in relation to the actuarial profession, and, indeed, to others.

Late in 1999 we surveyed some 4,500 of our 116,000 members to find out what they thought

of us, what they thought of the world, and what we should do about the world on their behalf. The thing that members said was more important to them than anything else, so far as their professional body was concerned, was to maintain and to enhance the reputation of the profession and the reputation of themselves as individual professionals. I believe that that reputation cannot now be asserted and assumed, as it has been in the past. It is a combination of things, based on our members, on their integrity and on their objectivity. Those two factors are why it is so important that approved practical experience, under the supervision of existing practitioners of repute, is such a key part of training, and must remain so.

It cannot be assumed that what has applied in the past continues to apply in the future. The days of the public saying: "Tell me"; of the profession saying: "Trust me"; and that being enough, are past. Now, reputation must be earned, it must be earned today and demonstrated today. It must be earned tomorrow and demonstrated tomorrow again and again. The public and our members are saying of us: "Show me"; and we must do that showing both clearly and honestly.

It means that we must listen to those who are stakeholders in our profession: to our members, to our clients, to the employers of members, to government on behalf of the public interest, internationally, both in the context of members overseas, but also in the effect of international bodies on the practice of our members within this country. We now have the benefit of thoughts and rules and regulations established by the International Accounting Standards Committee, the International Federation of Accountants, the International Auditing Practices Committee; and, in all of those cases, we also have the benefit of contributing when those rules are set.

We also have the rather more dubious benefit of, in many cases, being subject to the edicts of the Securities and Exchange Commission of the U.S.A., and we do not have any representation. We are not able to influence the rules and regulations by which it seeks to affect the way in which our members carry out their business within the U.K., never mind outside these shores.

So, communication with stakeholders is something that is absolutely vital. We need to be open in our dealings. We need to take action, and we are in respect of many matters: education and training, where the new ACA — something that, in our view, combines rigour with cost effectiveness and with up-to-date techniques, such as web-based training — is there to bring us into the future; and regulation, where, as one of the member bodies of the Consultative Committee of Accountancy Bodies, we have forged a new and open regulatory regime with the Government, that deals with matters such as professional independence and professional discipline. The process of discipline itself must be, and be seen to be, firm, fast and fair so far as our members are concerned and so far as the public and their clients are concerned.

We have invested much in digital technology that communicates both with our members and with others. This digital technology is not just to show and tell, it is actually there in order to consult with members and with the public, to listen to members and to the public on a scale, on a breadth, and with a focus that was hitherto unimaginable.

The time has come to abandon the master/servant relationship between Institutes and their members, which has characterised the past, in favour of working in partnership with our members to take ahead our people, our technical work, and to develop the reputation of our professions as a whole. This is particularly important in the area of education and training, in order to attract the best possible candidates into our professions, because these are the *sine qua non* of a successful future.

In conclusion, governments and voters are now sceptical of professional privilege and assertions that: "If it is all too difficult for you, leave it to us and trust us". If we fail to earn and sustain trust through open demonstration of competence, of integrity, and of objectivity, we are dead; but I believe that our great professions will show that they live in, and understand, the real world, that we will deal with these challenges, and that we and our members together will prosper.

Mr C. Pullan, F.I.A.: I begin by contrasting the role of the actuary with activities which are not professions.

The Company of Actuaries is one of a hundred Livery Companies in the City of London. Most would not be regarded as professions, so it is interesting to see what are its criteria. The first criteria for a new livery company is: "its profession, trade or craft must not already be represented among the livery companies." Chambers Dictionary defines a craft as: "a creative artistic activity involving construction". We do not make anything, so we are not a craft. A trade is defined as: "an occupation, way of livelihood especially skilled, but not learned, shopkeeping, commerce, especially as opposed to a profession." We are an occupation; we are skilled, but the key element is that there must be an element which is not outright commercial. It is, therefore, the ability to provide advice which takes account of other than commercial considerations which, to me, is the hallmark of a profession.

One risk I can see is that too much of our work is being reduced to that of an expert calculator without the exercise of judgement. We have all heard of actuaries being described as 'a sort of accountant,' and there is little doubt that the fight for separate recognition must have been a driving force behind the early history of actuaries. However, any profession must keep itself up to date and move with the times. For example, there is a livery company called 'horners', and they now encompass plastics.

In Section 9 reference is made to changes in society affecting the actuarial profession. I refer to two others, which have been mentioned by earlier speakers: contract development and litigation.

There is no doubt that the trend towards unit-linked contracts has reduced the role of the actuary in life assurance companies. This will continue, particularly with the consolidation of the industry. Another area is pensions. Stakeholder legislation could easily create a situation where there is a major trend to defined contribution schemes, where there is no requirement for an actuary. These effects could seriously undermine two of the core activities of actuaries in the U.K. That worries me, because one of the tags that I relate is that the reputation of a profession is how well it does its core activities, and its success is how well it extends from those core activities.

The other change is litigation. We are becoming a litigious society, where judgements are increasingly challenged in the courts. There is also pressure from politicians and consumerists. Consequently, we will live in an era of regulations, and, if actuaries are to have a role, we must continue to prove that we are worthy of it. It may be that strengthening the practices within the profession will be necessary. For example, in my experience, issuing guidance notes does not automatically mean compliance.

Unfortunately, I suspect that we rely too much on the absence of complaints, and only have occasion to consider just a few cases at a disciplinary level. Maybe we need more monitoring of standards within the profession. Our predecessors earned us the right to be members of a profession. Over the next few years we are going to have to work hard at being a profession, and to continue to show that we have that right.

Mr T. S. Shucksmith, F.I.A.: I found ¶3.1 particularly apt. It says that the term 'profession' is used by different people to mean different things, and that different occupational groups tend to tailor their definition to suit the characteristics of their group. I have long felt that this is true of actuaries, who pick and choose among the hallmarks of a profession, as suits their predominant circumstances.

One of the hallmarks of a profession is a high proportion of its members being self-employed. This is certainly true of actuaries' most direct reference groups in the U.K., namely accountants and lawyers. This hallmark is not recognised in the paper, although it is indirectly ridiculed as being a hangover from the medieval guilds or as an activity of anachronistic gentlemen. Just as a skilled manual worker can become his own master, as, for example, a plumber, professions offer people of higher intellect who apply themselves to acquire appropriate specialised skills the opportunity to become their own masters, as sole proprietors or partners.

A master provides direct services to his customer, whereas an employee is under a contract of service to his employer. His employer is his master. He is a servant.

Regrettably, a whole generation of actuaries has been brainwashed into believing that there is no difference between advice given by a self-employed actuary and advice given by an employed actuary. This is not true. There is a difference in legal relationships as between an employed actuary and the client on the one hand and the self-employed actuary and his client on the other hand. In the former case the contractual chain to the actuary is indirect; the links go from the client to the actuary's employer, and then on to the actuary through his contract of employment. The advice is given by the actuary to the client, but there is no direct contractual link. On the other hand, if the actuary is self-employed, the advice and the contractual relationship form the same link. It makes no difference to the contractual relationship that a named actuary is given notice of appointment under the Pensions Act or that the client can complain to the Institute about a breach of a code of conduct.

I assert, therefore, that there is a difference in circumstances between contractually indirect advice and contractually direct advice. The capacity in which advice is given, whether as a master or as an employee, is important. As a businessman myself, I always want to know in what capacity the person with whom I am dealing is acting. I want to know with whom the contractual buck stops, and who profits from the contract. Advice often ends up with a recommended course of action. Advice is a subtle commodity, and can be significantly affected by factors other than pure logic. It is important to know where the adviser is coming from, and this is related to the capacity in which he or she acts. The previous code of conduct required an actuary to state his or her capacity, but that was widely ignored or abused.

Capacity also matters to me as an actuary. It is not just that I took up the occupation of actuary in the hope of becoming a master rather than a servant. Being a master for the last 20-odd years has also enabled me to follow my own values. Firstly, I have been able to give contractually direct advice, in which I believe. Secondly, I have been able to do something about practices which I considered to be wrong. I have always considered that final salary schemes were grossly unfair to early leavers. As early as 1981 I designed and set up a final salary scheme, with the employer's full blessing, which offered full prospective actuarial reserves as transfer values. Also, I considered it wrong that members should have no right to discretionary pension increases, even when they were funded for. I designed a scheme giving an entitlement to pension increases based on a with-profits approach to the scheme as a whole. Thirdly, I was able to avoid situations where I could not give rounded advice.

To conclude my remarks on the hallmark of self-employment, I cannot do better than to quote a former Vice-President of the Institute, who put the point succinctly in a letter to the *Financial Times* a few years ago. He wrote: "Actuaries, like all true professionals, are employed by their clients". It was a pity that the member concerned, like most actuaries, was actually employed by his employer. I submit that he unwittingly said what we all know, in our hearts, to be true.

The second issue is that of values and beliefs. These are called normative elements in the paper, and it seems to me to be somewhat dismissive of such elements. They are ridiculed as attributed to anachronistic gentlemen. I believe that values and beliefs are very important hallmarks.

What do we profess? What do we believe in? Can there be a vocational element to being an actuary? I cannot identify with the slogan: 'Actuaries make financial sense of the future'. It is too glib. It is too general, and we know that it is not literally true.

A few weeks ago I had a conversation with an engineer. He asked what I did. What did an actuary do? What was the end product? In the past I would have muttered something about actuaries being valuers of long-term financial contracts, often involving contingencies of human life, and this leading to actuaries being experts in the affairs of life assurance companies and pension funds. However, I said that the purpose of actuaries' work was to deliver financial security, especially over the longer term. Here is something worthwhile, in which I could believe. This was a purpose, which people could even call a vocation.

Sadly, during much of my 30 years' membership of the Institute the actual purposes have been very different. With final salary schemes we were in the handcuff business, delivering financial insecurity to early leavers. Life assurance companies used high pressure sales techniques to sell inappropriate products with high lapse rates and poor returns to financially ignorant customers. Parts of the life assurance and pension industry are aimed at tax avoidance. Can we not purify our act, turn to basics, and purposefully pursue the provision, especially over the longer term, of financial security?

In ¶5.8.7 the author writes: "If a profession relies on traditional sources for its status, it will be in trouble if society, as a whole, rejects those traditions. This rejection is occurring as hereditary class systems yield to meritocracy (in principle, if not in practice)." I liked the words in brackets. A year or two ago, after a joint meeting of the Association of Consulting Actuaries and the Association of Pension Lawyers, an actuary, whose name and social background I do not know, said: "Isn't it noticeable how much more blue blooded the lawyers are than the actuaries." It was true. Whilst I had often thought it, I was surprised that he said it. It showed me that people are aware of social background, and that it is of some importance, not paramount importance, but a factor. I suggest that the Institute should examine, very carefully, why it has not been getting a representative proportion of public school boys and girls. A classless profession becomes a profession without class.

Finally, the author is far too accepting of the role of corporates and of professionals being servants of corporates. It looks to management programmes beloved of corporates. Big corporates may take the financial headlines, but a large proportion of activity is carried out in and by smaller organisations. It would be ironic, indeed, if the Institute, having pushed the role of actuaries as employees, found itself made redundant by the corporates, as the paper points out could happen. I hope that it will not.

Dr M. R. Hardy, F.I.A.: I think that this is the first paper I have read on the actuarial profession that rings true, and that does not lose its way in self congratulation, which is usually one of our great strengths. Where previous papers exploring the future of the profession have discussed new fields waiting to be conquered, the author asks whether we can survive as a profession, suggesting, in Section 12, that, perhaps, the professional body may be supplanted by corporate bodies.

In Section 3 the author discusses the definition of a profession; the naïve version, promoted by ourselves, involves extensive educational barriers to entry, public good, effective self regulation. The more cynical view is that a profession is an upper class closed shop, protecting its members, artificially and, perhaps, arbitrarily denying entry to others. To avoid deserving the charges of the cynics, we must ensure that our education system is fair and relevant, and we must regulate our membership in a way that is open and accountable. I am not sure that we currently achieve either of these.

In our examination system we do not flinch at pass rates of less than 20%; there was no outcry when it was disclosed, some years ago, that something like 70% of candidates fell within 5% either side of the pass mark in the later examinations (only a small minority of whom would pass); this reduces the examination to a lottery for these 70% of candidates. It also raises the issue of the effect of unconscious discrimination, which could easily be averted by introducing an anonymous examination system.

On discipline and self-regulation, it appears to be extremely rare for a discipline case to be proved, or even reach the point of formal investigation. It is interesting to compare the profession in Canada, where service to the public is emphasised as part of the responsibility of a professional actuary, with that in the U.K., where service to the client appears to be paramount. In Canada, around 60 disciplinary cases have been fully investigated over the course of around the past four years, and this is from a membership of just under 2000. I know this because the membership is kept fully informed of charges, evidence and findings, as is the public. The process truly appears accountable. In comparison, the Institute's processes appear secretive and self-protecting.

In Section 7 the author discusses the decreasing role of the nebulous concept of ‘professional judgement’. Knowledge, she says, is available more openly. This means that we must ensure that professional judgement is supported by science. We are disparaging of mathematics in the U.K., sneering at ‘technicians’. In developing some course materials a few years ago for the mathematics of finance, I was asked if I really had to use calculus — elementary differentiation — as we did not want to discourage non-mathematicians from entering the profession. The calculus stayed, but so did the attitude that the actuarial profession should no longer be associated with mathematics, that this will somehow stop us from being, and being seen as, good businessmen and women. In fact, mathematics is the foundation of this profession; it is our competitive advantage. We maintain our edge by combining mathematical skill with business acumen, and it is important not to devalue the importance of mathematics. That is especially true, at the moment, for financial mathematics. It was a lack of rigorous training in probability and statistics 20 years or so ago that caused us to take so long to recognise the importance of financial economics and financial mathematics in the treatment of non-diversifiable financial risk. This was exemplified in a discussion, some time ago, where a senior member of the profession was asked to justify the teaching of life contingencies without mentioning the word ‘probability’. He said that an actuary should be someone who instinctively knows when probabilities should be added and when they should be multiplied. Unfortunately, however, that does not give us the tools to know when we should be using a risk neutral valuation and when we should be using a real world or premeasure valuation.

In Section 10 the author reveals the true nature of the emperor’s new clothes — the Actuarial Control Cycle is not actuarial at all. It will not provide the edge we need. I am in complete agreement. The Actuarial Control Cycle, so valued around the world, is a content-free zone. The author then points out that we cannot even return to our original premise, that we are the experts in: “all monetary questions involving interest and probability”, as the financial economists know far more than we do about option pricing theory and practice. Nevertheless, in the ‘Vision and Values’ brochure it is claimed that we are the recognised experts in all long-term problems involving finance and uncertainty. When I read that, the cynic in me whispered three words: guaranteed annuity options. In the early 1980s, while many of us were pricing this as a cost free benefit, any options expert would have told us that this was not sensible. Were we blinded by insularity and even professional arrogance? In 1999 we were still holding meetings discussing whether it is reasonable to use the no-arbitrage principle, which merely states that the same set of cash flows should have the same price. We discussed whether we should even look at the work of financial economics; meanwhile, the financial mathematicians just get on with being the truly recognised experts.

While the profession seeks to move into wider fields, some of us worry whether the profession will survive at all. This paper articulates many of our worries, and, perhaps, casts some light on the way forward. I congratulate the author, and I hope, that we do not dismiss lightly the implicit and explicit criticisms.

Professor P. P. Boyle, F.I.A. (in a written contribution that was read to the meeting): The author has given us a perceptive discussion of the role of professions in society and the forces that shape their development. She provides a historical perspective for her analysis of how professions have evolved over time. The author marshals theories from sociology, economics and psychology to examine the issue. This is a thought-provoking paper, which deftly diagnoses some of the challenges that face the actuarial profession.

The author observes that the need for the traditional actuarial functions has declined, and that new specialists have emerged in fields such as finance. Two main responses to this challenge have emerged. The first is to upgrade and modernise the syllabus. This process seems to be under way in both the U.K. and in North America. However, it is not clear how one can add new, and quite difficult, material while simultaneously reducing the time to qualify. The second response has been to broaden the membership by inviting experts from the so-called wider fields to become Affiliates. This corresponds to the Society of Actuaries concept of the ‘big tent’. The

author discusses the challenges that these sorts of initiatives present. Some of the current membership may feel disaffected as others are offered a very painless route to membership in the actuarial community.

The paper notes, in ¶3.1, that the cognitive element is one of the three important characteristics of a profession. This relates to the role of the profession as a learned society. One of the implications in today's world is that the profession has to keep on learning and updating its knowledge base. An important way to strengthen the profession's knowledge base and enhance its expertise is to promote and fund fundamental research in the cognate disciplines. My plea here is for the funding agencies not to insist that proposals be obviously immediately useful and practical. It is more enlightened to promote fundamental research, since, ultimately, this can generate benefits. Isaiah Berlin once described the main burden of his work as: "distrust of all claims to the possession of incorrigible knowledge about issues of fact or principle in any sphere of human behaviour".

Perhaps, one implication of the paper is that we do not have all the answers, and that a little humility may be in order.

Mr J. Hayes (a visitor, Chairman, Occupational Pensions Regulatory Authority): I suspect that the author is aware of the work of Richard Abel, who is a Los Angeles based sociologist of the Marxist school. He said that the principal failing of professional discipline is its irrelevance to the vast majority of grievances that occur today. "Clients everywhere are angry about discourtesy, delay, incompetence and overcharging, yet professional disciplinary bodies, typically, disclaim jurisdiction over negligence or incompetence," was what he said about lawyers, and still does. I do not speak, as a former Secretary-General of the Law Society, from any Olympian heights; only with the envy of observing the profession that does not seem — at least in the public and the media minds — to have any such problems. Although I offer some sort of warnings or general advice, it is generally from the position of saying that you are so much better, but I think that it is important to analyse why that is.

First, as Chris Swinson, a former President of the Institute of Chartered Accountants recently wrote: "It is the professions most likely to be in the public eye or those that the members of the public have to pay for directly themselves and against whom they can most easily pin some feeling that they have been let down." The actuarial profession should not worry about having a low profile. A low profile is a huge unique selling point, and one which you should hang on to for as long as you possibly can.

In one respect, however, you have been pioneers. I have studied professional rules across professions for a long time, and have even given papers on them. The actuarial profession was fairly early into the field in saying that people could be full members of this profession while being employed by, and owned by, an enterprise which was not, itself, comprised solely of members of that profession. The legal profession has struggled with that. There are still rules in audit about the percentage of the ownership of the firm that must be in the hands of auditors for it to retain that status.

You might have had Lord Denning, a mathematician, on your side. In a case in the Court of Appeal, he said that the lawyer who was employed by a commercial employer had just the same rights and obligations as a lawyer as if he had been in private practice on his own. Perhaps, contrary to what one of your speakers said, I do not regard as the ultimate in professionalism to be the one-person sole practitioner outfit. Too much of a profession's disciplinary problems are caused by people who became unclubbable in any enterprise that consists of any more than themselves, and who then wreak their general failings on the others. What is the pre-requisite for full professional independence and interest? One of my former colleagues, an expert in legal ethics, after a conference of similar people, concluded that the only truly independent lawyer was one who had no clients at all!

In your 'Vision and Values' statement you say, quite properly, that, as an Institute, quite separate from the activities of individual members, there is a legitimate goal of pursuing the public good. Instead, perhaps, of concentrating on whether one piece of work down at the

actuarial coalface is truly actuarial or some other activity, it is even more important, when people are employed generally by people who are not actuaries, that the professional body should pursue fearlessly what it considers to be public interest themes, even though, at the time, sometimes it may cause very considerable embarrassment for some high-ranking members of that profession employed by those non-actuary-owned institutions.

There was a case in 1999 — the fallout of which continues — before the General Medical Council, in which the General Director of the Bristol Group of Hospitals was thrown out of his profession for gross professional misconduct relating to those children who died in the Bristol hospital. One of his defences was — and it is certainly what I would have advised — that, in that capacity as a chief executive, he was not acting as a doctor at all. The General Medical Council said ‘no’, and so did the Privy Council. They said, in effect, that, in that position, he was able to influence what other professionals did, and that it was his job to ensure that they lived up to those professional standards, and because he did not, he lost the right to belong to his profession.

Professor P. J. Corfield (a visitor, Professor of History, University of London): I work on social and cultural history, including the history of the professions. The author asks us to look at present practice in terms of the long view, the long swing of the past, but also to look ahead to the future.

I have one point to make arising out of my own research, but I first respond to some discussion points already made.

Speaking as an educationist, I was surprised to hear that you have examinations that are not anonymous; and, without entering into the rights and the wrongs of this, I predict that this will be a practice that will not long survive. That is, the process of anonymous marking in all the professions and in the university system and the education system, generally, is a visible long-term trend, that you will be part of sooner or later.

It is often mentioned that we are living in a process of a knowledge explosion. It is certainly true that we are living in the context of information explosion, and many, indeed, know what the phenomenon of information overload means, but I do think that there is a distinction between information and knowledge; and, as educationists and as professional people, one of our strengths is that we are processing and understanding much of this information into a formalised body of professional know-how.

The long-term prospects for the profession are good, in the sense that it is wielding and understanding knowledge, as opposed to mere information, that is vital, important and not going to go away.

However, my major point is that this should not, by any means, allow us to be complacent about the process of professionalisation, although I am very pleased that my own profession, teaching, is professionalising right now, and getting us into institutes and organisations.

The point that I want to make is that the Anglo-American tradition of self-regulation is a very interesting one historically. It clearly does depend on the existence of a social community among the professions that precedes the state giving the power of regulation. The first statutory empowerment was to the Law Society in 1843, but the Law Society had been existing for many years as an informal society, debating its own rules and procedure, but also advising governments informally on issues relating to law, and informally vetting candidates for enrolment as attorneys. They had been doing it for just over 100 years before they were statutorily empowered. So, it is partly the process of the state allowing professional bodies to regulate themselves, partly because there is a professional ethos and a group of people meeting and discussing. It was via clubs, societies, dining groups, with sociability, as well as via formal educational and formal aspects. So, this process has a long history.

It is an element of all the professions and would-be professions that continues to this day, and at meetings like this. Meetings like this are part of a long tradition of the formation of a professional community, and passing on the set of standards and values that we have all agreed are part of — not always upheld perfectly — the ideal and ethos of a profession.

How are we, and this applies to the professions generally, going to build this informal *communitas* among the professions into a global *communitas*? This is a process that is happening, but it is one in which we need to think very carefully how this can happen without accusations of cultural predominance from the English speaking world. One thing to be looking at is having ways of getting online web sites, newsletters and other communications instantly and automatically translated into other major languages. Another area, which relates to a large number of social sensitivities, but is also a very important way of creating *communitas*, is the international history of joking. It is very common for professions to collect jokes about their own profession. This is a form of group bonding. In fact, actuary jokes are best known to fellow actuaries. They are not widely known on the jokes circuit. These are ways of international transactions, often anti-actuary jokes are related by actuaries. Joking acts in a satirical way, holding up a mirror of what one should not be, in order to advocate what one should be. International joking and international conviviality are areas of tremendous social sensitivities, and the profession should be thinking about this so that a universal professional ideal can be translated into reality without accidentally being exclusive — for example, in gender terms, in religious terms, or different national traditions, or whatever.

So, one of the areas to think about is how to make the informal creation of *communitas*, which is a long part of the history of the profession. It is older than the formal processes of regulation, and it is one that is continuing now, and a very good thing too. So, we now have a new test of creating a global community among so many different cultures and approaches, and all the rest. I do not have the answer to how that is done.

Dr P. Wilkie (a visitor): I am not an actuary. I am the wife of an actuary, and a social scientist. One aspect of the paper concerns self-regulation. I am currently doing some work with the medical profession, which is a profession that is struggling to maintain self-regulation. It may continue to be able to do so, but it will be with the help of the laity, of patients or consumer representatives.

A second point concerns revalidation. How do people who qualified as actuaries a long time ago keep up-to-date, and how do their clients know that they are up-to-date? The medical profession is struggling with that at the moment, and is having to look at revalidation. The author mentioned, in her paper, about continuous professional development, but that needs to be very tightly controlled in order to be credible to an increasingly cynical public.

Mr J. Goford, F.I.A.: My paper (Goford, 1985) had the title 'The Control Cycle', not the Actuarial Control Cycle. I never claimed that it was actuarial. The 'actuarial' was added in Australia. It was always a teaching tool and a working tool, and, indeed, it is a consulting tool. As a teaching tool, it brings together the various disciplines to show their similarities. As a working tool in a life office, it brings together the completeness and mutual exclusivity of the financial drivers of a life company, and, as a consulting tool, it is indeed empty, and allows the client to provide the contents. So, it is an enzyme and a catalyst, unchanged by the contents.

Mr P. A. C. Seymour, F.I.A. (closing the discussion): When I am asked to close a discussion, usually I can understand why I was asked to do it. However, in this case it is less obvious to me. It is probably to do with the last four sections of the paper. The opener represents the Professional Affairs Board, whilst I think that I have been asked to close the discussion wearing a more wider fields hat, a subject close to my heart. I started with an interest in health care, went through wider fields, got involved to some extent with damages, and more recently am focusing on the question of Affiliate members and how we might improve our position in the banking sector.

In the definition of 'profession', in ¶3.2, the author states that one of the main elements is 'organisational'. Under this organisational heading I refer to the international aspects of what is said in this paper. In particular, I thought about the question of the difference between the 'Anglo-Saxon' concept of a profession (or possibly even the 'British' concept of a profession,

since it seems to be weaker in North America), and what I will call, for this purpose, the 'European' university-based model with state controls. The opener was positive that the creation of the International Actuarial Association would ensure the survival of the Anglo-Saxon model, albeit, as the author puts it in ¶8.10, by bending to: "the winds of change which are blowing towards ever greater quantification", to which she attributes the success, dare I say it, of the accountants.

I was encouraged by what Mr Ward said. Although he admitted that, perhaps, the U.K. accountants did not have the clout that they might wish in the context of North America, nevertheless dramatic changes are occurring in the international field. I am sure that theirs is a model that we should actively pursue, as we are doing.

Professor Corfield's final question, how to handle this difference, as it were, between the two models raised a very important, if small, point. We have web sites, but we have not translated them into foreign languages. Given that there is a risk of Anglo-Saxon arrogance in the global marketplace, particularly with the French, we might take that point severely to heart, and, indeed, put in some jokes.

My second heading is the 'normative' one, which I have called 'discipline and standards'. There is clearly a tension. The opener referred to it at the outset. Our monopoly in our core area depends on public trust, which, in turn, requires the maintenance of very high standards, but maintaining them, and being seen to maintain them, becomes increasingly expensive. To get round this the author has postulated some different ways in which the organisational structure might be changed.

Mr Clay said that some of the added expense, that is compliance reviews, was a consequence of our venturing into the wider fields.

Mr Sharp [who spoke at the meeting, and who subsequently submitted an amplified written contribution for what he said], who has done tremendous work over the years for the profession in the moral/ethical area, said that equity was fundamental. He thought that the author had missed the point. I recognise that she has not, but her concern was that our traditional basis of fairness and equity — for example, with-profits — was actually declining, a point also echoed by Mr Pullan. Mr Shucksmith came in very strongly with the emphasis on values. I agree with all those speakers.

Mr Ward, surprisingly to me, relied on 'articles' for a means of transmitting the ethos from one generation to the next. I am not arguing that the ethos is not important, but it was interesting to hear that 'work under father' approach. We have some post-qualification experience, but, perhaps, we could think harder about that aspect. He also spoke about many other things which are echoed in what we are doing: the rapidity of the disciplinary process, and so on. In effect (although, with a base of 116,000 members, I would feel more positive myself!) he was giving us an encouraging lead.

Mr Pullan also recognised the need for more compliance. This adds to expense. Dr Hardy said that, although we purport to have discipline, we do not actually exercise it, although she did not put it as bluntly as that. She pointed to the Canadian experience of which we are aware. We are also aware of the expense that goes with it. It is a difficult tension to balance.

Again, this point was emphasised by Mr Hayes, who reminded us of the scepticism which can very rapidly emerge about self-discipline. I liked his suggestion, in this context, that our low profile is a unique selling point. Dr Wilkie, briefly and succinctly, drew a parallel with the medical profession to the same sort of issues. This area is one which has come through very strongly as a point for us to pay close attention to.

My third 'cognitive' heading is wider fields and the future. I am disappointed in the number of futuristic views that we had. As an allegorical tale, in the 1970s I disliked the way that accountants, who were no longer working in audit firms, would describe themselves as having 'left the profession'. This paper has helped me understand why that was. It was difficult for me, because I was then an employed actuary, and I thought that I *was* in a profession. The paper has touched on the distinction between independence and employment, as have many subsequent speakers. Pondering this question, I wonder, like the author, whether the accountants had not

got it right! Perhaps what we need is a clear definition of where our 'profession' is bounded — namely, in the (ever increasing) area where the state supports our monopoly — with the greater proportion of actuaries actually, in 'accountant-speak', having left the profession, or, in other words, using their actuarial background and training in all sorts of different commercial roles.

A further thought, illustrated by the Mexican experience, is that the university-based model may, indeed, have something to say for itself in making expansion easier. Certainly, at this moment, our education is firmly headed in that direction, as a number of speakers have mentioned.

I liked Mr Carne's distinction between Type A and Type B. It was a very useful analysis. Unsurprisingly, since he and I have worked together in the wider field's context over the years, he was supporting some of the things that I have just said.

Mr Shucksmith picked up the distinction between the employed and the self-employed. At least he will have seen that I am beginning to learn the difference between the two!

Professor Corfield was very encouraging about the knowledge base that will form the fundamental area for the substance of our continuing profession.

Although this paper might cause gloom, even so I remain extremely positive. I see our younger members particularly strongly pushing out at the frontiers. The Staple Inn Actuarial Society, last week, discussed another thought-provoking paper ('Making Actuaries less Human', by Nigel Taylor), based on the behavioural pitfalls that stand in the way of exercising that professional judgement which this paper argues is a necessary ingredient in the mix.

In the editorial of the next edition of *The Actuary* magazine there is a clarion call for members to broaden their knowledge, even to the point of awarding CPD points *only* for this.

My still early association with banking has also highlighted how many of our younger members are already involved. We have had some encouraging early responses to our test marketing of Affiliate membership, though not from all quarters. Unsurprisingly, the closer their field of work to our own core, the more warmly prospective Affiliates will tend to respond.

The Presidents will shortly be asking every member to consider who might value Affiliate membership, and I hope that we will respond energetically with suitable introductions.

With all this enthusiasm for, and focus on, the opportunities for change, as well as on the real obstacles in our path, I remain confident that we will succeed.

Ms C. S. Bellis, F.I.A. (replying): I value the sense of shared commitment that comes from membership of a profession, and, not least, of the benefits of occasions such as this meeting. I would hope to see the concept of a profession survive, but only if it honestly delivers on any benefits for society which it claims to provide. Mr Sharp is disappointed that I omitted any consideration of how values are instilled, and Mr Shucksmith feels that the paper ridicules the traditional values of the English gentleman. I certainly did not intend to ridicule those values. What concerns me is that we should not make claims to moral superiority, nor to superior expertise, without any mechanism for backing up those claims. The organisational form which we call 'profession' has, in the past, to some extent, been accepted as a way of ensuring these claims. The paper argues that this acceptance has multiple origins, which may not have much to do with any reality about how well professions deliver what they promise.

I feel that two encouraging themes have come out of the discussion. The first is that there is an awareness within the profession of the sorts of problems which I raise in the paper, and a willingness to act. If we tried to deny the forces of change and the difficulty of dealing with them, then I would be very pessimistic about our profession's prospects of survival.

The second theme is internationalisation. The opener's contribution mentioned the moves towards a world-wide profession, with developments such as the new-look International Actuarial Association. I was very much struck by his comment that the professional bodies were organising globally well ahead of any moves towards world-wide government, or even world-wide regulation. While, naturally, I was aware of the efforts being made at internationalisation, and the fact that the British model of actuarial professionalism was, to some extent, being exported to new regions of the world, I had not reflected before on the relative role of government and profession in this context. In ¶6.3 I summarise an explanation for the different

development of professions in England, France and the U.S.A. in terms of the political history of these countries. Where central government was strongest, the professions were weakest. In global terms, there is certainly no strong central government. Perhaps, therefore, internationalisation will provide the space for the professional role to flourish. Professor Corfield also reminds us how the social community of experts meeting and discussing together historically laid the foundations for the state giving the power of regulation. We can see the changing nature of the International Actuarial Association as a latter-day example of this process. When I was writing the paper, all the developments in society which came to mind seemed likely to undermine the concept of the profession. The development of the international community, and the need for a global approach to problems, may be a force in the opposite direction, in favour of the survival of the professional role. The additional challenge in globalisation, as Professor Corfield points out, is how to foster the sense of community which lies at the heart of a profession.

The President (Mr P. N. Thornton, F.I.A.): Actuaries are proud of belonging to the actuarial profession, and it is particularly important that we stand back from time to time and look at the meaning of 'the profession', and where the professions, generally, are headed. This paper has been very helpful in enabling us to do that.

There are quite a few themes in the paper that I could pick up on. I will not do so in the interests of time, but one chord that was particularly struck was the reference to the tension between scientific theory and traditional professional judgement. Despite the fact that we do occupy a medieval hall, we have had some extremely healthy debates in this hall, testing traditional thinking versus new ideas. We are in good shape on that score.

Another theme was the question of professional judgement and whether our liking for the exercise of professional judgement is all to do with personal gratification, rather than giving better advice or doing a better job for the public. On the other hand, people do talk about careers being rewarding — the exercise of professional judgement is rewarding, and that, in turn, attracts good people into the profession. So I would be loath to see professional judgements totally replaced by scientific theory.

The key point in the paper for me was made quite early on, in the historical section dealing with when the professions really started in the 19th century. There was an emphasis placed on trust. As the profession moves forward into the future, the key thing is to retain that trust; trust, both in our technical expertise and in the integrity of our behaviour. How we interpret that, and how we achieve that trust, will change quite significantly over time. For example, in the actuarial profession, currently, we are looking very hard at the issue of monitoring compliance with our practice standards, and we have been working very hard in recent years on continuing professional development, which is receiving increasing emphasis in the whole concept of actuarial training.

The last point I will react to is the question of Affiliates. The author and one of the speakers were obviously concerned that the introduction of some non-actuaries into the profession as Affiliates, or, indeed, as Honorary Fellows, could produce a negative reaction among the members, that could, in some way, undermine the cohesion of the profession. I see it the other way (as did the closer). It is bringing in Affiliates and Honorary Fellows who will ensure that we are living in the real world, that we are relating to a bigger picture around us. It is those people coming and playing a part in our profession that will help us maximise our value to society, and will, indeed, help us to modernise ourselves and go forward strongly in the future.

It remains for me to express our thanks to the author, the opener and the closer, and all who have participated in the discussion. Thank you all very much indeed.

WRITTEN CONTRIBUTIONS

Mr C. D. Daykin, C.B., F.I.A., Hon. F.F.A.: I very much welcome this paper and the opportunity it provides to reflect on what makes us a profession. In the professionalism course

for newly qualified actuaries we ask the participants to reflect on professionalism from three points of view:

- what does the public stand to gain;
- what do members gain; and
- what do clients gain?

The danger for the profession is that the public sees the members as the principal beneficiaries of belonging to the profession. Our code, and that of other professions, however, tends to focus on the fiduciary relationship with clients.

This is certainly of great importance, and is in line with professions such as medicine and the law. However, one of the contributions of the actuarial profession to the wider debate has been our insistence on applying this concept also to the employed actuary. This extension came under attack from at least one speaker at the sessional meeting.

My own belief (albeit as an employed consulting actuary, with total professional independence) is that the issue of independence is a sterile debate. An actuary can only really claim independence if the advice given is totally open and public, and is capable of being relied on by any interested party. The fiduciary relationship which a self-employed consulting actuary has with his or her client (not to mention the receipt of a fee) implies that they are beholden to their client in a way which is not dissimilar from the perceived limitations on the independence of an employed actuary.

Independence is a professional state of mind, rather than a product of the employment relationship. An actuary who tailors his or her advice to the specific requirements of the client, whether in an employed or self-employed capacity, cannot claim independence. In fact, independence is almost the antithesis of the professional fiduciary relationship, and can only be claimed when public interest is the predominant factor, and advice given to the client is also suitable to be relied upon by third parties and innocent bystanders. I was struck by ¶7.3, which suggests that the emphasis on 'expert professionalism' may serve to dilute or diminish a broader 'trustee professionalism', which has more of the flavour of serving the public interest.

It is probably in this aspect, the role of the profession in serving the public interest, that we are most likely to present an image to the outside world which will result in general endorsement of the value of the profession. This is particularly important in countries influenced by the Napoleonic Code, where an automatic reaction to the concept of a profession can be an accusation of 'corporatism' (not easily translated into English because of our different Anglo-Saxon traditions, but possibly equivalent in terms to the English concept of 'self-serving').

It is important, as we seek to define a wider scope of activities for actuaries, that we understand better the ways in which we can particularly add value. The training and knowledge base is important, but even more so are our professional standards, including:

- behavioural norms;
- a strong commitment to keep up-to-date;
- standards of practice; and
- a firm, but fair, disciplinary process to back it up.

I am convinced that our legitimacy as a profession, including the right to self-governance and the privilege of virtual monopoly on certain roles, relies on us having a strong public interest role. Of course, as has been said many times in the public interest debate that we have had over the last few years, defending the public interest is more a role for the professional bodies than for individual members of the profession. However, the efforts of the professional bodies can soon be undermined if individuals do not act consistently with the profession's stance. We have had a number of instances recently where, at least, the public perception has been that individual actuaries did not act in the public interest — maybe because of commercial influences. Cases like this present material dangers for the profession as a whole.

I would like to focus on one other particular theme of the paper, namely the question as to whether or not the concept of a profession and, indeed, of professionalism is a product of Anglo-

Saxon Judaeo-Christian tradition or is capable of being interpreted in any social, economic, political or religious environment. I have experienced this issue from a number of angles:

- (1) in the Groupe Consultatif des Associations d'Actuaires dans les Pays des Communautés Européennes (the Groupe Consultatif), as it sought to reach consensus among European actuaries on particular issues, and then, through the implementation of a common code of conduct, began the process of creating a European profession;
- (2) in the IFAA, and then the IAA, where the process has been further internationalised, albeit with a danger that the sheer force of numbers from the Anglo-Saxon Judaeo-Christian tradition — Americans, Canadians, Australians, South Africans, Irish, as well as the Institute and the Faculty, will swamp other traditions; and
- (3) I have spent much of my time over the last 10 years managing projects to develop the actuarial profession in central and eastern Europe, where an explicit objective has been to develop the actuarial profession.

In taking on the role of Chairman of the IAA Professionalism Committee recently, as referred to by the opener, I feel that my role involves listening to the pleas of different cultural traditions, where there is:

- a different understanding of the profession;
- a different role of the actuary in society;
- not so much of a professional infrastructure;
- not the same history, tradition, or mutual support mechanisms; and/or
- different attitudes of government and other opinion formers.

These factors undoubtedly affect how people view the profession. A great encouragement in establishing the IFAA and, subsequently, in managing the changes to the IAA constitution to make the IAA an association of professional actuarial associations, has been the extent to which our vision of the profession in the Faculty and the Institute has been shared by others. Indeed, many appear to hold the Institute and the Faculty in high regard, and see them as role models of how they would like to see the profession developing in their countries.

It has been a particular challenge to work on establishing, or strictly, in some cases, re-establishing, the profession in the countries of central and eastern Europe, after a period when professions were not recognised or permitted. Indeed, the self-regulatory structure and emphasis on ethical standards seem strangely alien to the ways in which these countries developed under Communism. Those who have participated in our educational courses have generally done so either because of their interest in a new application of mathematics or because of their need for practical tools to equip them to work in insurance, pensions or finance. What we have sought to do, however, is to open their eyes to the concept of a profession, and the importance of developing a profession in their countries, rather than just training a group of technicians or specialist mathematicians. In particular, this has required a focus, amongst other things, on:

- practical applications, as well as sound theory;
- high ethical standards, and willingness to serve the client, the employer or the wider public interest;
- a willingness to accept public interest roles for individual actuaries, such as the Appointed Actuary of an insurance company;
- organising together to form a cohesive body with self-regulatory characteristics;
- a readiness to contribute to debate on public and social issues; and
- the maintenance of standards of competence and enhancing the reputation of members of the profession.

This seems to be particularly difficult to achieve in a large country such as Russia, where appreciation of the sociological concept of a profession (or, indeed, of ethics more generally) is not widespread. In China different issues arise, because of the level of government control within society. Developments in smaller countries, such as the Czech Republic, Slovakia, Poland,

Hungary, Croatia, Slovenia, Latvia, Lithuania and Estonia have been encouraging, however, and suggest that our concept of a profession can be implemented into almost any democratic society. How successfully a self-regulatory profession can operate, as such, in other political systems is less clear. However, even in a democratic society a key issue will be how the situation is viewed by the insurance (or pension) regulator. There is no doubt that formal responsibilities under insurance (or other) statutes can go a long way to support the concept of a publicly recognised profession.

No doubt different countries will see the professions developing in somewhat different ways. However, the highly international nature of the actuarial profession, and the particular roles played by the Groupe Consultatif and the International Actuarial Association, offer a prospect that a relatively uniform approach to professionalism could emerge all around the world. Whether this will amount to a universal adoption of the Anglo-Saxon model, or whether a synthesis of alternative approaches will emerge, remains to be seen. This will be part of the dynamics of the IAA, where a commitment to multiculturalism should be a high priority for the leadership, and where every effort must be made to encourage active participation and influence from all traditions.

A good deal of further reflection is needed on this topic, in particular as the profession begins to see substantial growth in completely different social and religious traditions, such as in China and in the Arab world. The focus on public interest may be even more readily understood in these other cultures, where corporate or societal responsibility tends to take preference over individualism. In this sense the value of a profession may be understood, although the concept of self-regulation may present difficulties.

Returning to the IAA, and its Professionalism Committee, only time will tell how influential this can be in creating a common understanding of professional issues among the world's actuaries. The first agenda item has been to consider the question of whether the IAA, as an association of professional associations, can be responsible for setting international actuarial standards, and, if so, with what form of due process. Papers discussing these issues can be found on the IAA web-site (www.actuaries.org). Future agenda items will include mutual recognition processes and promulgation of information about disciplinary cases. In due course the Committee should probably address the whole issue of 'what is a profession', and seek to develop a full international consensus on some of these fundamental issues.

Mr I. J. Kenna, A.I.A.: I was sorry to note, in ¶3.5, that ministers of religion have dropped off most lists of professions because they are not well paid. This displays a certain narrowness of approach. Should a professional be merely somebody with a qualification who gets more than, say, £30,000 a year?

So, what is a profession? A profession can be defined as: "an organised group of people who accept responsibility for a certain area of human knowledge and activity". Although there are frequent references to money in the paper, the word responsibility does not appear at all.

The actuarial profession has a core area, mortality, and border areas which it shares with, or disputes with, other professions or with the state. If a job is worth doing, there is a high probability that someone else has got there first.

One of the most useful contributions that actuaries have made to human knowledge is that smoking tobacco doubles one's average mortality rate and takes, on average, six years off one's expectation of life. The investigation into smoking was, originally, a pure cost. At that time, too, the great majority of people, and probably of actuaries, smoked.

As yields decline, mortality is becoming more and more important. Yet the actuarial profession has still only researched smoking. On the other hand, the medical profession is of the opinion that there are other items of human consumption which are also harmful. The trouble is that research does not, initially, make money. However, we have collectively accepted the responsibility for mortality investigation. The actuarial profession is all the better for a full time administrative staff paid for by the members. It would also be all the better for a full time professional research staff.

Mr C. D. Sharp, F.I.A. (who spoke at the meeting, and who subsequently submitted this amplified contribution as a replacement for what he said): I first thank the author for her admirable and timely paper. While I naturally agree with most of what she has written, there are some aspects which call for comment. May I stress that, in an area such as this (which is necessarily full of value judgements), a fundamental problem is that the same words can mean different things at different times, and even at the same time can mean different things to different people, depending on their personal 'values', those 'habits of thinking about ethical matters' which are unique to each of us. Rarely, if ever, are the terms that we use capable of exact definition.

To do justice to all the points raised by the paper would require another paper, and, therefore, I must concentrate on what I regard as the essentials. These are two: the scope of the paper; and its relevance to actual behaviour in the rough and tumble of ordinary business life.

I now comment on four points:

- (1) There is the stated scope of the paper. Where (in ¶11.1) the author specifically excludes moral philosophy, she does herself less than justice, since her comment regarding 'shame' (a moral judgement) in the next section (and various comments elsewhere) show that she is very conscious of the importance of a reputation for being 'fair' (an ethical evaluation) in maintaining the trust on which our profession, like all others, depends for its continued acceptance by the society, or societies, within which it operates. Here I would like to draw attention to a subsidiary aspect that, in some ways, all professions must play the part of a trade association. As the author points out, professions take steps to prevent incursions on 'their patch' and, quite properly, professions take steps to maintain their reputation by exercising a reasonable degree of control over the behaviour of their members. There is nothing unethical in this, provided that the action taken is out in the open and is made public.
- (2) For us to retain the trust which our predecessors have built up, we must be seen, in general terms, to be acting 'in the public interest'. Now, this is another of those ill-defined terms where, I suggest, individual members of our profession can reasonably expect the Councils to provide guidance. May I draw their attention to the Code for Public Prosecutors, which may provide a useful starting point, particularly as it says that: "damage to individuals, while not the sole issue, must yet play a very significant part in determining where 'the public interest' lies". It concludes that each individual prosecutor must make a value judgement in interpreting how 'the public interest' factor should be applied in particular cases.
- (3) There is the application of what the author, and others, have written about professionalism to behaviour in the rough and tumble of ordinary business life. Most of us have to be business men as well as professionals. Self-evidently, it would be idle to maintain a purely ethical professional stance if to do so would result in fatal injury to the organisation which we work for or are advising. Rarely, if ever, are we faced with simplistic ethical choices of 'right' and 'wrong', but with the far more taxing problems of conflicting 'rights'. The current problem of the 'right' way to deal with the problem of guaranteed annuity options is an admirable example. Yes, it is clear that there is a case for the final bonuses to be the same for all with-profits contracts, irrespective of any annuity option, but, also the Appointed Actuary, making his recommendations to his board, must have regard to the proper interests of all the other with-profits policyholders (and in a proprietary company the shareholders). In this case, the House of Lords will presumably decide, but there must be many other issues which never surface in public and never reach the courts.
- (4) In both life assurance and pensions I have been increasingly conscious, over the years, of the diminution of the importance attached to the actuarial input, particularly in the growing number of leviathans. This, in my view, has been, at least in part, due to the fact that our methodology is basically flawed, because it does not directly face up to the problems caused by inflation and by the way in which we, as a profession, have failed to provide the essential degree of financial security which virtually all our public seek. To pretend that

changes in the basic unit of measurement (in our case still the £) do not matter led to the move away from the with-profits policy to the equity-linked contract that I foresaw first in a contribution to a paper to the Institute on 'Savings and Inflation' in 1952 (*J.I.A.* **78**, 3).

I suggest that the time has come for that original research, called for by another speaker, dealing directly with inflation and, as a side issue, with the need for some small part of the huge pension fund reserves to be switched from paper assets into real assets (such as care homes and communities), which would be of great value to the elderly in our aging population. An Indian friend once said to me: "It is only the wearer who knows where the shoe rubs", and, as a ninety-year-old, I believe that I can justifiably urge the case for such a change. I declare my interest!