

Intra-Professional Specialist Differentiation In The UK Surgical Profession

This thesis is submitted
for the degree of Doctor of Philosophy (Ph.D.)

Mark Wilkinson
St. John's College
University of Cambridge
January 2020

Declaration

'This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the Preface and specified in the text. It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. I further state that no substantial part of my thesis has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the Preface and specified in the text. It does not exceed the prescribed word limit for the relevant Degree Committee'.

Mark Wilkinson

Intra-Professional Specialist Differentiation In The UK Surgical Profession

Abstract

This thesis studies specialist differentiation in the surgical profession of the United Kingdom, seeking to clarify what the combinations of factors favour or hinder it. It draws on interviews with two hundred surgeons, general practitioners and hospital CEO's, as well as on sociological literature, especially Bucher and Strauss's (1961) 'Process Model', the concept of 'profession' developed by Freidson (1970), Larson's (1977) model of the 'Professional Project' and Bourdieu's (1981, 1984, 1986, 1988, 1990, 1991, 2005) seminal work on 'Capital' and 'Power' in 'Social fields'. The thesis aims to interpret specialisation as a dynamic political process influenced by different groups' deployment of accumulated specific types of 'capital', challenging the view, widespread in the profession itself and still present in functionalist sociological literature, that specialist differentiation is an inevitable consequence of advances in knowledge and technology. In addition to the introduction, conclusion and appendices, the thesis includes chapters on: (1) theoretical framework; (2) methodology; (3) the role of knowledge and technology in specialist differentiation; (4) the role of institutions before the establishment of the NHS; (5) the role of the relationship between the profession and the state in the period 1948-1990; (6) ditto in the period 1991-1997; (7) the current situation and how it might develop.

Acknowledgements

The completion of this thesis is in no small part, due to the love and support I received from my beloved Mum and Dad, Pauline and Barrie Wilkinson. Unfortunately, they are no longer around to see the final polished product.

Special thanks also go to my brother, Howard and partner, Thomas for their support and words of encouragement, and last, but by no means least, my supervisor, Professor Martin Richards, for his invaluable advice and support throughout.

Contents

p. ii	Declaration
p. iii	Abstract
p. iv	Acknowledgements
p. v	Table of Contents
p.1	Introduction and Background
p.2	1.1 Introduction
p.10	1.2 Historical Sources
p.11	1.3 Background
p.15	Chapter One. Towards a Working Theory of Intra-Professional Specialist Differentiation in Surgery
p.16	1.1 Introduction
p.16	1.2 Theoretical Foundations
p.26	1.3 A Workable Theoretical Framework
p.30	1.4 Summary
p.31	Chapter Two. Qualitative Research Process
p.32	2.1 Introduction and Aims
p.33	2.2 Theory and Methodological Considerations
p.35	2.3 Ideas: A Processual Approach
p.37	2.4 The Qualitative Research Project and the Interview
p.44	2.5 Gathering and Analysing Data
p.61	2.6 Overall Analysis and Theory Generation
p.66	2.7 Summary
p.68	Chapter Three. The Professional Project: Knowledge and Technology, Means to an End
p.69	3.1 Introduction and Aims
p.71	3.2 Knowledge and Technology: An End in Themselves
p.73	3.3 In Pursuit of Knowledge and New Technologies: A Means to an End
p.80	3.4 Knowledge and Technology: Variables Within a Larger Equation
p.83	3.5 Summary
p.85	Chapter Four. Surgico-Power Politics and Intra-Professional Specialist Differentiation 1800-1947
p.86	4.1 Introduction and Aims
p.87	4.2 The Structure of Surgical Field

- p.95 4.3 The Royal College of Surgeons' Strategies and Responses to the Challenges of Specialisation: The Dominant vs. The Newcomers, and Patterns of Specialist Differentiation 1858-1947
- p.109 4.4 Knowledge is Power, and Power is Knowledge
- p.111 4.5 Obstetrics and Gynaecology – A New Professional College is Born
- p.121 4.6 Specialist Differentiation: The Cases of Ophthalmology and Otorhinolaryngology
- p.124 4.7 Orthopaedics: Laying the Foundations for the Mature Speciality
- p.137 4.8 Summary

p.138 Chapter Five. Surgico-Power, the NHS, the State, and Specialist Differentiation 1948-1990

- p.139 5.1 Introduction and Aims
- p.140 5.2 The Structure of the Surgical Field
- p.144 5.3 Fragmentation Ceases
- p.145 5.4 The Relationship Between the Medical Profession and the State
- p.148 5.5.1 Professional Participation in the Health Service: Macro, Meso and Micro Levels
- p.149 5.5.2 The Medical Profession, Policy Making, and Implementation: Macro, Meso and Micro Levels
- p.158 5.6 The Road to Maturity: The Case of Orthopaedics
- p.162 5.7 Specialist Differentiation and the Royal College of Surgeons
- p.165 5.8 Summary

p.167 Chapter Six. The State, the Profession, and Collective Professional Autonomy 1990-1997

- p.168 6.1 Introduction and Aims
- p.169 6.2 The Structure of the Surgical Field and its Evolving Political Infrastructure
- p.179 6.3 The Politics of Specialist Differentiation: The Association of Surgeons of Great Britain and Ireland
- p.185 6.4.1 The State and the Profession: Redressing the Balance
- p.186 6.4.2 The Internal Market or Purchaser Provider Split (PPS)
- p.188 6.4.3 Professional Autonomy at the Micro Level: Consultants Contracts, Appointments and Distinction Awards
- p.189 6.4.4 The Development of a Corporate Culture: Audit and Directorates
- p.190 6.4.5 Management Arrangements and Structural Changes – Macro and Meso Levels
- p.192 6.5.1 New Structures, Old Dynamic
- p.192 6.5.2 Macro Level Health Planning and the Voice of the Expert
- p.193 6.5.3.1 The Role of the Surgical Profession in the Running of the Health Service: Clinical Guidelines
- p.194 6.5.3.2 The Surgical Profession and Training
- p.195 6.5.3.3 The Calman Report on Specialist Medical Training – 1993
- p.195 6.5.3.4 The Calman-Hine Report on the Organisation and Delivery of Cancer Services – 1995
- p.196 6.5.3.5 The Surgical Profession and Models of Service Provision

- p.197 6.5.4 The Realities of the Purchaser-Provider Split and Meso Level Health Planning
- p.201 6.5.5 Micro-Operational Level
- p.207 6.6.1 The Internal Market in Health Care, the Surgical Profession and the Pace and Direction of Specialist Differentiation
- p.208 6.6.2 Collective Professional Autonomy and Specialist Differentiation
- p.213 6.7.1 Intra-Professional Specialist Differentiation: Push and Pull Factors
- p.217 6.7.2 Vascular Surgery: Two Steps Forward and Three Steps Back
- p.221 6.8 Summary

p.223 Chapter Seven. Possible Future Scenarios in the Surgical Field

- p.224 7.1 Introduction and Aims
- p.225 7.2 The Surgical Field: Challenges from and Interactions with Other Social Fields
- p.229 7.3 The 'Triangle of Intersecting Forces': A State of Equilibrium
- p.231 7.4 Prospects for Specialist Differentiation in the Future
- p.233 7.4.1 General Surgery
- p.237 7.4.2 Trauma and Orthopaedics
- p.240 7.4.3 Cardiothoracic Surgery
- p.246 7.4.4 Paediatric Surgery
- p.251 7.5 Summary

p.252 Conclusion

p.266 Appendix One

p.268 Appendix Two

p.272 Bibliography

INTRA-PROFESSIONAL SPECIALIST DIFFERENTIATION IN SURGERY

Introduction and Background

1.1 Introduction

Over the course of the last seventy-eight years, the surgical profession of the United Kingdom has experienced major structural changes as a result of intra-professional specialist differentiation. This thesis is a case study of this phenomenon, aiming to clarify the factors effecting its pace and direction, and its effect on the profession and organisation of surgical services. Given the protracted nature of these structural changes, the thesis will have historical and contemporary strands.

Intra-professional specialist differentiation is the ultimate form of specialisation, resulting in groups within the mature profession achieving independent professional status: 'a license and mandate' (Hughes, 1958:78) to have control over their own work. It differs from sub-specialisation/super-specialisation, which occurs under the aegis of the mature profession or a recognised speciality and articulates with the whole; and from fragmentation or intra-professional specialist differentiation, which is separation and disarticulation from the mature profession or recognised surgical speciality.

The utility of the study is two-fold: firstly, it makes a contribution to the literature on the sociology of the professions, which despite the difference in perspective and emphasis, has concerned itself primarily with the growth of the 'mature' profession.

In the 1950's and '60's, the sociology of the professions was dominated by a structural functionalist ideology. Macdonald (1995) notes that, the writings of Durkheim and Parsons emphasised the functional utility of the professions within the social division of labour. A useful summary of the trend is offered by Heinz and Laumann (1994):

'Talcott Parsons and some generally like-minded theorists, including Joseph Ben-David and William J. Goode,¹ have argued that the growth of the mature profession is one of the most salient features of modern industrial societies. The occupations included by these theorists were lines of work that emphasised involvement with the "cognitive complex" –

¹ Joseph Ben-David, "Professions in the Class System of Present Day Societies: A trend Report and Bibliography," *Current Sociology* 12 (1963-64): 247-330; William J. Goode, *supra* note 9, pp.194-200.

that is, in a sense, the emphasis was on the “learned” in the term “learned profession” (p.14).

Although the authors do not give specific examples, one can presuppose that the term “learned profession” refers to professions such as Medicine and Law. Heinz & Laumann go on to note that Parsons et al argued that the success of these professional groups and their rise to prominence was natural and inevitable because they fulfilled a specific functional pre-requisite relating to complex modern societies.

The primacy Parson’s and his followers attributed to the functional significance of the growth of the mature profession is reflected in his seminal essay: *“The Professions and Social Structure”* (1954). The functional significance of the professions to social structure can be summed up as follows: “rationality”, “functional specificity”, and “universalism”. Indeed, Brante (1988) notes Parsons considers the professions as ‘the major bearers and transmitters of rational values’ **(p.120)**.

Rationality in the scientific sense is best summed up by Newton-Smith (1981), as providing ‘an objective appraisal of the merits of scientific theories’ **(p.1)**. In other words, it provides a framework whereby the justification for scientific theories is evaluated in an objective manner. Parsons (1954) contends that the same rational values, inextricably linked to the application of science, are a fundamental characteristic of industrialised societies. Scientific investigation by its very nature, according to Parson’s, is objective and autonomous of personal or long-established judgements. Parsons relates this rationality to specific professional examples namely, lawyers and businessmen. He contends that they are ‘enjoined to seek the “best” and most “efficient” way of carrying on his function, not to accept the time-honoured mode’ **(p.37)**. That is to say, professionals reach decisions based on rational deliberations, within institutional frameworks.

Professional authority is not based on superior status but on the superior ‘technical competence’ of the professional. Parsons (1954, 2012) defines this as ‘specificity of function’. Specificity of function or competence ‘has primarily the function of delimiting a field so that it is relatively manageable, so that competence will not be destroyed by spreading too thinly’ **(2012:320)**. Last, but not least is the function of ‘universalism’. Parsons (1954) maintains that the relationship between professional and client is universalistic, i.e. based on standards and not by virtue of personal feelings or judgements about the client.

In summary, the significance of the mature profession to Parson's is one of an institutional conduit in which 'the most important social functions ensue, namely the pursuit of science and liberal learning and its practical application in medicine, technology, law and teaching' (1954:48). Brante (1988) describes this as an 'integrated rational unity, generating the force propelling society forward' (p.121).

By the 1970's, though the focus in the sociology of the professions was still on the growth of the mature profession, the theoretical emphasis had changed, shifting from the generally accepted structural functionalist theories of the 1960's which focused on structure and questions relating to the 'part played by the professions in the established order of society' (Macdonald, 1995:xii) to more action-based theories drawing on the Chicago school of sociology of the 1960's, with questions relating to how professions 'manage to persuade society to grant them a privileged position' (ibid.).

Freidson and Hughes were successors of the Chicago school, and the sociology of the professions has used their works, in particular their concept of profession, to elicit the processes or stages behind the development and growth of the mature profession.

Freidson argued that 'what is critical for the status of medicine and any other profession is its ultimate control over its own work' (Freidson, 1970:185). The privilege of self-regulation, that is the professions' 'license and mandate' (Hughes, 1958:78) to self-police, is granted by society (or in effect the state), by virtue of winning the support a group of people with significant power and influence in society, that is to say, an elite (Freidson, 1970).

The thesis builds on this rich legacy of sociological writings and attempts to take the analysis to another level: using intra-professional specialist differentiation in the surgical profession of the United Kingdom as a case study, it analyses the processes through which aspirant groups within the "mature profession" have to go in order to be able to self-police.

The thesis will argue that intra-professional specialist differentiation is a journey and not just an end-point; it is a process which begins when a group decides to pursue this course,² and reaches

² Many groups do not set out with the intention of pursuing the 'professional project' with a view to self-regulating; this goal comes later on in their development.

fruition when the surgical establishment either grants the group the privilege to self-police or refuses to grant such a privilege.

The processes involved in intra-professional specialist differentiation have general characteristics. For example, each group will need to carve out a distinct area of knowledge and technical skill and demonstrate that they and they alone have the necessary skills and expertise to practice it. Each group will also have specific characteristics which they bring into the processual equation, for example resources which the particular group has accumulated over a period of years even prior to any conscious decision to pursue such a course of action.

Processes operate within contextual junctures, whether historical or contemporary, so they cannot be analysed in isolation from the immediate context and circumstances in which they operate. The interaction of general, specific, and contextual variables will effect the pace and direction of these processes along the way, and ultimately determine the success or failure of groups to self-regulate in what is a political battle for control of knowledge.

There is clearly a need for analysis at this level. For example, Bucher and Strauss' seminal work (*Professions in Process 1961*) focused on the growth and development of groups which they term 'segments' within the mature profession, and the 'conflicts of interest' (p.325) and power struggles which ensue. Since medicine is usually considered the prototypical profession, Bucher and Strauss' illustrative points are taken from the profession of medicine. However, their level of analysis does not include the conditions under which segments become formal specialities in their own right, a significant point which they allude to in their work:

'Possibly the acme for some expanding segments is the recognised status of speciality. Certainly, this is the way specialities seem to develop. But the conditions under which segments will become formal specialities is in itself a fascinating research problem.'
(p.333)

Structural functionalist theory explains away differentiation (of which intra-professional differentiation is the ultimate form) as part of a structural response to functional need, just as the rise of the profession is a structural response to a functional need of society. Thus, the structure of the division of labour (medicine and surgery) is viewed as 'natural', i.e. determined by the laws of the social system. Indeed, according to Parsons (2012) the proliferation of knowledge and

technical complexity, and the scientific knowledge underpinning it, is objective and impartial resulting in specificity of function which Parson's notes is inevitable: 'It is inevitable that both incumbency of the role should be achieved and that performance criteria by standards of technical competence should be prominent' (p.305).

Thus, the processual elements involved in structural differentiation are viewed as evolving in response to the ineluctable forces of the social system, devoid of human agency and action, and given their theories' explicit scientific logic they are unable to explain the failure to differentiate. Indeed, as Colomy and Rhoades (1994) note, structuralist accounts of differentiation 'suffer from a macro bias which is reflected in their inability to account for variable patterns of structural change' (p.547).

Accounts of structural differentiation should not ignore the fact that human beings are actively involved. Human beings create knowledge; however, to create knowledge does not in and of itself mean that you can control it and apply it. Professions are stratified by differentials in power and resources, and struggles will ensue for the control and ability to apply that knowledge. Thus, differentiation is far from inevitable and unproblematic.

In the spirit of fairness to Parson's, it should be said that he does not completely discount human action, indeed Parsons had what could be described as a:

'complicated, almost love/hate, relationship with scientific positivism. On the one hand he was a thoroughgoing empiricist, believing that the entire scientific enterprise is dedicated to understanding and explaining an identifiable empirical world.' (Smelser, N. 2012. Foreword. In: Parsons, T. *The Social System*. New Orleans: Quid Pro, V.)

However, Smelser was at pains to point out that Parsons, unlike the behaviourist approach, which is only concerned with observable stimulus response behaviours, Parsons did not discard the individuals own internalised drivers of motivation, including moral values and conviction, as 'for him these states were central, identifiable ingredients of action' (ibid.).

Parsons (2012) starting point is social systems of action and the interactions between individual actors in certain situations and certain conditions, which he argues can be treated in a scientific

sense and subjected 'to the same order of theoretical analysis which has been successfully applied to other types of systems in other sciences' (p.1). The dichotomy in Parson's theory is evidenced when he moves on to describe the social system as comprising a diversity of actors engaging in interaction with one another, with motivational significance to the individual actor, or in the case of a collectivity, its component individuals. The actor or actors will have at their disposal the means and conditions of action, their personality systems (i.e. actor and actors) and cultural systems, in the form of tradition, ideas, beliefs, etc. However, Parsons stresses that the above elements are not 'theoretically reducible to terms of one or a combination of the other two. Each is indispensable to the other' (ibid.).

Recent works in the sociology of the professions, most notably Abbott (1988), suggests that there is some inevitability attached to specialist differentiation which most commonly arises 'because the skills applicable to a given task area develop beyond the ability of single practitioners' (p.106). However, Abbott does concede that differentiation does not always arise as a corollary of the highly complex nature of professional knowledge, rather through differentiation in an external structure. Abbott uses the difference in client groups in the legal profession as an example. Interestingly, she observes that differentiation can take on two forms: horizontal and vertical, however, a successful outcome is not always realised when attempted. Abbott defines 'horizontal' division or differentiation as division based on task, and 'vertical' division as division based on status whether this distinction is so clear cut in practice is another matter, given that groups may wish to differentiate based on specific knowledge and skills which are high in status. However, although clarification of this point is an interesting area of research in its own right, it is beyond the remit of the thesis.

Although Abbott (1998) admits that differentiation is not always achieved when attempted, the remit of his work does not extend to any analysis of the processual aspects of what he terms horizontal division, which ultimately effect the pace and direction resulting in success for some groups and failure for others. Thus, despite the fact that Abbott explicitly notes that there are 'disparities in income, power, and prestige within professions' (p.120), his analysis does not extend to the highly political nature of intra-professional specialist differentiation.

Likewise, studies which have focused on specific professions, such as Hugman's *Power in the Caring Professions* (1991), do not focus on the processual elements entailed in division:

'In the same way in which the caring professions have developed through claims to skills and knowledge, so groups within the professions have attempted to demarcate specific aspects of the skills and knowledge which are regarded as prestigious...These specialisms represent the success of sub-groups in marking out an area of practice which attracts enhanced status because additional training is required, and to which access by other members of the wider professional group can be restricted.' (p.97)

Thus, this thesis will contribute to a greater understanding of intra-professional differentiation. It is not, however, intended to provide a generic template for explaining intra-professional differentiation across all professions, since professions are unique in their history and structural development.

The second area to which this study hopes to contribute is the literature of medical sociology. Turner (1995) notes that 'Medical sociology became a well-established and formally recognised component of the sociology curriculum in the 1960's' (p.6). However, despite its history and the vast array of work published, it has generally failed to question the development of the foundation blocks of medicine and medical settings and institutions, namely the specialist division of labour. As Atkinson (1995) shrewdly remarks, 'Medical settings and institutions have all too frequently been treated as the occasion for commentary on 'other' themes' (p.38): sociologists of medicine take the specialist division of labour for granted, and use it as a conduit for studying other things.³ For example, Fox (1992) criticises Burkett and Knafl (1974); Knafl and Burkett, (1975) who concentrate on the speciality of orthopaedic surgery and compare it with other specialities in terms of how surgeons within the speciality 'develop clinical judgement of whether a case is appropriate for surgical or non-surgical disposal' (p.5). Pringle (1998) uses fragmentation in general surgery as a means to explain feminisation.⁴ In her opening paragraph she notes that:

'General surgeons, capable of responding to any emergency, are a disappearing species. Although in the UK nearly a third of all surgeons still do a lot of paediatric, vascular and abdominal surgery, the trend everywhere is towards specialisation. She then goes on to note that: **Fragmentation within the field, and its shifting boundaries with other fields, open up**

³ Additional examples adduced by Fox (1992) include, Becker, 1961; Glaser and Strauss, 1970; Bloor, 1976; Stimson, 1976 used interactionist and ethnomethodological perspectives to study the rules women and men use during interactions (pp.4-6).

⁴ Other studies have focused on gender and surgery namely, Cassell (1998) *The Woman in the Surgeon's Body*. Harvard: MA.

new possibilities for women, who once had very limited opportunities to succeed as general surgeons.’ (pp.76-77)

Exceptions to the tendency not to study the division of labour in its own right do exist. For instance, some studies have focused on the factors determining the overall growth of specialisation. Starr (1982) refers briefly to structural factors which impact on specialisation in the medical profession at large, while other works concentrate on particular medical and surgical specialities. Halpern (1988) studies the development of American Paediatrics, and Casper (1998) the growth and development of Foetal surgery in several hospitals in the United States. Studies such as these stress the socially organised nature of specialist divisions of labour and the importance of external context-specific variables in shaping a specialities development. For example, Casper (1998) notes that ‘increasing medical specialisation and the search for new health care markets, and intense cultural and political investments in foetuses provided the ‘fruitful contexts’ for foetal surgery’s growth’ **(pp.6-7)**.

While not discounting knowledge and technology as variables, existing studies recognise that these variables lack the power to impose their own imperatives on the organisation of work. For example, Halpern (1988) does not deny the role of science in the development of medical specialities; and indeed, holds that ‘even in the evolution of a social problem based field like paediatrics, scientific progress and systematization of knowledge are vital to professional consolidation’ However, she tempers this by adding that other variables are more significant, for example, ‘organisational innovation’ **(pp.28-29)**.

One important feature which sets the present thesis apart from the studies which do study the division of labour in its own right, such as those just discussed, is that they tend to focus on the United States. Since, as will be discussed in chapters 3 and 4, there are significant differences in the development of the regulatory structures of the surgical profession in the US and the UK, the findings of American-focussed investigations are not well suited to explaining the dynamics of the UK context. This study adopts emphases and perspectives which are different from those of American-focussed investigations. In particular, it will analyse the journey towards ‘self-regulation’ as a political battle for control of knowledge.

A further difference between this study and previous ones lies in its compass of enquiry, as many publications which do recognise the need to investigate the division of labour in its own right do so in a somewhat restricted sphere, such as paediatrics (Halpern) or foetal surgery (Casper). The

present study's broader perspective on the profession in its entirety enables a more organic and wholesome understanding of the phenomena and their interconnections.

The present thesis thus hopes to contribute to the long-term goal of achieving 'a greater understanding and awareness of intra-professional, inter-professional and inter-organisational dynamics and power dependence relationships' (Hunter, 1990:219).

This study's focus on the highly regulated and officially sanctioned nature of self-regulation within the UK surgical profession, and its analysis of the processes through which aspirant groups within the "mature profession" have to go in order to be able to self-police, adds a distinctive and fresh approach to the existing body of literature.

1.2 Historical Sources

As alluded to at the beginning of this introductory chapter, intra-professional differentiation in the body of surgery has a protracted history spanning seventy-eight years. Accordingly, historical literature constitutes an essential foundation block to this thesis, upon which sociological conceptualisations can be built in order to investigate intra-professional differentiation.

The thesis will draw on and utilise four principal historical sources, namely the works of Rosemary Stevens: *The Impact of Specialisation and State Medicine: Medical Practice in Modern England – 2003 & American Medicine and the Public Interest: A History of Specialisation* (1998); Roger Cooter: *Surgery and Society in Peace and war: Orthopaedics and the Organisation of Modern Medicine 1880-1948* (1993); Christopher Lawrence: *Medicine in the Making of Modern Britain 1700-1920* (1994); and Fletcher-Shaw: *Twenty-Five Years: The Story of the Royal College of Obstetricians and Gynaecologists 1929-1954* (1954).

Stevens's work on specialisation in the English context provides a general and sound chronology of dates and events leading to differentiation; her work on specialisation in the American context is equally thorough and provides a useful contrast with England. Cooter provides a specific account of the growth of orthopaedics as an area prior to the establishment of a national health

service; in particular, he highlights beautifully the precarious nature of orthopaedics' growth during this period. Both authors set these developments in the social fabric and related processes operative at that time.

The work of Lawrence is invaluable in this respect. Lawrence provides a thorough understanding and appreciation of the norms, values and ideology underpinning societal structures particularly during the 1800's. This is indispensable for understanding exactly how the surgical establishment held the status quo together during this period, preventing any fragmentation of the body of surgery.

Fletcher-Shaw's work on the history of the Royal College of Obstetricians and Gynaecologists is distinct in that its author is a former President and one of the leading lights in the founding of the College. This provides the thesis with a unique insight into the political processes which resulted in the ultimate form of intra-professional differentiation with the formation of a separate Royal College. Of course, such an account is open to the charge that it was written by an interested party, but it nonetheless remains an indispensable historical source.

1.3 Background

During the early years of the nineteenth century, the long and elaborate process of specialist differentiation within the body of surgery began to evolve and develop. From the early nineteenth century to the beginning of the twentieth century, special hospitals began to be set up, and around these hospitals specialist societies began to evolve. For example, 'The Ophthalmological Society of the UK was founded in 1881, evolved from informal discussions in the house surgeons' room at Moorfields eye hospital' (Stevens, 2003:31).

Between 1929 and 1947 the specialisation process went a step further, and professional consolidation through self-regulation became the order of the day for some areas, resulting in separation and disarticulation from the surgical corpus. For example, in 1929 gynaecology broke away and combined with obstetrics to form their own College, separate from the Royal College of Surgeons and the Royal College of Physicians, and with its own examinations and the power to license. By the 1940's ophthalmology and otolaryngology were demanding a form of self-

regulation, namely their own fellowship examinations. The FRCS (Fellow of The Royal College of Surgeons) in Ophthalmology and Otolaryngology was instituted in 1947. Both specialities continued to take the primary examination in the basic medical sciences, but they were no longer examined in general surgery in their finals (**Stevens, 2003**).

Stevens points out that this point specialist differentiation ceased:

‘Other surgical specialities remained largely content with their own speciality association or set up particular bodies with limited functions. For example, a Joint Committee for Postgraduate Orthopaedic Training was formed in 1948 under the aegis, among others of the Royal College of Surgeons, the British Orthopaedics Association, and The Institute of Orthopaedics. Orthopaedics, neurosurgery, plastic surgery, and urology which were all well developed scientific areas of surgical practice, made no move for independent examinations.’ (ibid.:114)

These surgeons continued to take the general FRCS examination (the primary which examined in the basic medical sciences, and the final, in general surgery) before embarking on apprenticeship in registrar and senior registrar grades in their chosen surgical field (**Stevens, 2003**). Rutkow (1993) points out that general surgery was the base on which surgical science thrived. Consequently, intra-professional specialist differentiation has made the

‘greatest inroads in the broad territories once presided over by so-called general-surgeons. Before specialisation, a surgeon performed basically all types of operations. Thus, the average nineteenth century surgeon could perform a urological procedure as well as an orthopaedic operation.’ (p.512)

General surgery lost ophthalmology (1947), otolaryngology (ENT) (1947), gynaecology (1929) (**Stevens, 2003**). Orthopaedics, neurosurgery, urology, plastic and thoracic Surgery were also firmly established, but remained tentatively attached to general surgery, and were seen as specialist interests within general surgery. By the 1980's however, urology, orthopaedics, neurosurgery and cardiothoracic surgery had all broken away from general surgery and had their own fellowship examinations. Ophthalmology seceded and formed its own College on 14th April 1988 (it was granted a Royal License in 1993) (**www.rcophthac.uk/about/college/history**). More

recently, paediatric surgery (1992) and maxillofacial surgery (1994) were granted their own fellowship examination by the Royal Colleges.

Watkin (1998) points out that:

'The process of increasing specialisation has continued, with the emergence of sub-specialities within each surgical speciality. This has perhaps been most marked in general surgery, which encompasses breast surgery, coloproctology, endocrine surgery, upper-gastrointestinal surgery, hepato-pancreatico-biliary surgery, transplantation and vascular surgery. The other surgical specialities are also increasingly sub-specialising; and for example, there are nine specialist groups or associations within orthopaedics.' (p.105)

Some of the sub-specialities aspire to independence. For example, during the late '80's and early '90's there were 'several loud and persuasive voices arguing that vascular surgery should seek independent speciality status from general surgery' (**Jackson, 1992:63**), and laparoscopic surgeons also began their quest for independence. More recently, reports are recommending that surgery on children (across all of the specialities) should be carried out exclusively by paediatric surgeons (**RCS, 2000**). With these voices came the predictions of the imminent demise of the general surgeon:

'In the dining rooms of teaching hospitals and in the bars at conferences specialist surgeons may be heard forecasting the imminent demise of the general surgeon and his replacement by specialised multi-disciplinary teams who will concentrate on one system or even part of one system.' (Irving, 1986:741)

Another commentator also predicts further specialist differentiation, suggesting that the areas which originally broke away from surgery to form their own specialities will also fragment:

'History suggests that existing surgical specialities will fragment, their present sub-specialities becoming independent specialities, so there is the potential for the emergence of up to 57 surgical specialities!' (Watkin, 1998:106)

These viewpoints are widespread in medical circles, where specialisation leading to the differentiation of a specialist field is viewed as an inevitable consequence of advances in knowledge and technology. Such viewpoints are not only contemporary but are historically sourced too. For example, an anonymous author writing in the *Lancet* (1945) asserts that:

'With the growth of knowledge and the development of technique the division of labour naturally followed.' (p.209)

The thesis argues that intra-professional specialist differentiation in the surgical profession, whether in the past or future, cannot be explained by reference to advances in knowledge and technology alone. Such a contention would be reductionist and technologically deterministic. Knowledge and technology are means to an end and not ends in themselves. Thus, although knowledge and technology are important in terms of providing the basis for the possibility of new boundaries (i.e. specialities) they do not determine whether groups will be successful in their quest to differentiate and self-police.

This thesis has an eclectic quality, since one theoretical perspective alone cannot possibly explain the complexities involved in specialist differentiation in surgery. Indeed, this should come as no surprise, as one of the joys of sociology is its richness of theoretical perspectives, which is stimulating in its own right as well as providing a reminder that it is rare that there is only one valid view of a social action or a social phenomenon.

The thesis will show that intra-professional specialist differentiation in surgery is not a natural or inevitable phenomenon which can be explained in terms of its ever growing knowledge and technology base. On the contrary, specialist differentiation is a complex process drawing together micro, meso and macro strands; it is very much an intra-professional political process drawing on other variables, for example, government, and the NHS and the way these interrelate, at different contextual junctures in time.

CHAPTER ONE

*Towards a Working Theory of Intra-Professional
Specialist-Differentiation in Surgery*

1.1 Introduction

In arguing against a structural reductionist approach to intra-professional specialist differentiation, the thesis we will adopt a working theoretical framework which emphasises action within structure. It will build on the central notion of profession identified by Freidson (1970) and Hughes (1958): autonomy and self-direction, and in particular how they develop. It will also utilise Larson's (1977) concept of "*Professional Project*" and Bucher and Strauss (1961) "*Process*" model, and include key concepts: "*Social field*," "*Capital*" "*Habitus*" and "*Power*", from the seminal works of Bourdieu: (*The Specificity of The Scientific Field* 1981; *Distinction: A Social Critique of The Judgement of Taste* 1984; *The Forms of Capital* 1986; *Homo Academicus* 1988; *The Logic of Practice* 1990; *The Peculiar History of Scientific Reason* 1991 and *The Social Structures of the Economy* 2005).

1.2 Theoretical Foundations

Though Freidson and Hughes focus on the growth of the mature profession, this thesis will use their seminal work as a foundation for taking the level of analysis further.

Freidson and Hughes's processual approach, with its emphasis on professional groups actively negotiating their position is pivotal, as it locates professionalisation within a political arena in which groups actively use knowledge as a justifier in their quest for autonomy and self-direction. Indeed Freidson was keen to stress that knowledge and technical skill are a means to an end and not an end in themselves: 'Knowledge and expertise, whether accepted or rejected', do not exist 'in and of themselves'; on the contrary they are 'abstractions which are realised by the activities of men organised into occupational careers and groups' (Freidson, 1970:xi).

Freidson and Hughes were unanimous that what is unique and central to the notion of profession is the 'special privilege of freedom from the control of outsiders' (Freidson, 1970:137 & Hughes, 1958), in other words they are autonomous and self-directing. This privilege is not a natural historical fact, but rather a special privilege granted by society (or in effect the state), by virtue of winning the support of a powerful societal group that is to say

‘an elite segment of society which has been persuaded that there is some special value in its work. It’s position is thus secured by the political and economic influence of the elite which sponsors it.’ (Freidson, 1970:72)

It is justified by two central claims: knowledge expertise and conformity with the rules governing professional conduct. In relation to the former, it is claimed that the depth of knowledge and expertise required in professional work, is such that non-professionals are not equipped to provide evaluatory judgements or put controls in place to regulate it. In fact, the profession asserts that it is the most dependable authority on the specialised area it deals with. Such claims are also linked to ethicality, inasmuch as professionals are involved in important duties and decision making and by default are responsible individuals who can be depended on to work unsupervised and, in the cases where a professional does not perform his or her work to a satisfactory standard or ethically, the profession itself may be trusted to carry out the proper regulatory action **(Freidson, 1970)**.

The arguments and claims made by generic medicine for self-regulation in an attempt to persuade the state to grant them a ‘license and mandate to control their own work’ **(Hughes, 1958:78)** are and have been replicated by aspiring groups within the ‘mature’ profession in their attempt to persuade and win the support of the elite within the surgical profession in order to be able to self-regulate. In this respect the thesis moves the level of analysis to another tier: from the relationship between the state and the ‘mature’ profession to the relationship between the ‘mature’ profession and its relationship with the aspiring professional groups within it.

In building on Freidson and Hughes’s pivotal foundation, this thesis will utilise Larson’s (1977) concept of *‘Professional Project’* and will also draw on Macdonald’s (1995) synopsis of this concept. The professional project is a concept originating from the Chicago school of American sociology, with an emphasis on action within structure **(Macdonald, 1995)**. Larson’s objective was to examine how occupations organise themselves to attain market power. Not unlike Freidson, Larson (1977) stressed that the success of professional groups was not a ‘natural historical fact’ and indeed Larson used Freidson’s emphasis on the need for professions to secure the ‘grace of powerful protectors’ **(p.xii)**, that is to say the backing of a powerful section of society.

Larson’s concept of *‘Professional Project’* is processual in nature. As its name suggests, it is a strategy for acquiring ‘the related objectives of market monopoly and social status’ **(ibid.:104)**, through professionalisation. Though, like Freidson and Hughes, Larson is concerned with the growth of the mature profession, her concept can contribute most usefully to producing a workable

theory of intra-professional differentiation in the surgical profession. The concept's utility lies in its ability to elicit the stages or benchmarks through which aspirant groups pass, and the justificatory arguments they draw on in their quest for professional status. The 'professional project' emphasises the 'coherence and consistence of a particular course of action' (Macdonald, 1995:10) through the goals and strategies pursued by a given group.

The professional project is not an inevitable by-product of a societal functional prerequisite, on the contrary it is a 'collective mobility project' (Larson, 1977:66), as it is only through joint effort that professionalisation can be potentially realised. Therefore, the project is the collective outcome of the actions and efforts of the group. However, Larson does point out that the project is not a 'deliberate' or conscious effort for all members of the group. The group's efforts do not stop there, as once the group has been brought into existence, it is necessary to ensure the group is maintained and if possible, the position of the group is strengthened (Macdonald, 1995). From a practical standpoint the ultimate goal is 'market control, work autonomy and status prerogatives on the basis of specialised training and scarce expertise' (Larson, 1977:198).

The use of the word market for Larson underlines the fact that she 'draws directly on Weber's ideas of the economic and social order, and the notion that specialist knowledge constitutes an 'opportunity for income' (Macdonald, 1995:9). The professional project is thus:

'an attempt to translate one order of scarce resources – special knowledge and skills – into another – social and economic rewards. To maintain scarcity implies a tendency to monopoly: monopoly of expertise in the market, monopoly of status in a system of stratification.' (Larson, 1977: xvii)

The surgical profession has an economic monopoly in the health market for surgical services and enjoys high social status. The underlying trend towards Intra-professional specialist differentiation within the profession may have monetary and status linked agendas, even though this is unlikely always to be stated explicitly. However, whatever a group's underlying motivation, in order to achieve a monopoly in the market it is necessary to pass through two interrelated stages in the professional project. The first stage in the process is the need to establish, a 'cognitive basis' (ibid.:15), in other words, define a distinct body of knowledge, that the group claims is theirs and theirs alone. The establishment of a cognitive basis enables the group to differentiate and therefore distinguish, the 'commodity' they are providing. Without this cognitive basis, the group(s) could not hope to 'negotiate cognitive exclusiveness' (ibid.) – that is to say, the authority to be

autonomous and self-regulating, with a monopoly and control over recruitment and selection, education, training and the internal evaluation and regulation of standards, around their particular body of knowledge.

It is during the negotiating stage that the group is required to demonstrably prove that they, and they alone, possess the necessary knowledge and skill required to perform a specified activity(s) and that it would have adverse consequences if such activities were performed by those without the education, knowledge, and training (**Macdonald, 1995**); indeed, education and training is 'a critical portal on which exclusionary closure is based, that generates definitions of 'insiders' and 'outsiders' (**Allsop & Saks, 2002:6**). The central element in the negotiation of cognitive exclusiveness and exclusion is 'autonomy of technique' (**Larson, 1977:38**).

The final stage of the professional project requires the support of a group of people with significant power and influence in society, that is to say, an elite (**Freidson, 1970**). However, it is the power of the state which ultimately guarantees the autonomy of the profession (**Larson, 1977**); in the case of the surgical profession, it is the surgical establishment. Knowledgeable skill may be a justifying claim for self-regulation, but it does not explain why some groups are successful in their attempts to persuade the surgical elite and others are not. Larson's concept of professional project is pivotal in terms of its ability to provide a benchmarking framework which begins at the group's inception and ends in the political arena. However, given Larson's focus on the growth of the mature profession, her analysis does not extend to diversity, conflicts of interest and power struggles within the profession which have the potential to effect the pace and direction of the professional project along the way.

Bucher and Strauss' '*Process Model*' (1961) focuses upon the pluralistic diversity and 'conflicts of interest' and power struggles within a profession, and their implications for change. Given that medicine is usually considered the prototype of the professions, Bucher and Strauss' illustrative points are taken from the medical profession. They note that it is characterised by specialities which they term 'major segments' and a 'loose amalgamation of segments (groups) pursuing different objectives in different manners and more or less delicately held together under a common name at a particular period in history'. They further contend that 'at any one time the segments within a profession are likely to be in different phases of development and engaging in tactics appropriate to their position' (**p.326**). Despite this however, Bucher and Strauss also note that the fate of segments (groups) are also closely entwined, thus there is a relationship of interdependency.

Bucher and Strauss' remit does not extend to focusing on the conditions under which segments become formal self-regulating specialities in their own right. However, their work's usefulness for this thesis is two-fold. Firstly, their level of analysis focuses on the development of groups and how they pursue their objectives during their professional development: the relationship between the speciality and the groups within it, as well as the relationship between the aspiring groups themselves. Secondly, it is invaluable in terms its ability to highlight hot areas where conflicts of interest and power struggles ensue, as knowledge becomes contested. Indeed, their model and associated concepts are invaluable tools for eliciting the nature of politicking between groups or segments at the micro-level, and between groups or specialities at the meso-level and how these play out at the macro-level (Institutions and Relations with important special publics outside the Profession). Unlocking this potential enables an understanding of how such conflicts effect the pace and direction of specialist differentiation as groups pursue the professional project.

Not unlike Larson, Bucher and Strauss (1961), note that early on in their development, segments (groups) pursue goals and strategies. However, given the plethora of interests which characterise the mature profession, there are likely to be conflicting interests and power struggles, on two different levels. Firstly, in view of the fact that 'professional movements' ensue within an institutional context, a large part of the activity of segments is a power struggle for institutional recognition. This thesis provides a very good historical example of this in the shape of orthopaedics, which attempted to gain a foothold in the prestigious teaching hospitals during the early years of the twentieth century, only to be thwarted by the powerful surgical establishment at that time. In an attempt to secure an institutional place, segments

'carve out for themselves and proclaim unique missions. They issue a statement of the contribution that their area and it alone, can make in a total scheme of values, and with it an argument to show why it is peculiarly fitted for this task.' (p.326)

In other words, they attempt to establish exclusivity, a central strand being cognitive exclusiveness, which is a crucial intervening variable.

Bucher and Strauss note that:

'In order to survive and develop, a segment must be represented in the training centers.⁵ The medical school curriculum is crowded as specialities compete for the student's time and attention, seeking to recruit, or at least to socialise the budding professional into the correct attitudes towards themselves.' (1961:331)

The second level at which power struggles are likely to take place, is that of 'master segments', or specialities. Bucher and Strauss note that within established specialities, there is going to be a power struggle for control of the speciality associations, for two reasons: firstly, control of the specialty associations' reins of power enables the leading groups to have at their disposal a range of 'sanctions' to ensure that rank and file members comply with the rules and regulations they have successfully implemented. Secondly, the leading groups within the specialty associations enjoy a privileged relationship with the public and what Bucher & Strauss describe as 'special publics'. The ability to control external relations, places the controlling groups (segments) in a unique position to forward their own interests when negotiating with relevant special publics, as associations do not represent all interests under their umbrella, on the contrary they represent one group (segment) or coalition of 'segments'.

As mentioned earlier, Bucher and Strauss' work focuses on conflict and power within the mature profession and within specialities or master segments; and in doing so it pinpoints areas of potential power struggles and conflict. However, their work does not focus on the processual elements in power struggles, the sum of which equals either success or failure. For example, they do not explain the reasons behind the success and failure of segments to gain a foothold in the training centres, nor the reasons behind the success of some segments in taking the reins of power and controlling the professional associations. Ultimately, their work does not focus on the conditions under which segments become self-regulating 'pure' specialities in their own right.

Bourdieu's works on capital and power in social fields (see section 1.1), adds to the work of Larson and Bucher and Strauss. Bourdieu's conceptual framework is very useful for this thesis in providing solid theoretical scaffolding for understanding and explaining intra-professional specialist differentiation in the field of surgery, and the success and failure of groups in their push for self-regulation. In order to be able to fully understand and appreciate the utility of Bourdieu's concepts for this study, they require elucidation. The most profitable way of achieving this is through an exploration of his writing.

⁵ Halpern emphasises the importance for an aspiring specialist group of achieving an autonomous department in a medical school (1988:57).

Bourdieu's (1988) analysis of the social field, in this case the French university field begins with structural concerns. He argues that:

'the structure of the university field is only, at any moment in time, the state of the power relations between the agents or, more precisely, between the powers they wield in their own right and above all through the institutions to which they belong; positions held in this structure are what motivate strategies aiming to transform it, or to preserve it by modifying or maintaining the relative forces of the different powers, that is, in other words, the systems of equivalence established between the different kinds of capital.' (p.128)

Bourdieu provides a detailed exposition of the different types of capital⁶ and how these relate to structure and power. His use of the word 'homologous' to describe the composition of the university field in relation to the field of power, indicates that it has a similar relative position and purpose. Thus, at one extreme is situated the faculties of Law and Medicine imbued with inherited social capital and holders of economic and political capital, and at the other, the faculties of science and the arts, in possession of the capital of scientific authority or intellectual renown. The schism between what Bourdieu describes as the 'scientifically dominant but socially subordinate faculties' and the 'scientifically subordinate but temporally dominant faculties' (**ibid.:54**), is reflected in the power structure in the university field. Thus, the faculties of Medicine and Law hold more power in the university structure than the socially subordinate faculties namely, the science and arts.

The holders of academic power are in possession of academic capital which according to Bourdieu, is acquired and sustained by holding a position with the means and authority to control other positions. For example, a position on the Universities Consultative Committee provides the holder(s) with 'power over the agencies of reproduction of the university body ensuring for its holders a statutory authority' (**ibid.:84**). Bourdieu goes on to note, that capital has multiplying properties in as far as holding one position can lead to holding new positions of authority.

This 'statutory authority' is played out in what Bourdieu describes as 'the complex and multi-dimensional opposition between the clinical practitioners and the biologists in the medical faculties' (**ibid.:59**). Within the internecine faculty battle, the dominant (i.e. the Professors of medicine imbued with social capital, symbolic capital, and specific cultural capital, as opposed to the biologists in possession of scientific capital and closer to the socially subordinate faculties), have

⁶ See Bourdieu's Homo Academicus, 1988.

the power to determine academic initiation. In the case of medicine, this academic initiation takes the form of consecutive and highly 'competitive examinations' which 'postpone until very late true initiation into the scientific methods of the laboratory' (**ibid.:105**). This is also a clear manifestation of power determining what counts as knowledge and is played out further across the gamut of faculties within the university field. Indeed, Bourdieu notes that the faculties themselves are characterised by divisions organised along the same lines as the university field namely, between the socially dominant faculties and socially subordinate faculties.

Bourdieu's pivotal paper on the scientific field (1981), a precursor to his work on the French University field, focuses on the internal struggles between the dominant and newcomers. He notes that every social field is characterised by a competitive struggle between agents (dominant) imbued with specific types of capital on which the field is dependent, and the dominated, in possession of relatively little of this capital. Indeed, the scientific field is no exception to this rule; Bourdieu describes the struggle that ensues as a 'political struggle for scientific authority, a particular kind of social capital which gives power over the constitutive mechanisms of the field' (**p.262**).

This enables those who control such authority, namely the dominant, to 'impose the definition of science that best conforms to their specific interest, that is, the one best suited to preserving or increasing their specific capital' (**Bourdieu, 1991:13**). Given this, the dominant are committed to 'conservation strategies aimed at ensuring the perpetuation of the established scientific order to which their interests are directly linked' (**Bourdieu, 1981:270**).

Given that the dominant view of science is objectified in institutions, and is thus self-perpetuating, conservation strategies are naturally built into the institutional supports. For example, the education system is the institution responsible for ensuring the continuance of the 'official' (dominant) view of science by methodically instilling, what Bourdieu terms the 'scientific habitus' upon newcomers to the field. Bourdieu describes the scientific habitus as consisting of:

'systems of generative schemes of perception, appreciation and action, produced by a specific form of educative action, which make possible the choice of objects, the solution of problems, and the evaluation of solutions.' (**ibid.**)

In other words, it is the means by which groups succeed in imposing perspectives favourable to their interests.

Bourdieu points out that:

'The established scientific order also includes the instruments of circulation, in particular the scientific journals which, by selecting their articles in terms of the dominant criteria, consecrate productions faithful to the principles of official science, thereby continuously holding out the example of what deserves the name of science, and exercise a *de facto* censorship of heretical productions, either by rejecting them outright or by simply discouraging the intention of even trying to publish them by means of the definition of the publishable which they set forward.' (ibid.:271)

From the outset Bourdieu (1981, 1991) is at pains to point out that the scientific field, like any other field, is a social field; social fields by their very nature are populated by individuals. Indeed, social fields and their supporting structures are created and brought into existence by individuals, as Bourdieu observes when he notes that the structure of the field, and the objective relations which characterise, it are brought about through previous struggles. Although Bourdieu produces a macro-structural framework, he does not lose sight of micro-concerns. For example, he relates the micro to the macro when he focuses on the scientist's career pathway. His use of the word 'agent', which he uses to denote the scientist, clearly suggests that agency as well as structure is important.

This is further reinforced in his analysis of the structure of the French university field, which he argues, reflects the differentials in power between agents situated within institutions. Subsequently, Bourdieu moves from the macro to the micro as his discussion progresses from the hierarchical organisation of the field to faculties or sub-fields and the agents that comprise them

It is fair to say, that Bourdieu's conceptual tools: social field, capital and habitus have dualistic properties (action and structure), in that field denotes structure as well as a social space; capital in all its forms is a resource for agents, and its exchange value is dependent on the type of capital and the social field, and its relationship with other social fields in space and time (**Thomson, 2014**). However, possession of certain types of capital is actualised in structures and enables the dominant to exercise power over the dominated or newcomers; in the case of the scientific field,

and in the case of the university field, the 'temporally subordinate faculties', and the 'socially dominant faculties' (Bourdieu, 1988:41). Habitus is structured and influenced by the agents past and present environmental conditions, for example, family background and educational experiences. It is these past experiences which Bourdieu contends, are internalised by the individual as 'schemes of perception, thought and action.' He describes this as a 'system of dispositions which generate – a present past that tends to perpetuate itself into the future' (1990:54). Conversely, it is doubtful that Bourdieu was implying that agents are structurally programmed without free will, on the contrary, in his work on the scientific field he submits that:

'Depending on the position they occupy in the structure of the field the new entrants may find themselves orientated toward risk-free investments of *succession strategies*, which are guaranteed to bring them at the end of a predictable career, the profits awaiting those who realise the official ideal of scientific excellence through limited innovations within authorised limits; or towards *subversion strategies*, infinitely more costly and more hazardous investments which will not bring them profits accruing to the holders of the monopoly of scientific legitimacy unless they can achieve a complete redefinition of the principles legitimating domination: newcomers who refuse the beaten tracks cannot beat the dominant at their own game unless they make additional, strictly scientific investments from which they cannot expect high profits, at least in the short run, since the whole logic of the system is against them.' (1981:271)

In addition, in his work on the university field, Bourdieu (1988) also suggests that the logic of the field is very much dependent on the thesis director or head, imbued with academic power, being able to manage the career aspirations of his/her students, and the students willingness to participate in the competition, based on their disposition.

Overall, Bourdieu's concepts and their dichotomous relationship between action and structure, should be viewed together as opposed to in isolation. Indeed, Bourdieu (1984) formally summarised the interrelationship between the concepts in an equation: [(Habitus) (Capital)] + Field = Practice (p.101). In other words, we cannot understand habitus without understanding the agents position in the field, relative to the capital possessed, and we cannot understand the types of capital if we do not understand the field they operate in (Maton, 2014). Indeed, the relationship between action and structure in Bourdieu's theoretical schema, share similarities with Giddens's 'Structuration theory' in that Bourdieu places 'the knowledgeableability of actors and conscious

intentionality in the context of structure as the medium and outcome of contingently accomplished activities of situated actors' (**Kilminster, 1991:95**).

Bourdieu's work, which navigates between action and structure, provides a robust theoretical scaffolding for explaining specialist differentiation in surgery. At the same time, it is malleable enough to enable other concepts to be accommodated within its theoretical boundaries, resulting in a workable theory which is able to elicit the factors which effect the pace and direction of intra-professional specialist differentiation in surgery.

1.3 A Workable Theoretical Framework

The profession of surgery, not unlike the scientific field and the university field, is composed of structures. However, all structures are created by individuals and are composed of individuals, and in this respect are, in Bourdieuan terms, social fields. As in any other social field, individuals will associate with other like-minded individuals and in turn form groups. By their very nature groups will have different identities, values and goals; some may wish to pursue the project towards professional status, as described by Larson (1977), with self-regulation as a long-term goal, others may not. Thus, it follows that the surgical profession, not unlike other professions, is a loose amalgamation of interest groups or 'segments pursuing different objectives in different manners and more or less delicately held together under a common name at a particular period in history' (**Bucher and Strauss, 1961:326**).

As with any structure, however, it will be stratified by differentials in power as Freidson (1988) and Abbott (1988) rightly state: between those at the top of the profession, namely the 'dominant', who are committed to 'conservation strategies' aimed at ensuring the perpetuation of the established surgical order to which their interests are linked (**Bourdieu, 1981**), and the aspirant groups, whose objective or occupational quest in practical terms is to have complete control of their own affairs through self-regulation, with their own postgraduate examinations, effectively ensuring a market monopoly based on their service expertise (**Larson, 1977**), as well as the added cachet of advancing the status of the area.

As in any social field, power, as Flyvbjerg (1998) states, 'determines what counts as knowledge; procures the knowledge which supports its purposes and suppresses the knowledge which does not serve it' (p.226). The ability to 'facilitate or suppress knowledge is what makes one group or party more powerful than another' (ibid.:36); in this case: the dominant over the aspirant groups. This ability comes from a significant differential between the capital/resources at the disposal of the dominant group and the aspirant groups. The dominant are in possession of a greater volume of capital/resources, since they control the institutions which propound, inculcate, and support the norms and values of the dominant group (Bourdieu, 1981).

Bourdieu (1986) writes that:

'Capital can present itself in three fundamental guises: as *economic capital*, which is immediately and directly convertible into money and may be institutionalised in the forms of property rights; as *cultural capital*, which is convertible on certain conditions, into economic capital and may be institutionalised in the forms of educational qualifications; and as *social capital*, made up of social obligations ('connections'), which is convertible, in certain conditions, into economic capital and may be institutionalised in the form of a title of nobility.' (p.16)

For the purposes of this thesis, the types of capital discussed will be: *social capital*, with reference to the social origins of the dominant in the field of surgery, particularly in relation to the first surgical epoch, 1800 - 1947; *social capital* in relation to the group and the potential for members to accumulate the combined capital of the group, as a result of what Bourdieu (1986) describes as the 'multiplier effect'. This will be of particular relevance in Chapters Five and Six, in regard to power, political alliances and lobbying; *surgical authority*, not unlike scientific authority, 'a particular kind of *social capital* which gives power over the constitutive mechanisms of the field' (Bourdieu, 1981:262); *economic and political capital* accumulated from the relationship of mutual dependence between the medical profession and the state, since the inception of the NHS in 1948; *scientific capital* associated with the development of technical foci and advances in surgical knowledge, and publication in esteemed peer reviewed medical journals, such as the Lancet; *symbolic capital*, which Bourdieu (1988) describes as the capital 'attached to a proper name and capable, just like a famous brand name in business, of guaranteeing a lasting relationship with a captive clientele' (p. 58), as was the case in the development of Obstetrics and Gynaecology, and *specific cultural capital* which

'constitutes an advantage all the more powerful if the capital common to the field, considered, whether faculty or discipline, is less objectified, less formalised, and it is more completely reducible to the dispositions and the experience constitutive of an art which can only be acquired in the long-term, and at first hand.' (ibid.:59)

It could be argued that medicine and surgery are an art and that understanding the process of disease is something which cannot be learned from objectified knowledge contained in a textbook, alone, but requires a long-period of observation and practice. Indeed, the same argument can be used with regards to bodies of knowledge that are attached to a new technique, such as the Ophthalmoscope or Laparoscope; mastery of these technologies requires long-periods of training and at first hand.

The structure of the distribution of capital in its forms varies according to the structure of the social field in question at that juncture in time and determines the chances of the successful operationalisation of capital by groups'. Indeed, if a group(s) is imbued with specific types of capital that the field depends on for its preservation, the group(s) will be able to garner additional capital as the field produces more of that type(s) of capital **(Bourdieu, 1986)**.

Thus, aspirant groups occupy various positions within the field, depending on the 'capital'/resources they possess **(Bourdieu, 1991)**. There may be new groups possessing a lower volume of capital/resources and more established groups which have managed to accumulate capital/resources over a period of time. Thus, a hierarchy of opportunity arises, for a group's chances of achieving self-regulation will be very much dependent on the capital/resources at that group's disposal: the greater its resources, the greater the group's lobbying power, in what is effectively a political process; The political process involves struggles and conflict as well as strategies and negotiation, and can operate not only on a macro-level, but also on a meso-level. On a macro-level the politicking occurs between the leaders of the aspirant groups and the dominant (i.e. the surgical establishment); this also includes power struggles within the specialist associations over who controls the reins of power **(Bucher & Strauss, 1961)**. A very pertinent contemporary example of this is the political machinations and power struggles which ensued within the walls of the Association of Surgeons of Great Britain and Ireland (ASGBI) during the latter years of the 1990's. This will be discussed in Chapter Six.

At the meso-level the politicking occurs between the leaders or pioneers⁷, who are predominantly found in the highly specialised world of the teaching hospital and located in the large urban centre, and their generalist colleagues, who practise in the district general hospital (DGH) in the suburbs. The dispute may be about 'turf', whereby the leaders in the teaching centres attempt to take more of the difficult cases from the hands of their generalist colleagues, fuelling the argument that difficult cases should be performed by specialists. This provides additional capital in terms of lobbying power on a macro (national level). This will clearly be seen in Chapter Six with contemporary examples from teaching hospitals and district general hospitals.

There may also be a third level on which politicking takes place, namely a micro-level between the leaders or pioneers of groups and the rank and file membership, who for various reasons may not share the same aspirations for the future of their area as their leaders. This may have the effect of altering the pace and direction of the group's aims with regard to self-regulation. A germane example here is vascular surgery and the issue of private practice, which will be discussed at length in Chapter Six.

The fact that fields are social means they do not exist in a vacuum, therefore when social fields meet and interact each has the potential to effect the other: the state on the profession; and the public or 'civil society' on the profession (**Salter, 2004**). A pertinent example is cardiac surgery, which will be covered in Chapter Seven.

The profession has the potential to effect the state ('special publics' – **Bucher & Strauss, 1961**), a good example being paediatric surgery, which will be covered in Chapters six and seven. Additionally, management has the potential to effect the profession, and vice versa. Such interactions may add another dimension to the political process and the pace and direction of specialist differentiation. In this context, the value of capital may not only be defined by the establishment, but by other fields which interact with the profession. The value of capital may therefore be relative to the context of the interaction and its outcomes.

The dominant group may, in an attempt to protect its interests and those of the profession in general, change its conservation strategies in line with changing contexts/threats. An historical example of this is the decision taken by the Royal College of Surgeons to legitimise scientific

⁷ "Leaders" and "Pioneers" is adopted from an article appearing in the 1945 edition of the Lancet, entitled "Clinical Specialism". This will be discussed at length in chapter four.

medicine and specialisation from the mid-nineteenth century onwards. This will be discussed in Chapter Four.

The dominant group may also be replaced over time as contexts change, fields interact, and groups become imbued with greater capital. A pertinent example is the changes to the power structure of the Royal College of Surgeons during the late 1940's, when general surgery's power base had been eroded and the potential for one group to hold power had been curtailed. This will be discussed in Chapter Four.

Boundaries between groups may also blur, and interdependence may become the order of the day (**Bucher & Strauss, 1961**). A pertinent example is the medical speciality of radiology and vascular surgery, a general surgical sub-speciality. This will be discussed in Chapter Seven.

1.4 Summary

This chapter has attempted to construct a workable theoretical framework which will enable a sound understanding of intra-professional specialist differentiation in the surgical profession of the United Kingdom, the factors which have effected the pace and direction of these processes in the past, and the factors which are effecting the pace and direction of these processes in the present.

The proposed framework emphasises an 'Action within Structure' approach in which it is considered that individuals and groups are actively involved in the processes relating to intra-professional specialist differentiation. Intra-professional differentiation is not determined by the laws and pre-requisites of the social system (**Parsons, 2012**).

Individuals and groups create and apply knowledge, but to create knowledge does not in itself guarantee that one can control it and decide when to apply it. Professions are stratified by differentials in power and resources, and struggles will ensue for the control and ability to apply that knowledge. Knowledge is a politically contested resource surrounded by a political battle for the right to self-regulate and determine what counts as knowledge.

CHAPTER TWO

Qualitative Research Process

2.1 Introduction and Aims

This thesis is a case study of intra-professional specialist differentiation in the surgical profession of the United Kingdom. The core data on which the analysis draws were in-depth interviews conducted by the author with two hundred surgeons drawn from across the nine surgical specialities and from all levels of the surgical profession. In addition, general practitioners and hospital medical directors were also interviewed. In total, four rounds of interviews were conducted, the first three in 1997-1999, and the last round in 2003.

The core ambition of the thesis is to elicit the dynamics behind, intra-professional differentiation in UK surgery. As noted in the preceding chapters, this thesis will adopt an 'Action within Structure' approach, in which it is considered that individuals and groups are actively involved in the processes relating to intra-professional specialist differentiation. In doing so, the eclectic synthesis of theoretical perspectives utilised in this thesis guides us in the methodology(s) employed; indeed, theory channels us in research, in other words, it could be said that methodology is an extension of ideas. A more thorough exposition of this will be covered in Section 2.2 Theory and Methodological Considerations.

The richness of theory generates thinking and out of thinking, ideas and concepts become polished. Indeed, Atkinson (2017) argues that theory and ideas are pivotal to quality of outcome in qualitative research. Section 2.3 "Ideas: A Processual Approach", seeks to explore this further and how it relates to the initial stages of this study.

The remaining sections (2.4 to 2.6 inclusive) will systematically document the interview design, including sampling, ethical questions, data analysis and the generation of theory. Section 2.7 provides a summary.

2.2 Theory and Methodological Considerations

The difference between qualitative and quantitative methodological approaches cannot be reduced to technical differences alone, on the contrary, the differences are attributable to divergent philosophical and theoretical traditions. Methodological considerations are thus, an extension of theory **(King & Horrocks, 2010)**.

Glaser and Strauss (2008) point out that the debate between qualitative and quantitative approaches is an historical one and reflected a change in emphasis from theory generation to theory verification. This change in emphasis was very much in vogue between 1940 and 1960 and dominant in scientific positivism. This approach posits that human beings are part of nature and can be studied objectively, not unlike objects in the physical world. Therefore, research within this epistemological tradition seeks to generate knowledge that is objective and unprejudiced by the researcher or research process **(King & Horrocks, 2010)**.

Glaser & Strauss (2008) suggest that the ability to vigorously test theory based on a systematic approach including sampling, coding, distribution of values, the formulation of concepts and generation of hypotheses, directed sociology in a scientific direction.

The scientism of sociology and epistemological tradition of objectivism was reflected in structural functionalist theory in the 1950's and 1960's and in particular in the work of Talcott Parson's. Although, this was discussed in the introductory chapter, it is worth reiterating that, Parson's had a 'complicated, almost love hate relationship' **(Smelser, N. 2012, Foreword. In: Parsons, T. *The Social System*. New Orleans: Quid Pro, V)**, with the ontological position that human beings can be studied in the same way as physical objects in the natural world and subjected to the same system of analysis. He was empiricist in as far as he believed 'that the entire scientific enterprise is dedicated to understanding and explaining an identifiable empirical world' **(ibid.)**. His emphasis on the inevitability of specificity of function, as technical complexity, and scientific knowledge advance leads to a technologically deterministic stance, whereby the specialist division of labour and specialist differentiation are viewed as inevitable and the role of human beings is one of reacting to the functional pre-requisites or laws of the social system. On the other hand, Parson's (2012) did not completely discount human action. On the contrary, he describes the social system as comprising actors with motivation interacting with other actors in a social space, utilising their personality systems and cultural systems.

The theoretical framework utilised in this thesis emphasises an action within structure approach; whilst not discounting structure it argues that knowledge and technology do not operate autonomously of human agency and action, but that actors are the creators of knowledge and new technologies and the institutional structures buttressing these. Indeed, if knowledge and technology existed independently, devoid of human agency, you would expect to see a similar pattern of specialisation across countries, given the global nature of knowledge and surgery; however, this is not the case. A general comparison is provided in Chapter Three, of the pattern of intra-professional specialist differentiation in the UK surgical profession in comparison with the profession in the United States. The essential thrust of the argument employed, is that the growth of knowledge and new technologies alone cannot explain the variation in the rate of specialist differentiation between the UK and the USA and indeed, between specialties in the UK. Therefore, this would suggest that there are other processes at work.

I would argue that a qualitative methodological approach provides the best theoretical fit, given this thesis argues against the scientific reducibility of specialist differentiation. In addition, attempts to uncover the processes at work, determining whether intra-professional specialist differentiation is successful or unsuccessful are likely to be complex and therefore unlikely to be expounded through a quantitative approach.

Qualitative methods tend to be synonymous with theoretical approaches, such as interactionism, phenomenology and ethnography which emphasise the importance of understanding the social world, not in terms of causation, but in terms of social actors, social processes, and systems. As sociologists we are required to question and elucidate the taken for granted realities of everyday life. For example, the reality we are faced with when entering a modern hospital, is a vast array of specialisms, indeed, the hospital is associated with the 'specialist' and there is an assumption that the specialist has greater expertise and specialist knowledge than the generalist. However, as Atkinson (2017) points out, our ideas and 'assumptions' about the world we live in 'are generated through socially shared beliefs, knowledge, and conventions' (p.20).

The socially shared beliefs Atkinson refers to, are produced by the surgical profession and its constituent specialties; social fields, whose members bring them into existence, and demarcate these distinctive boundaries. As is often the case, beneath the taken for granted realities of everyday life, there is competition and claims for legitimacy, that 'actions of type X should be performed by actors of type X' (Berger & Luckmann, 1967:72).

Atkinson (2017) describes boundaries as being significant, given the 'symbolism' accorded to them. In this case the symbolism attached to specialist boundaries is one of expertise in a field of knowledge and skill; this is reinforced through 'language' and 'rhetoric'. The significance of language and rhetoric, according to Atkinson, lies in their utility for 'justifying' and 'explaining'. Atkinson suggests that we should view justificatory narratives in the context of 'accounts', which present 'versions of stories that contain distinctive kinds of speech acts' that are 'deployed to move and persuade the listener' (p.64).

For example, interviews with members of the surgical profession (the leaders and advocates of specialisation) revealed the use of an empiricist like accounting device which described specialisation as a "predictable" and "irresistible" consequence and engine for the advancement of knowledge (See Chapter Three, section 3.2). Accounts and accounting devices may also include, what Atkinson describes as 'contrastive rhetoric'. For example, specialist laparoscopic surgeons contrast positive outcomes for the expert trained in this technique in terms of patient outcomes, length of stay and cost, in comparison with non-laparoscopic open procedures.

Justificatory rhetoric can be a powerful lobbying tool. Indeed, boundary demarcation lines between the 'specialist' and the 'generalist' regarding certain procedures often begin with the specialist associations setting out guidelines, which are reinforced by rhetorical devices employed in the right forums. For example, breast cancer and cancers in general are still high up on the government of the day's agenda. It is therefore not surprising that ABS (Association of Breast Surgery) guidelines on who could and who could not practice breast surgery were accepted not only by the government, but also by the profession (see Chapter Six, Section 6.5.4).

2.3 Ideas: A Processual Approach

As suggested earlier, methodological considerations are an extension of theory, however ideas are theory in embryonic form; indeed Atkinson (2017) contends that theory and ideas are one and the same. Not unlike most postgraduate doctoral theses, the research focus for this thesis changed as ideas were generated and refined over time. This did not cause any concern, as qualitative research by its very nature is more exploratory and investigative.

The initial research focus was on the status passage of surgeons as they became more specialised in their career and Erving Goffman's (1961) concept of 'Moral Career'⁸ was utilised. However, as I began to read about specialisation, I became more interested in the structure of the profession itself and not on the individual surgeon.

The first stage of the enquiry consisted in assessing the state of existing research and documentation. Investigation of secondary literature (discussed in the Introduction) revealed that, though specialisation in the UK (and the United States) figured prominently as a theme in discussions of other topics in surgery (e.g. *Feminisation, Pringle 1998; and Consultations in Paediatric Cardiac Surgery, Silverman 1981*), sociologists had not yet sought to problematise it in its own right, to uncover its history, development and underlying dynamics.

Before research into these questions could begin in earnest, it was necessary for me to familiarise myself with the complex organisation of the profession, the nature, and functions of the relevant professional bodies, and of the specialities and various sub-specialist areas. I acquired this background information primarily from publications in UK surgical journals including *Annals of The Royal College of Surgeons of England; Journal of The Royal College of Surgeons of Edinburgh; Surgery; The BMJ; The Lancet; The American Journal of Surgery; Archives of Surgery*. In particular (*Irving, The General Surgeon. BMJ, 1986; Jackson, Coloproctology – A Speciality in Transition. Annals of The Royal College of Surgeons of England, 1992; Jordan, The Future of General Surgery. The American Journal of Surgery, 1991*).

As I acquired familiarity with the state of the profession, I began to formulate my overall interest in a more precise manner, breaking it down into a preliminary set of research questions:

- *Why has specialist differentiation within surgery occurred?*
- *Had its pace changed over time, and if so, why?*
- *Does the NHS impact on this process, and vice-versa?*
- *Is the profession driving it, if so why?*
- *What role does knowledge/technology play in this?*

⁸ The concept of "Moral Career" was applied by Goffman in his seminal account of the moral career of the mental patient within the context of a total institution. The term career was not used in the traditional sense, but in a 'broadened sense to refer to any social strand of any person's course through life'. The 'concept of career allows one to move back and forth between the personal and public, between the self and its significant society' (1961:123).

- *Is general surgery on the road to extinction?*
- *In what ways does specialist differentiation impact on the profession?*

Though perusal of surgical literature enabled the formulation of questions such as these, neither it nor the writings of sociologists (which, in surgical matters, tended to be confined to the US context) contained the sorts of information necessary to answer them. It became apparent that, for this, it would be necessary to talk directly to members of the profession and get the inside story.

2.4 The Qualitative Research Project and the Interview

Qualitative research is processual in nature, designed to educe an outcome; the outcome is knowledge, ideas, and ultimately theory. Given the processual nature of qualitative research, there are stages that the qualitative researcher is likely to pass through when formulating the research project (Warren 2001; King & Horrocks, 2010) and my research was not an exception to this rule. For example:

1. Formulating a research question
2. Selecting the type of interview to utilise
3. Deciding on who to interview and recruiting a representative sample
4. Gaining access and ethics
5. Developing an interview guide, comprising areas to be covered

As alluded to in the previous section, I developed a preliminary set of research questions which were “broad” and “causal” in nature. King and Horrocks (2010) suggest that qualitative research cannot answer such questions and propose utilising quantitative methods in the hypothetico-deductive method tradition, that is to say, formulating hypotheses that can be falsified through the testing of observable data. However, I would argue that use of a survey to answer such questions would at best, have provided superficial answers and at worst, would not have provided the depth and richness, that only qualitative methods can; in addition, such an approach is the very antithesis of what this thesis argues against.

There is an abundance of literature on the qualitative interview: Arksey & Knight (1999); Warren (2001); Charmaz (2001, 2014); Marvasti (2004); King and Horrocks (2010); to name but a few.

The interview is one of the oldest methodologies utilised by social scientists, an approach championed by the ethnographers of the Chicago School. The Chicago School methodology utilised a combination of case studies, documentary analysis and qualitative interviews. These methods were employed to enable a greater understanding of the diversity of the Chicago urban experience of the 1930's and 1940's (**Warren, 2001**).

The qualitative interview is just as relevant today as it was to the urban ethnographers of the Chicago School. The interview is the most widely used tool employed by qualitative researchers, in their quest to understand the social world. I hesitate to use the word "data" even though qualitative research does indeed produce data. I would argue that the qualitative interview is not merely an instrument utilised to produce data, per se, but to reveal the richness of social structures and social systems. The kernel of the qualitative interview is essentially a dialogue involving two people 'in which one person has the role of researcher' (**Arksey & Knight, 1999:2**), designed to educe this richness.

Warren (2001) poses the question as to who should one interview? The answer to this question is dependent on theoretical stance, i.e. whether the researcher seeks to verify theory and therefore seeks to establish statistically significant and generalisable data, or whether the researcher seeks to understand the social world and underlying processes. The former utilise social surveys with a representative sample of the population to be studied.

In contrast, qualitative research does not set out to establish statistical generalisability, however, it does seek to understand social phenomena through the collection of rich and complete data. In addition, there is more importance attributed to analysis and explanation that is more 'holistic' in nature as opposed to recording statistical correlations. Given this, samples in qualitative research are usually purposive, in other words, participants are selected because of the likelihood they will generate valuable data for the research project (**Green & Thorogood, 2004**), or to advance the researcher's theory (**Charmaz, 2001**).

King & Horrocks (2010) suggest that the sampling and recruiting of participants may occur at numerous stages during the course of the qualitative research project. For example, the initial

sample may be recruited and interviewed, and based on initial analysis of the data, an additional sample delineated to address particular issues that have emerged. Glaser & Strauss (2008) describe this form of theoretical sampling, as “Grounded Theory”, in which the process of data collection generates theory and informs the researcher as to what data to collect subsequently, and where to find them. This process is controlled by the embryonic theory that emerges from the data.

As alluded to in section (2.3), I began to generate a set of preliminary research questions around: specialisation; knowledge and technology; the future of general surgery and specialisation in the context of the NHS. My sampling strategy was purposive as the literature enabled the formulation of questions but provided no answers. The initial sample was British surgeons who had written about specialisation. At first there was the preoccupation that access might be problematic because of the busy nature of a surgeon’s life, and the daunting prospect of being interviewed by a social scientist probing for answers to questions relating to the internal workings of the profession. Indeed, Feldman, Bell & Berger (2003) suggest that gaining access may seem like an unwelcome obstruction to an enthusiastic researcher however, gaining access is a vital stage in the research process, as without access one cannot garner data. In addition, the authors argue that the actual process of gaining access affects the data available to the researcher. Indeed, the authors suggest that access, like research itself, is a dynamic process and one which is very much dependent on developing relationships.

In practice, however responses were overwhelmingly positive, and the initial fears groundless: it was possible to find ample numbers of suitable interviewees in all four rounds of interviews. This illustrates the paradox of access Feldman, Bell & Berger describe in their work, that is, regardless of having ‘so little to offer our informants’ (2003: viii), we manage to gain the access required. The authors seek to elucidate this contradiction by viewing it through a ‘relational lens’. They contend that relationships and their motivations in the context of research are akin to relationships in everyday life. For example, they note that key informants may also get something out of the encounter, this could be related to the prestige they realise as a result of their connection with the researcher or because they want the researcher to do well.

Some pertinent examples from my research experience reinforce the seminal work of Feldman, Bell & Berger. Firstly, what I would describe as the Oxbridge effect enabled easier access to all levels of the profession, but especially to the teaching hospital professors and leaders in the profession, many of whom had been students at Cambridge or Oxford once upon a time. Secondly,

it facilitated a platform upon which to build good relationships as it was a conversation point during the interviews. Thirdly, since childhood I have always had a keen interest in medicine and surgery and was therefore familiar with the professional nomenclature; this enabled a very good relationship dynamic between me and my interviewees and facilitated contacts within the profession. Feldman, Bell & Berger compare the access process to opening a door, with success being dependent on whether the researcher can find the door and has the 'right key or combination that enables one to open it' (**ibid.: ix**). However, once you are through the door there is an opportunity to build relationships, garner further contacts and expedite the research project. In this respect, access and sampling have a symbiotic relationship.

Interviews were held in total with over 200 professionals in the course of four rounds. Overall, the sample was primarily comprised of surgeons, although in round two, hospital CEO's and General Practitioners were interviewed. The sampling for this research was conducted (i.e. interviewees were selected) in two ways: 'systematic sampling' and an element of 'snowballing'. In systematic sampling' the researcher arbitrarily selects every tenth or twentieth name from a list. 'Snowballing' involves using personal contacts to build up a sample of the group to be studied. During rounds one, two, and four, systematic sampling and snowballing techniques were utilised and in round three systematic sampling was used.

For rounds one, three and four, respectively, the systematic sampling techniques employed combined: compiling a list of surgeons drawn up from the UK medical directory; teaching hospital and district general hospital (DGH) websites; names were chosen using the method above. Once the list of names was generated, letters were sent to all, outlining my background and the research project (see Appendix 1 for an example of a letter). The list purposively reflected demographic and teaching hospital vs DGH considerations. For example, it was important that the sample was not London centric or weighted in favour of teaching hospitals. The systematic sampling technique employed in round two for Trust CEO's followed the same technique as outlined above. The snowballing technique employed in round one, involved utilising two surgical contacts of my college tutor; personal GP contacts in round two and a small number of surgical contacts recommended by interviewees in rounds one and four, respectively. Overall, both techniques (systematic sampling and snowballing) were employed effectively throughout the research.

Ethical considerations have become more prominent as society has become more cognisant of the rights of individuals (**Tinker & Coomber, 2004**). Indeed, King & Horrocks (2010) note that

organisations, such as the National Health Service (NHS) specify that research that involves either patients or staff must go through the procedures of the National Research Ethics service (NRES).

This research did not follow the ethics committee route. This was due in part to a combination of inexperience and pragmatism. However, the research adhered to ethical considerations. For example, as alluded to above, all participants were sent letters outlining the research question; this was expanded on during the introductory element of the interviews and clarity provided if required. In addition, a few of the participants asked for assurance that they would have site of any material for publishing before it went into the public arena.

The final stage in the development of a qualitative research study is the interview guide. King & Horrocks (2010) recommend the use of an interview guide that serves as a framework for the main topics the researcher needs to cover but has enough flexibility in the way the questions are phrased, the order in which the questions are posed, and permits the interviewee to steer the discussion in unexpected directions.

The interview guide was utilised effectively during all four rounds of interviews. I set out with a list of main themes and questions relating to these, to be covered during the course of the interview. However, the order in which they were asked was very much dependent on the rapport established with the participant at the beginning of the interview. In addition, the participant would often answer a question, which would then require a clarificatory question, and more often than not, the participant would go off on a tangent and in doing so would provide more information.

As alluded to in this section, the qualitative interview is not merely an instrument utilised to produce data, on the contrary, it is a social interaction between interviewer and interviewee and should not be viewed as 'something to be controlled, as they are in standardised survey interviews' (**Warren, 2002: 91**). Indeed, as Charmaz (2001) suggests, the qualitative interview is an encounter whereby the interviewer delineates the topics and prepares the questions, however there is an element of fluidity whereby ideas and topics materialise, and the interviewer can follow these pointers.

The format of the interviews was relatively informal, and most lasted between thirty and sixty minutes. All interviews were tape-recorded. Warren (2001) suggests that the turning on of a tape-recorder may have significance for the interviewee. This was certainly an issue for a minority of interviewees. The interviewees in question, were suspicious and asked for assurance that

information gleaned was for research purposes only. Once anonymity was assured, they were happy to continue. Of course, it is hard to quantify whether the presence of a tape-recorder influenced the depth of information submitted. However, there were occasions when the conversation continued after the tape-recorder had been switched off and a written record was utilised thereafter; the interviewees were not opposed to this method being employed.

The interview style employed combined two tried and tested styles, namely 'non-directive' and 'active'. The 'non-directive' style was used initially to establish a rapport with the interviewee. This involved paying attention to the interviewee's responses, refraining from offering opinions, in order to avoid expressions of approval and disapproval, enabling the interviewee to pen up and talk freely. Indeed, building a rapport is essential to unlocking the information held by the interviewees, indeed Feldman, Bell & Berger (2003), propose that trust is fundamental in developing this rapport, and courteousness, focussed listening and a genuine interest in the information the interviewee is imparting are pivotal in building this. Once trust and its resulting rapport had been established between myself and the interviewee, I then adopted a more 'active' style in which I responded to them by following up on what they had said with more in-depth probing questions.

There are three main types of probe that can be used effectively during the interview process, namely: elaboration, clarification, and completion. As their names suggest, they fulfil a specific purpose. For example, 'elaboration' probes are what I would describe as garnering probes, as they prompt the interviewee to provide more detail about a specific topic; 'clarification' probes are utilised for the purpose of amplification of words or technical detail that the interviewer has not completely understood; 'completion' probes invite the interviewee to finish explaining a topic that he / she did not conclude (King & Horrocks, 2010).

Below are examples of elaboration probes used during the interview process:

Example 1

JLC: We're having difficulty getting patients to go back to somewhere...say the patient is sent straight from a DGH casualty department to us, we have nowhere to send the patient back to. In that way, sub-specialisation has excluded a group of patients from treatment in their own hospital, taking up beds in our hospital and we can't get them out...our beds are filling up with these patients. This is an example of where sub-specialisation is exclusive...it excludes patients - sub-specialisation is a bit like that, in that it narrows to a

focus which has good points and bad points... you can produce better results and have more interesting people, but it excludes other people who fall between stools, and people suffering with backache is an enormous sub-set of the population with nowhere to go.

MW: When you talk about back work are you talking about all levels of the spine?

JLC: Well, neurosurgery has traditionally dealt with neck problems more than other levels...I suppose because where there is neck trauma there is often spinal cord involvement, and that's where we get involved. A few of the lumbar discs were treated by neurosurgeons and that's the way it used to be, but over the last 10 or 15 years orthopaedic surgeons are withdrawing from that and we are now dealing with a lot more degenerative work... we're still not well sorted to treat other levels of the spine, other than degenerative work. So, whereas we'll take cervical spine trauma, we don't have good resources and we don't have the skills really, to sort out trauma at other levels.

MW: Why do you think orthopaedic surgeons are withdrawing?

JLC: Orthopaedic surgeons have traditionally been a big target for lawyers – society wants to get back at doctors for what they perceive they do, and it's unsustainable really... but I think it's a big influence on some people that when they get sued for something they say 'I'm never going to do that again... I'm not going to deal with those cases. But if you withdraw from those cases there is no one else to take it up, and that's why there has been increasing pressure on Neurosurgery to take more of this spinal work, and whereas we have the skills to take on some of it, we haven't got the skills to take on all of it

Example 2:

VVP: There are fewer people wanting to do pure thoracic – there are not enough thoracic surgeons to do all of the jobs.

MW: Would you mind explaining why this is the case?

VVP: There is almost a sub-division within that, in that the oesophagus is moving away from the cardiothoracic people towards the Upper GI surgeons... the lungs will be done by cardio-pulmonary surgeons, and that's the current trend. I suppose that makes sense... the oesophagus is a very unforgiving organ, there's a lot of complications and morbidity attached to it... even though we have two specialist thoracic surgeons, they have had great difficulty drawing the oesophagus back, whereas in somewhere like (B) the two thoracic surgeons do lungs and gullets.

2.5 Gathering and Analysing Data

The methodological framework to which the data-gathering during interviews broadly adhered is known as 'grounded theory', developed by Glaser & Strauss in 1967. Charmaz (2014), describes grounded theory methodology, as 'systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories from the data themselves' (p.1). Thus, it is not a dogmatic approach, as it offers a set of principles and exploratory mechanisms as opposed to rigid rules.

Grounded theory essentially consists of two diametrically opposing positions in sociology, namely Columbia University scientific positivism and Chicago University (Chicago School) qualitative research. Glaser was trained at the University of Columbia and Strauss at the University of Chicago (**Glaser & Strauss, 2008**). However, despite its positivistic heritage, grounded theory methodological guidelines, e.g., coding, sampling, and comparative method, are on the whole, impartial. As alluded to above, grounded theory offers the researcher a set of 'guidelines' and experimental / 'heuristic' mechanisms rather than rigid rules to be followed (**Charmaz, 2014**). Grounded theory is thus an enabler. It could also be said that grounded theory is instinctive, almost common-sense like. For example, as qualitative researchers we set out with questions we would like to try and answer and as we progress in our quest further questions emerge from our initial findings.

As indicated in section (2.4), this research utilised in-depth qualitative interviews. Charmaz (2001) suggests that there is a good fit between in-depth qualitative interviews and grounded theory methods. For example, qualitative interviews are open-ended and enable a deeper examination of a topic which the interviewee has extensive knowledge, experience, and vision. The fluidity of

this approach enables the interviewee to pursue pointers during the interview and develop new lines of enquiry.

Round One Interviews (Spring 1997)

The purpose of the first round of interviews was twofold: to familiarise myself in more detail with general aspects of the profession relevant to my research, and more particularly to elicit opinions on the question of specialisation. Given the impression of inevitable decline for general surgery circulating in specialist literature, it was necessary to understand how members of the profession themselves regarded and explained the issue.

As alluded to in section (2.4), the sample of interviewees was chosen using systematic sampling and snowballing, although initial contact was made with authors of articles on this topic in surgical journals. Given the important place of general surgery in the research, ninety-three general surgeons across the sub-speciality range were interviewed (particularly vascular surgery, given that they were the leading group pushing for independence from general surgery). There was representation from specialist centres and district general hospitals. The distribution of general surgeons across the sub-specialities was as follows:

- *Vascular: 40*
- *Colo-rectal: 28*
- *Laparoscopic: 10*
- *Upper GI: 5*
- *HPB: 1*
- *Breast: 4*
- *Endocrine: 1*
- *Transplantation:4*

The questions posed to interviewees in the course of the semi-structured interviews were:

- *Why has specialist differentiation within surgery occurred?*
- *Has its pace changed over time, and if so, why?*
- *What impact does the NHS have on the process, and vice-versa?*
- *Is it being driven by the profession, if so, why?*
- *What role does knowledge / technology play in this?*

- *Is general surgery on the road to extinction?*

Given the emergent and fluid nature of the interviews, questions were not posed in the same order for all interviewees and the phraseology varied from interview to interview as the conversation developed. All of the interview material from this round was transcribed.

Charmaz (2001) submits that coding is the quintessential first-step in terms of moving the researcher from ‘description to conceptualisation of that description’ (p.683). Glaser & Strauss (2008) describe coding as a process whereby data is broken down, labelled, and compared with data. They describe this process as the ‘Constant Comparative Method’. The first stage in the constant comparative method entails ‘the analyst coding each incident in his data into as many categories of analysis as possible’ (p.105). The initial analysis in round one interviews employed a line by line approach to coding each incident in the data. Examples of this approach are set out below in Table 1.

Table 1. Initial Coding

<p>Example 1: GB</p> <p>Inevitability of specialisation</p> <p>Territory / control / power</p>	<p>Whether they like it or not, surgeons are becoming more and more specialised, through factors not relevant to the surgeon...they are just happening. In addition, the vascular society, the colo-proctology society and the breast society, are saying, let’s try and strengthen what has already happened... in other words, we want you to be signed up as breast and general surgeon and not just a general surgeon. It is common-sense that you would want to group together like-minded people with similar interests, and on top of that there is power. If you fragment and chop up the size of the pond, you can be a big fish in a small pond</p>
<p>GP referral patterns</p> <p>Trust management</p> <p>Inevitability of specialisation</p>	<p>One of the factors that has led specialisation, is the selection of surgeons to whom you refer particular patients. Nowadays GP’s are more likely to refer varicose veins to that surgeon and gallbladder to that surgeon. They are also getting feedback from the Trust advising them of</p>

<p>Specialisation beneficial to Trusts</p> <p>Amalgamation</p> <p>Service provision</p>	<p>special interests.</p> <p>I am not sure that the Trusts are pushing for specialisation, but they are jumping on the bandwagon. Our Trust was helpful in building the vascular practice, so they clearly see that as a good thing. Pressure may prevail under the new NHS in terms of grouping together hospitals, in order to provide a vascular service for a much larger group of patients. In practice, it is not always that easy, as there are vested interests.</p>
<p>Example 2: J.T.B.</p> <p>Knowledge base</p> <p>generalist / specialist</p>	<p>The corpus of knowledge the profession had a hundred years ago was such, that a surgeon could encompass the entire corpus of knowledge and practice the whole range of surgery, as it was then...there was no such thing as a specialist surgeon a hundred years ago, they were surgeons full-stop.</p>
<p>Specialisation</p> <p>Expansion in knowledge and technology</p>	<p>Over the last 30 years there has been a trend to specialise in the so-called areas of general surgery...surgery of the peripheral blood vessels (vascular), intestines from oesophagus to anus, breast, and endocrine glands. The reasons for this trend is related to the expansion in the corpus of knowledge and technologies. In addition, there is</p>
<p>Patient expectations</p> <p>Media</p> <p>Specialist vs. generalist</p> <p>Calman Hine</p> <p>Specialist centre</p>	<p>pressure from patients, as the concept of a general surgeon, who is not a specialist, does not go down well with the general population. This is partly media fuelled, that if you go and see a generalist you are likely to get inferior or even the wrong advice. A recent government report by Calman and Hine, suggests that there is evidence that the treatment for breast cancer is better if you are treated in a specialist centre.</p>
<p>Prestige</p> <p>Generalist / specialist</p>	<p>There is a perception amongst some surgeons that being a specialist is more prestigious than being a generalist. If one then sets up specialist surgical societies and groups, you can</p>

<p>Power of specialist associations</p> <p>Affiliations</p> <p>Power / weak / Without form</p> <p>Influence on the centre</p> <p>Membership strength</p>	<p>become treasurer, secretary, and possibly president. People like to wear medals around their necks and call themselves president...this is not the most important factor, but nevertheless, it is there as an undercurrent.</p> <p>The specialty associations are also becoming more powerful. In general, surgeons associate with their specialty associations rather than their college. The Royal Colleges are seen as amorphous and have definitely become weaker.</p> <p>The Association of Surgeons of Great Britain and Ireland is the specialty association representing general surgery and its sub-specialties, and has a much more powerful voice with the government – strength in numbers, etc. It is probably more powerful than the British Orthopaedic Association.</p>
--	--

The interviewees suggested a broad range of reasons for the intensification of specialisation and differentiation within the profession and following the initial coding phase, a number of codes and corresponding categories were developed and further problematised in subsequent rounds.

Table 2. Generated Categories and Codes

Categories	Codes
Developments in knowledge/technology	Natural-inevitable process / Techniques with steep learning curve
GP referral patterns	Surgeons powerless/forced to specialise /patient expectations

Internal market & NHS Trust managers	Specialisation more lucrative for NHS trusts/market power
Professionally driven by speciality Societies and (SAC's) controlling the pace & direction of specialisation	Power, status, diminishing power of Royal Colleges
Turf wars between hospital types	Specialist centres vs. district general hospitals / Power / territory
Anatomical turf wars	Power & politics / Specialist associations technique vs. organ related discipline
Calman-Hine report	Positive outcomes increase with volume of procedures
Calman training programme	Reduction in training times / Early specialisation
General take	NHS resources - shortage of surgeons / Need to provide general emergency service to populace.

Glaser & Strauss (2008) suggest that in addition to the generation of a number of categories and codes, the constant comparison of incidents within the data begins to 'generate theoretical properties of the category'. For example, the 'continua of the category, its dimensions, the conditions under which it is pronounced or minimised, its major consequences, its relation to other categories' (p.106).

Subsequent to the generation of categories and codes / properties, it was possible to identify "power" as a dimension peculiar to four of the categories, namely: *Internal Market & NHS Trust Managers; Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace and Direction of Specialisation; Turf Wars between Hospital Types, and Anatomical Turf Wars*. Thus, at an albeit superficial level, it could be said that, comparatively speaking, the four categories were related. Glaser & Strauss submit that as 'categories' and their codes / 'properties' materialise, the researcher will uncover two types: 'those that he has constructed himself and those that have been extracted from the language of the research situation' (ibid.:107). In regard to this research, "Power" as a code / property was extracted from the language used by the interviewees. However, it was also possible to construct / educe two further codes / properties relating to the four categories, namely "Agendas" and "Resources". For example, if we focus on the category *Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace and Direction of Specialisation*; the specialist societies agenda is to be able to control their body of knowledge, through standard setting, professional examinations, and training. Knowledge itself, is a resource, and the ability to control it, places specialist societies in a powerful position.

There is two fundamental questions in sampling: firstly, what group(s) should I interview next? Secondly, what is the underlying theoretical rationale and process employed in the selection of these groups? The authors recommend that the basic principle underlying the decision to select one group over another relates to their significance in advancing the development of theoretical categories (Glaser & Strauss, 2008). During the initial coding phase, nine categories were generated as contributing to the specialisation of surgery and of these categories, three involved other professional groups: *GP referral patterns; Internal Market & NHS Trust Managers; Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace and Direction of Specialisation*. It was therefore necessary to interview these comparison groups of peer professionals, namely the Presidents of the Royal Colleges, General Practitioners, and Trust managers in order to enable them to respond to the statements of the surgeons.

Round Two Interviews (Autumn 1997)

The samples were chosen as follows: snowballing (for GPs) systematic sampling (for Trust Managers, from a list of Specialist Centres and District General Hospitals). The Presidents of the Royal Colleges in London, Edinburgh and Glasgow were interviewed, but it was not possible to interview the fourth (Dublin).

General Practitioners

Three GPs were interviewed, one each from North Yorkshire, Cambridgeshire, and Berkshire. They were asked the following questions:

- *Surgeons suggest that GP referral patterns are a factor driving specialist differentiation – could you give me your opinion on this?*
- *Does patient expectation have any effect on your referral patterns to surgeons?*
- *What sort of strategies do you employ as a fundholding Trust with regard to the purchasing of specialist services?* (The purpose of this question was to determine the extent to which GP's influence the organisation of surgery in their local hospitals)

Table 3 Generated Categories and Codes (2)

Categories	Codes
Professionally driven by specialty societies and (SAC's) controlling the pace and direction of specialisation	Surgeons and specialty societies inform GPs of specialist services
GP referral patterns	Low expectation of patients
Internal Market & NHS Trust Managers	Trust managers inform GP's of specialist services
Purchasing of specialist services	Waiting list priorities / Local access to surgeons

Trust Managers

Two Trust managers from Cambridgeshire were interviewed. One managed a DGH, the other a specialist centre, and they were chosen so that their answers might be compared. They were asked the following questions:

- *Would you say that your NHS trust impacted on the pace and direction of specialist development within your hospital?*
- *Given the nature of the purchaser provider split, is it in the interest of a trust (such as yours) to have highly specialised surgeons?*
- *Many of the surgeons interviewed argue that trusts put pressure on them to develop certain services given their marketing potential – would you say that this is an accurate picture?*
- *Would a highly specialised surgeon have more bargaining power in terms of the allocation of resources across departments?*

Table 4 Generated Categories and Codes (3)

Categories	Codes
Internal Market and NHS Trust Managers	No pressure on surgeons / Extra-contractual referrals attractive /Finite Resources Supportive of specialisation Allocation of resources based on need to provide service to local populace
Calman-Hine Report	Hospital configuration Driven by Royal Colleges

Presidents of Royal Colleges:

The Presidents of the Royal Colleges of London, Edinburgh, and Glasgow. They were asked the following questions:

- *Would you say that the surgical Royal Colleges have been weakened by the increasing influence of the specialist associations?*

- *Can you explain the specialist training structure and the role of the surgical Royal Colleges in it?*
- *If an aspiring specialty group wishes to break away and form its own self-regulating specialty, which body would hold the ultimate veto?*

Table 5 Generated Categories and Codes (4)

Categories	Codes
Colleges' statutory role to supervise and oversee surgical training	Colleges not weak / Ear of Government / Service planning (1948 onwards)
Professionally driven by specialty societies and (SAC's) controlling the pace and direction of specialisation	Report to Colleges / specialist arm of Colleges
Surgical power structures	Senate of Surgery - ultimate veto over self-regulation

Following initial coding, additional categories and underlying codes were created for General Practitioners (Table 3) and Presidents of the Royal Colleges (Table 5) and it was also possible to add additional codes to the categories generated following round one interviews: *Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace and Direction of Specialisation*, *GP Referral Patterns*, and *Internal Market & NHS Trust Managers*. In addition, the use of comparison groups and comparison of incidents within the data, enabled me to question the continua and minimisation of specific categories -

- The continua of the category *GP Referral patterns*, as a contributory factor driving specialisation was brought into question, in light of GP interviewee responses. The comparison of incidents across this data suggests that GP referral patterns are based on the information provided by surgeons and NHS Trusts, and that overall, patient

expectation does not influence choice of surgeon, either specialist or generalist. Furthermore, the GP sample adds more credence, as the interviewees were from large fundholding practices; their population base was a mix of affluent and non-affluent areas. One of the practices purchased services from a teaching hospital and the other two, from district general hospitals.

- The category *Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace and Direction of Specialisation* was minimised, given the role of the Royal Colleges in surgical training and the surgical structure. Thus, although specialty societies may be one of the driving forces behind specialisation, it is the Royal Colleges and the specialty societies through the SAC's, that oversee specialist training. In addition, if a sub-specialty wishes to set up its own separate specialty, the area will require the support of its parent specialty, and the Senate of Surgery holds the ultimate veto.

Round Three Interviews (Winter 1998-1999)

The purpose of the third round of interviews was to investigate whether the specialities which have broken away from general surgery and no longer from part of it (Trauma & Orthopaedics, Plastic Surgery, Neurosurgery, Cardiothoracic Surgery, Paediatric Surgery, Urological Surgery, ENT and Oral and Maxillofacial) are experiencing calls for further specialisation and splintering (i.e. aspiring sub-specialist groups wanting to self-regulate); and if so, how these compare to the corresponding calls currently made in general surgery.

The sampling method used was systematic sampling. A total of 82 interviewees were selected from specialist centres as well as district general hospitals. The distribution across specialities was as follows:

- *Trauma & Orthopaedics*: 38
- *Plastic*: 6
- *Neurosurgery*: 4
- *Cardiothoracic*: 22
- *Paediatric*: 3
- *Urological*: 6
- *ENT*: 2
- *Oral and Maxillofacial*: 1

Some of the questions were as in round 1, the difference being in the nature of the respondents: in round one the respondents were ‘general’ surgeons, who had not yet specialised to the point of self-regulation, whereas the respondents in round three belonged to the specialities which had broken away from general surgery and begun to self-regulate.

- *Why has specialist differentiation within surgery occurred?*
- *Has its pace changed over time, and if so, why?*
- *Is it being driven by the profession, if so why?*
- *What role did knowledge/technology play in this?*
- *Is general surgery on the road to extinction?*
- *Is it true that the Royal Colleges ultimately control the pace and direction of specialisation?*

In the light of the responses in round one, the question about the NHS was focussed specifically onto NHS trusts, and a new question was inserted about GP referral patterns:

- *What impact do NHS Trusts have on the process, and vice-versa?*
- *Do you think that GP referral patterns push specialisation, if so why?*

Questions were also devised to identify differences across different specialities:

- *Has sub-specialisation occurred within your speciality? Do you see this progressing further, and if so to what extent?*

Initial line by line coding was carried out, examples of which can be seen in Table 6, below.

Table 6.

<p>Example 1: H.U.</p> <p>General ortho surgeons</p> <p>Specialist spinal surgeons</p> <p>Specialisation</p> <p>Territory / expansion of</p>	<p>General orthopaedic surgeons stopped doing spinal surgery... specialist spinal surgeons do this surgery, but there aren't vast numbers of specialist spinal orthopaedic surgeons...there are only a few highly specialist orthopaedic surgeons doing Scoliosis surgery. However, I see a day when neurosurgeons, rather like when plastic surgeons did hands... they will muscle in... maybe it's just a</p>
---	---

<p>neurosurgery</p> <p>Consultant led trauma service</p> <p>Power of specialist associations</p> <p>Limited manpower</p>	<p>reflection of the expansion of neurosurgery.</p> <p>In the 90's the BOA (British Orthopaedic Association), started to feel, that it was a good idea to have a consultant led trauma service. I hadn't done trauma for about 7-8 years to any great degree, and couldn't understand why after 7-8 years, I'd have to do trauma lists again. So, with limited manpower you can see how a Trust would want everyone to do it – I was resistant to it.</p>
<p>Trauma will not separate</p> <p>Exclusive trauma centres</p> <p>Private practice</p>	<p>I do not see a time when Trauma will be hived off from orthopaedics... I see there being orthopaedic trauma surgeons. Now, there are some...you can go around the country and you'll find trauma centres with surgeons' dealing exclusively with trauma... I think that's a perfectly reasonable way to go...there's even talk of having it here, but people say, well you'll not find people to do it. Well of course you will, provided you dress the job up. If you're expected to come in and do trauma and everything else as well, you won't, but if you acknowledge that this is a specialty that needs sorting out, you'll fill it. There would be no private practice in this area though, which would put some off.</p>
<p>Example 2: V.V.P.</p> <p>Specialist societies</p> <p>Oesophageal surgery / territory</p> <p>Training / examinations in thoracic and general surgery</p>	<p>There's a big dispute regarding oesophageal surgery and general surgery, because we do a lot of oesophageal surgery as well... times have changed a lot, in that a lot of the upper GI tract surgeons are doing oesophageal surgery and chest surgery but are not trained to do chest surgery... we grumble at the fact that they're not trained to do it. I was at a recent meeting of the Association of Upper GI Tract Surgeons, and we basically agreed that anyone who wants to do oesophageal surgery should train for a while in thoracic; also, our trainees are not getting general surgical exposure. We want our guys to train in general surgery</p>

	<p>as well...hopefully there will be a good crossover between the two specialities. So, thoracic surgeons at the moment...some don't do any oesophageal work, a lot do.</p>
<p>Resources Power Negotiate your specialty Lung cancer not topical</p> <p>Inevitable Volume / outcomes Calman-Hine report Cancer units / Cancer Centres</p>	<p>I think things have gotten better to a certain extent, for instance this clinical director system of management... I think it's more sort of upfront and confrontational, and I think you are in a better position to negotiate your speciality. So, I think things are actually improving... again it's communication, because a lot of people don't understand what thoracic surgeons do. They know how many breast cancers are taken out each year, but they're not interested in lung cancer... it's not very topical, but then again, it's killing more women than breast cancer. So, now they have to get interested in it and it's becoming more topical. But I think the thing that's stimulated thoracic surgery, has been the development of cancer unit's, cancer centres and the Calman recommendations... that if you're doing 2 oesophagectomies you shouldn't be doing it, you should be sending them to the major centres. So, there's a lot of evidence now that volume equals good results...if you're not doing the volume, you shouldn't be doing it at all. Hence, the patterns of referrals have changed a lot, because of the cancer units and cancer centres and also the availability of intensive care.</p>
<p>Internal politicking</p>	<p>I sit on the cardiothoracic management team (CMT)...I'm the thoracic advisor, and we're in the process of amalgamating with (B), so that we're going to have a new unit built at (J)... so there's a lot of politics going on underneath, and there are committees here and there that you can put your two penneth into.</p>
<p>Weak Without form Royal Colleges</p>	<p>The college has nothing to do with the way services are planned to be quite honest. Personally, I find it very hard to know what the Royal Colleges do, apart from education and meetings and, perhaps SAC's. In</p>

<p>Professionally driven by specialist societies guidelines / service planning</p>	<p>terms of local presence and involvement in the way services are distributed, I don't think they do a very good job, to be honest.</p> <p>The societies have done more than the Colleges in terms of giving advice on how specialities should be set up. For instance, the Society of Cardiothoracic Surgeons and The European Association of Cardiothoracic Surgeons have developed guidelines and protocol etc, and we did one on how a Thoracic unit should be set up. So, they've done more in terms of planning how many surgeons you should have per million of population, what the services should actually include, and that's been more useful in planning your speciality.</p>
<p>Influence on centre Bristol and cardiac surgery Dr Foster and league tables</p>	<p>The government talks to the speciality associations more than the colleges, particularly over the Bristol affair – paediatric surgery, cardiac surgery...so, when it comes to things like that, it has been the societies that have been dealing with it, not the colleges.</p>

Overall, the interview data reinforced the data obtained from round one interviews with general surgeons. However, given that round three was conducted in 1999, two years after round one, it seemed desirable to ascertain whether things had changed significantly with regard to the lead player in the push for separation from the specialty of general surgery, namely vascular surgery. Accordingly, the President of the Vascular Surgical Society of GB & Ireland was re-interviewed. His answers from round one already being on record, he was just asked the following:

- *Has vascular surgery's position changed since 1997 – are vascular surgeons still pushing for separation from general surgery?*

He responded by noting that the situation had changed somewhat, in as far as vascular surgery was not pushing for separation as it had back in 1997. The reasons given: demographic factors; recruitment issues and private practice. Given his responses, and overall responses, additional categories and codes were created accordingly.

Table 7. Generated Categories and Codes (5)

Categories	Codes
Specialty	Specific traits
Demography	Eclectic Hospital

The first category: *specialty*, not only to reflect the traits of vascular surgery (e.g. recruitment issues and private practice) but also to reflect traits specific to other specialties. These traits impact on the pace and direction of specialisation / specialist differentiation, either driving it forward or slowing it down. For example, the specialty of trauma and orthopaedics is the largest specialty outside of general surgery; highly specialised with a number of sub-specialist areas, trauma being one of them. According to interviewees, there have been many predictions about the future of trauma surgery within orthopaedics, and despite many longing for the day when separation occurs, this is unlikely as there is no private practice, and it has onerous on calls. The second category, demography reflects the data gleaned from the President of The Vascular Surgical Society of Great Britain and Ireland.

Round Four Interviews (Autumn 2003)

In December 1997 the newly elected Labour government began introducing changes to the NHS. The emphasis was on quality of care and health outcome. New structures were created in order to deliver these (NICE and CHI) and trusts were expected to embrace the concept of 'clinical governance.' The government was also keen to involve clinicians in the development of service agreements with commissioners of health care (e.g. GPs). The purpose of round four, held in Autumn 2003, was to ascertain whether the changes of 1997 had effected the pace and direction of specialist differentiation, and whether they were likely to do so in the future.

Interviews were conducted with surgeons from three specialist centres and two district general hospitals. The sample was constructed using systematic sampling and the snowballing technique. The distribution of interviewees across specialities was as follows:

- General Surgery (Vascular): 3
- General Surgery (Colorectal): 2
- General Surgery (HPB): 1

- Trauma & Orthopaedics: 3
- Neurosurgery: 3
- Cardiothoracic:5
- Urology: 5

The interviewees were asked a number of questions, beginning with one which was posed also in rounds one and three.

- *Why has specialist differentiation within surgery occurred?*

A specific question was asked to elicit the current state of specialisation in the speciality concerned

- *How is sub-specialisation currently progressing within your speciality?*

A further three specific questions were then asked: to elicit the respondent's overall view of the impact of governmental reforms on sub-specialisation in the respondent's speciality, and overall factors likely to affect the pace and direction of sub-specialisation and possibly specialist differentiation in the future:

- *A labour government has been in power for six years. Have changes to the health service (e.g. foundation of government organisations such as NICE, CHI and the emphasis on Service improvement and Clinical Governance) effected the pace and direction of sub-specialisation within your speciality?*
- *The government White Paper and Royal College of Surgeons Workforce Document note that reforms will result in greater professional involvement in designing surgical services – what are the implications for your speciality?*
- *What do you see as the factors most likely to influence the direction of future sub-specialisation and possibly differentiation/separation in the future?*

The responses to the first question generally reinforce the responses from previous rounds. Responses to the latter question generated additional categories (clinical governance and

NCEPOD) when compared with a similar question posed to surgeons in round three, and an additional category (Medical litigation) was created.

Table 8. Generated Categories and Codes (6)

Categories	Codes
Clinical governance	Results/outcome/medico-legal
Medical litigation	Patient expectation
Calman-Hine report	Number of Procedures / Cancer centres
NCEPOD (confidential enquiry – perioperative deaths)	Centralising of certain types of surgery into specialist centres
Private practice	BUPA / number of procedures / financial considerations
Calman training scheme	Reduced length of training / Forced to sub-specialise earlier

2.6 Overall Analysis and Theory Generation

As documented in section (2.1), the bulk of research interviews took place between 1997 and 1999 with a further round conducted in 2003. Throughout the previous section I described the use of the constant comparative method; the utilisation of comparison groups; generation of categories, codes / properties; identification of relationships between categories; the continua of categories and minimisation of categories. This systematic and iterative approach, entailing

constant checking, elaborating, and refining of categories during the emerging analyses, enabled the refinement of research questions, categories and associated properties and the development of theoretical ideas. It is to the development of theoretical ideas that I now turn.

My experience of theory building, at least in embryonic form, began during the analysis phase, following the first round of interviews. In summary, it was possible not only to generate codes / properties from the language used by the interviewees, but to develop properties for a number of categories that conceptualised and encapsulated these codes / properties, namely "Agenda's" and "Resources". For example, in section (2.5), I used the category "Professionally Driven by Specialist Societies and (SAC's) Controlling the Pace and Direction of Specialisation" as an example of how these concepts encapsulated the codes / properties derived from the interviewees, namely "power".

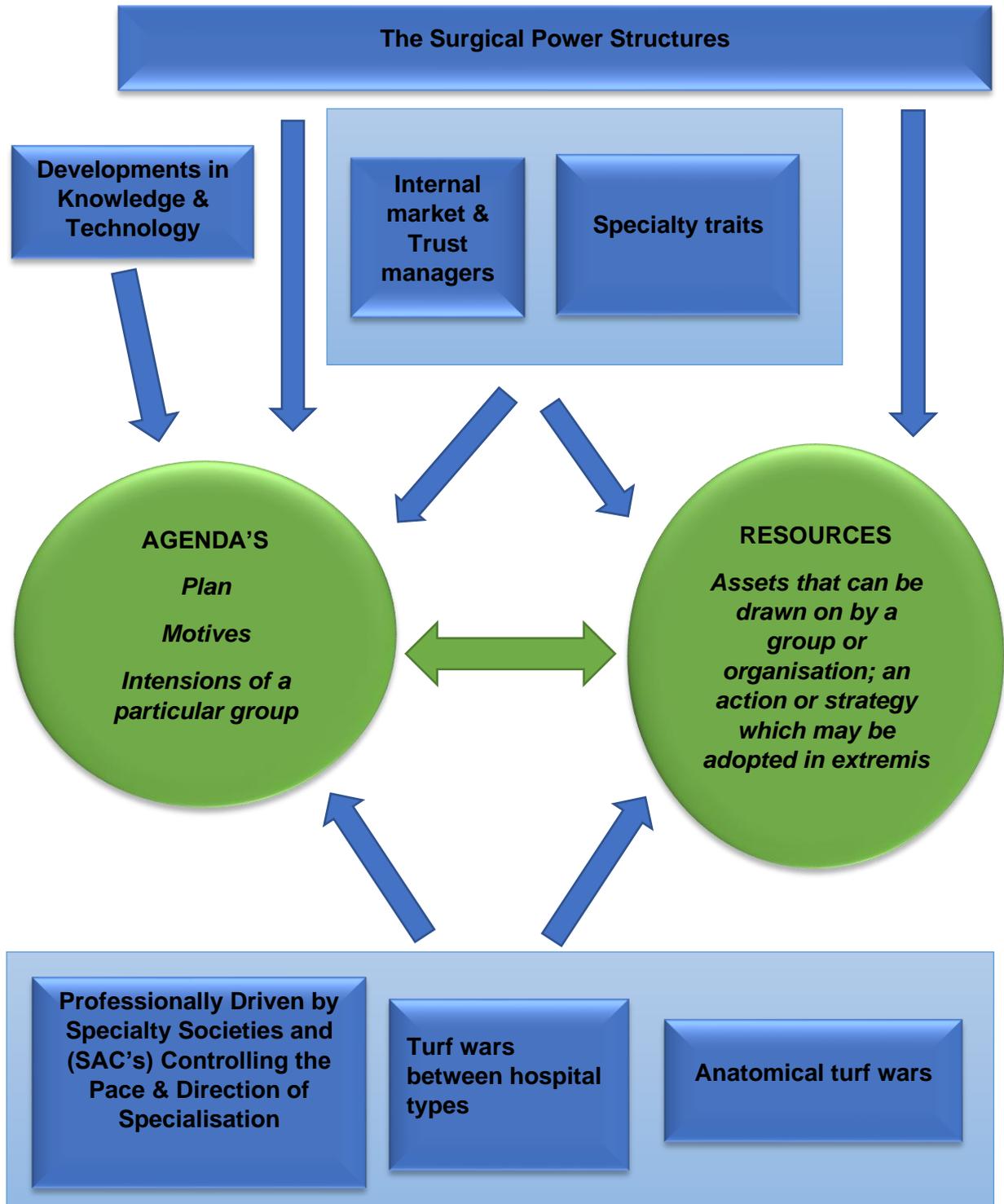
I was able to develop these conceptualisations, as it was palpable to me that the sample of surgeons, comprising leaders of the specialist societies, teaching hospital professors and district general hospital surgeons were driving their own agenda's, and that resources would be intricately linked to these. This approach to theory building is in keeping with Glaser & Strauss methodological guidelines. For example, they suggest that as theory develops, the researcher will observe that the concepts extracted from the interview setting (language used by interviewees) will tend to be existing explanations / justifications for the practices and developments (in this case, factors affecting the pace and direction of specialisation and specialist differentiation, according to surgical interviewees), in contrast concepts created by the researcher will tend to be explicatory, (in this case, the beginnings of a framework elucidating the factors, sociologically).

Glaser & Strauss submit that as the analysis progresses, the 'delimiting features of the constant comparative method' (2008:110), results in what they describe as 'reduction'. According to the authors, reduction essentially means that the researcher could potentially uncover consistencies in the initial categories / properties, enabling the formulation of theory with a reduced number of concepts and a higher degree of complexity. As this research progressed, I discovered that the concepts constructed were reinforced by subsequent interview rounds and it became possible not only to discover underlying uniformities in the initial categories, but also to advance the theory. This process was aided through the use of diagrammatic delineations; sociological literature on the professions; library materials, both

historical and contemporaneous, and what Charmaz (2014), describes as ‘sensitizing concepts’.

Lempert (2007) submits that diagrammatic delineations are pivotal in the generation of theory, as unlike memos they are less loquacious and are able to visually display links between categories more succinctly.

Figure 2.1.



The diagram in Figure 1. reflects the progressive analysis between rounds one and three, respectively. It illustrates the commonality between categories based on their interconnection with the concepts: "Agenda's" and "Resources." Thus, if we isolate the categories: "*Surgical Power Structures*"; "*Professionally Driven by Specialty Societies and (SAC's) Controlling the Pace & Direction of Specialisation*" and "*Internal Market and Trust Managers*", and focus on the professional groups behind these categories; all of the groups concerned have an agenda, which may be similar or may differ. For example, it is in the interests of aspiring specialty groups to assert and propagate that they are the driving force behind specialisation; that they have the ear of government, and in comparison, the Royal Colleges are weak and amorphous. Intentionally putting another group down, is a rhetorical device which helps bolster a groups position (in this case the aspiring specialty groups), enabling them to garner support from grass roots members, as strength in numbers exerts greater pressure for their demands to be met. Conversely, the Royal Colleges agenda, is to ensure no further differentiation in the body of surgery, and they will draw on their resources to ensure this does not happen. NHS Trust managers may have similar agendas to individual surgeons at the clinical coal face, and aspiring specialty leads, i.e. to develop specialist services within their hospital.

In addition, to the commonality between categories, there is also a commonality between the concepts: "Agenda's" and "Resources", as professional groups draw on resources to either further their agendas or protect their position and interests.

It was also possible to progress the theory and develop a workable theoretical framework through the utilisation of concepts from the existing sociological literature: the central notion of profession identified by Freidson (1970) and Hughes (1958): autonomy and self-direction. In addition, Larson's (1977) concept of "*Professional Project*"; *Bucher and Strauss (1961) "Process"* model, and key concepts: "*Social Field,*" "*Capital*", "*Habitus*" and "*Power*", from the seminal work of Bourdieu (1981; 1984; 1986; 1988; 1990; 1991, 2005).

Although, the central premise of grounded theory is the generation of theory from analysis of the data, Glaser & Strauss (2008) submit that a discovered grounded theory 'will tend to combine mostly concepts and hypotheses that have emerged from the data with some existing ones that are clearly useful' (p.46). Indeed, Charmaz (2014) suggests that grounded theorists begin their research with an interest / curiosity regarding a particular phenomenon and already possess an armoury of concepts for looking at these. For example, she notes that her studies of people with chronic illnesses began initially with an interest in how their experience of illness

shaped their experience of time. These interests directed her in her selection of concepts, namely: 'self-concept, identity, and duration' (p.31). Charmaz, describes these as "sensitizing concepts", which from the outset, were utilised to develop interview questions, reflect on interviewees responses, and examine and 'think analytically about the data' (ibid.). At the outset my guiding sensitizing concepts were: "Agency", "Action" and "Power" These concepts reflected my approach: action within structure. This approach focusses on agency and action on an individual, group and structural levels (micro, meso and macro levels).

Glaser & Strauss (2008) submit that primary historical material, such as historical documents and secondary sources such as scholarly texts may be utilised during the initial stages of the research process to promote a granular understanding of the area of study. The authors go on to note however, that specific primary historical materials, such as correspondence between key figures in history, can be significant sources of qualitative data, although they caveat this, by noting that they are not the most important resource in theory generation.

The use of primary and secondary source material and sensitizing concepts complemented the data collection. Firstly, given the necessity of acquiring a historical (developmental) perspective on differentiation, it was necessary to consult sources over and above the interview transcripts, as the interviewees could not be expected to have the necessary historical memory or understanding. Accordingly, historical sources (primary and secondary) (see the introductory chapter section (1.2)), constitute an essential foundation block to this thesis. In addition, to historical sources, seminal texts on the NHS, were utilised, particularly in relation to the internal market (purchaser provider split) and relationship between the state and medical profession. For example, *Klein (1995) 'The new politics of the NHS'* and *Marnoch (1996) 'Doctors and Management in the National Health Service.'* Finally, publications in UK surgical journals were consulted in order to familiarise myself with the current state of general surgery and its sub-specialty areas. In addition, key interviewees provided access to significant professional publications, which enabled me to understand and appreciate the complex organisation of the profession, surgical training, the nature, and functions of the relevant professional bodies, and of the specialities and various sub-specialist areas.

Secondly, professional publications were used comparatively during the data analysis, following interviews with Presidents from the Surgical Royal Colleges, and were used in conjunction with interview data to generate further interview questions in round three.

Thirdly, my sensitizing concepts acted as points of departure to form conceptualisations (Agenda's & Resources) that encapsulated codes / properties relating to a number of categories, enabling the identification of underlying uniformities, and greater analytical clarity; finally, my sensitizing concepts directed me towards higher-level sociological concepts that would allow me to build on the conceptualisations noted above, and formulate a workable theoretical framework.

Having established a robust theoretical framework following interview rounds one – three, it was germane to ascertain whether the new NHS structures introduced by the Labour government between 1997 and 2003 had affected the pace and direction of intra-professional specialist differentiation and whether they were likely to do so in the future. As alluded to in section (2.5), interviewee responses in relation to the question as why specialist differentiation in surgery occurred, reinforced responses from previous interview rounds. Additional categories were created to reflect interviewee responses to the question, as to the factors most likely to influence the direction of future sub-specialisation and differentiation. Although additional categories were created, this does not detract from the central theoretical framework; on the contrary, they are another set of variables in what is a complex process.

2.7 Summary

The foregoing sections have explained the qualitative approach this research adopted, including how I gathered data and utilised the general principles of 'Grounded Theory' to analyse the data, and generate theory.

It was possible to distil three explanatory themes / models from interviewees for elucidating specialist differentiation in surgery and the factors affecting its pace and direction:

- 1) Intra-professional specialist differentiation is driven by the exponential rise in knowledge and new technology(s). The importance of knowledge and technology is given an objective primacy – with the profession having little control.
- 2) Specialist differentiation is driven by the profession and tied up with power and status.

3) The trend towards differentiation is driven by the NHS and factors such as GP referrals, patient expectations, the Calman report, and clinical governance.

In addition, through the use of the constant comparative method, it was possible to generate theoretical properties (encapsulated in above themes) that conceptualised the generated categories, namely 'Agenda's' and 'Resources'. These concepts were precursors to a workable theoretical framework and were further developed with concepts from the existing sociological literature, in order to illuminate sociologically, the complexity of intra-professional differentiation.

It remains to explain how the data is incorporated into the body of this thesis. Chapters 3, 4 and 5 incorporate literature on the history of surgery in the UK; chapters 5, 6 and 7 incorporate literature on the history of the NHS (from 1948 to the present day). Additionally, some of the interviewees provided non-public access documents about the planning and provision of surgical services, and these were utilised in Chapters 6 and 7. The thesis draws on the interviews and a robust theoretical framework to test the heuristic weight of these three explanations and the factors they comprise, in an attempt to obtain a clearer understanding of what governs the pace and direction of intra-professional specialist differentiation in UK surgery. The interviews are discussed most intensively in Chapters 6 & 7, but also utilised in Chapter 3.

Atkinson (2017) aptly notes that 'all research is imperfect. We never attain perfect 'data,' and analysis is always partial' (p.167). This research is no exception to this rule. Indeed, generated data is the outcome of our subjectivity. As alluded to in section (2.6), Charmaz (2014), suggests that as researchers our interests direct us to focus on and question particular phenomena and these in turn influence our selection of concepts and interview questions. This research focussed on the factors effecting the pace and direction of specialist differentiation in the UK surgical profession. As a result, the data was more general and not specific, and consequently, did not reveal explicit strategies employed by groups in seeking separate specialty status, of how groups control training and the curriculum and of influence in key professional bodies. Not unlike data generation, decisions in relation to how data is incorporated in the body of the thesis can never be free from the researchers subjectivity.

CHAPTER THREE

***The Professional Project: Knowledge and
Technology, Means to an End***

3.1 Introduction and Aims

The exponential growth of knowledge, especially scientific knowledge, over the past hundred years encourages the supposition that the power of knowledge has grown correspondingly. And surely there is ground for this.

'The power to render whole continents, if not the entire planet, virtually uninhabitable has grown out of the physical sciences. While unprecedented power over the shape of life itself seems to be developing out of the biological and medical sciences.' (Freidson, 1988:1)

Formal knowledge may be powerful, however 'in and of itself knowledge is an abstraction', therefore in order to

'have any impact on the natural world knowledge must have human agents or carriers, and the impact it makes must be influenced in part by the characteristics of those agents who create it and apply it.' (ibid.:9)

This chapter will stress that, although knowledge and technology are powerful, and indeed the basis of specialities within medicine and surgery are highly specialised knowledge and technical skill, care must be taken not to give knowledge and technology objective primacy over the agents and conditions through which it is created and applied.

The introductory chapters have clearly documented the fact that structural functionalism assigns objective primacy to knowledge and technology in explaining structural differentiation. Primary and secondary sources also suggest that the medical and surgical professions attribute primacy to knowledge and technology. However, their emphasis may have underlying professional agendas.

The first section of this chapter will analyse this proposition, and in so doing it will outline the arguments propounded by structural functionalism and in doing so will take relevant quotes from primary and secondary source material from the medical and surgical professions.

The second section of this chapter will provide counter arguments to those in the first section. It will argue that knowledge and technology are a means to an end, not an end in themselves. It will utilise key examples from the world of science, then move to focus on the growth of two professional groups in the surgical field, namely vascular surgery, and laparoscopic surgery. It will explore how they create and utilise knowledge as a means to an end in terms of advancing their knowledge base and development; and finally investigate how knowledge and technology(s) are utilised as a means to an end in pursuit of the Professional Project.

Vascular surgery and laparoscopic surgery provide good examples. Both areas pushed vociferously for self-regulation during the latter years of the twentieth century. Indeed, it could be said that vascular surgery led the way in terms of its use of clinical trials and surgical outcome data in order to justify its push for self-regulation. Laparoscopic surgery is also a very interesting case, as it is a technique based speciality. Its push for self-regulation was a contentious issue, which will be discussed in chapter six. Both areas are still firmly attached to the speciality of general surgery, despite their attempts to push for 'pure speciality' status and self-regulation on the grounds of the sophistication of knowledge and technique which they have amassed over the years.

The latter point leads into the third and final section. This section will argue that although knowledge and technology are used as justifiers in attempts to self-regulate or self-police, they are only two variables among many which will influence the final outcome: if they were the only variables involved in specialist differentiation, then comparisons between specialities (and indeed aspiring specialities) within the UK would show a consistent pattern.

The speciality of urology will be utilised as a prime example here. Urology was one of the last areas to differentiate from general surgery, and it shares similarities in knowledge and technique base with both vascular surgery and laparoscopic surgery. However, they have not successfully differentiated from the speciality of general surgery. Likewise, if knowledge and technology were the only variables involved, then trans-national comparisons would also show consistent patterns. In practice this is clearly not the case, as comparisons with the UK and the USA will demonstrate.

3.2 Knowledge and Technology: An End in Themselves

Structural functionalism's emphasis on natural growth in explaining intra-professional differentiation invests knowledge and technology with a primacy and objectivity, operating autonomously of human agency and action. However, structural functionalism is by no means alone in attributing primacy to knowledge, technology, and science. Howell (1995) notes that most social historians have implicitly treated the

'development of medical technology as simply the logical expression of scientific and clinical reality; medical knowledge produced by machines and science is treated as more "real" and more "objective" than the knowledge produced by theoretical arguments.' (p.11).

Atkinson (1995) also notes that although not all medical sociologists 'are guilty of it, there is a profound danger' that the natural world i.e. 'biology, anatomy and pathophysiology is treated as given' (p.24). For example, he goes on to note:

'The taken-for-granted contrast between the cultural and the natural too readily implies that the 'natural' is a realm that exists prior to and independently of cultural interpretation. Hence, the sociological focus is turned towards the field of culture. But since the latter is associated primarily with the lay or non-medical, the world of disease and pathology is implicitly granted a privileged status. While illness resides in social meaning and social action, disease resides in the natural world.' (ibid.)

There are members of the medical and surgical professions that regard knowledge and technology as the pre-eminent factors behind specialist differentiation and specialisation in general. Clearly this position is not untenable per se, yet, not unlike the arguments set out above, it implicitly regards knowledge as objective.

An article appearing in the *Lancet* (1945) entitled "Clinical – Specialism" argues that:

'In general, the differentiation of a special field is influenced by the extent of its intellectual content and the complexity of its technique; these influences are natural and in the main lead to the sound demarcation of specialist fields.' (p.210)

The sentiments expressed in this article reflect viewpoints which are fairly widespread in medical circles and replicated in more recent discussions (e.g. Moore⁹ 1995; Bernhard 1995; Turnberg 2000).

For example, specialisation leading to the differentiation of a specialist field is viewed as a predictable corollary of and as a mechanism for the progress of knowledge (**Bernhard, 1995**), as a force that has significantly improved patient care and outcomes, to the point where it is irresistible (**Turnberg, 2000**). This is echoed in a statement which reflects the viewpoints of many of the surgeons interviewed during the course of the research:

The days when a surgeon could know everything have long gone. The exponential increase in knowledge and the extraordinary advances in technology have seen the emergence of new specialities, sub-specialists, and super-specialists – specialisation is an irresistible force. I think that that's the fundamental reason, and I don't see them stopping, and I don't see the posts of medical advance slowing down. It is possible that in the future surgeons may no longer be needed, or at least not so many. (Prof. PT. Professor of Surgery)

Although the medical and surgical professions do not explicitly state that knowledge is objective and indeed autonomous, nevertheless their language and emphasis implicitly attributes a primacy and indeed objectivity to knowledge, as betrayed for example by the words “predictable” and “irresistible.” Likewise, stating, that specialisation is a predictable outcome of, and mechanism for the progress of knowledge recalls structural functionalist arguments that specialist differentiation occurs because it fulfils a functional need. To view the development of intra-professional specialist differentiation in surgery as simply the logical expression of scientific and clinical reality is erroneous.

⁹ According to Moore (1995) specialisation becomes a force which cannot be stopped in its tracks: 'Specialisation sometimes takes hold of a hospital and the hospital cannot stop, like an eagle flying with two big fish in its talons. Can't let go' (p.149).

However, despite the surgical profession's emphasis on the predictability and logic of differentiation, it may be a useful myth propagated by the profession as a means to an end, and not an end in itself as the sources would suggest. Historically speaking, the profession has sought to associate itself with science. As far back as the latter years of the eighteenth century, surgery was able to raise its status on a par with medicine as a result of what Foucault (1972) describes as medicine and surgery's relationship with 'such perfectly constituted sciences as physiology, chemistry and microbiology' (p.199). Furthermore, 'science has become the fundamental ground for the legitimacy of professional techniques' (Abbott, 1988:189), as aspiring professional groups push for independence and self-regulation.

3.3 In Pursuit of Knowledge and New Technologies: A Means to an End

'In and of itself knowledge is an abstraction. In so far as it is tangible, its growth can be measured by counting the number of books and journals that have been published. However, for knowledge to be able to exist in books and journals it must have human creators and consumers.' (Freidson, 1988:9)

Human beings produce/create knowledge and new technology(s) and utilise them in the pursuit of 'goals' as a means to an end, whether personal, professional, economic, or other.

Before focusing on the creation and utilisation of new knowledge and technology(s) by the medical and surgical professions, it is worth turning first to the world of science, the world which the medical and surgical professions regard themselves as affiliated to.

Studies carried out by Fujimura (1988); Fujimura & Chou (1994) and Atkinson et al. (1997) clearly show that scientific knowledge is 'constructed' and changed as a means to an end 'through negotiations among actors working in organisational contexts' (Fujimura, 1988:261).

Fujimura's (1988) research paper *The Molecular Biological Bandwagon in Cancer Research: Where Social Worlds Meet* provides a good example of how scientists 'construct doable' research problems which can easily be marketed to the wider scientific community. Whereas researchers

had previously studied cancer in other ways, in the late 1970's and early 1980's, molecular biologists and tumour virologists successfully packaged 'the oncogene theory in a way that they claimed encompassed and unified many other areas of cancer research'. According to Fujimura, one of the reasons why this representation was widely accepted 'was that the theory-method package fit the institutional and organisational constraints of scientific work in multiple social worlds' (**ibid.269**).

Atkinson et al. (1997) have identified similar dynamics in their analysis of the discovery of the Myotonic Dystrophy gene. They extend Fujimura's observations by commenting that, though the research problems were 'doable', in the scientists' own narratives the discoveries were not regarded as inevitable, but acquired by dint of hard work and skill, and with an element of luck. This is a salutary reminder of the tortuous and sometimes haphazard paths through which knowledge is constructed.

As in science and the social sciences, in the medical and surgical worlds knowledge is a global resource: new knowledge ideas and techniques are exchanged between groups and colleagues. Groups set up around new ideas and areas of interest develop these and apply new knowledge(s), technologies and techniques. Groups are not just a mere fact of social life, or, as the functionalists would argue, a structural response to the exponential rise in knowledge. As alluded to in Chapter One, Larson (1977) argues that the professional project is not an inevitable by-product of a societal functional prerequisite, on the contrary it is a 'collective mobility project' (**p.66**), as it is only through joint effort that professionalisation can be potentially realised. Therefore, the project is the collective outcome of the actions and efforts of the group. Thus, once the group has been established, it is necessary to ensure the group is maintained and if possible, the position of the group is strengthened. This is only achievable if the leaders within the group(s) 'articulate its objectives and set in train the work needed to achieve them' (**Macdonald, 1995:188**), and the rank and file members of the group(s) are fully cognisant of the objectives and agree with them.

In the case of surgery this would entail setting up a society and journal for the particular specialism and its body of knowledge and techniques, possibly with self-regulation as a long-term goal. The development of vascular surgery and laparoscopic surgery are very good examples of this: both areas were brought into existence through the hard work and ingenuity of surgeons committed to promoting their specialty as opposed to ineluctable processes.

The roots of vascular surgery can be traced back to the pioneering work of a young French surgeon named Alexis Carrel (1873-1944). Carrel was noted for his work on the cardiovascular system and in particular in relation to the treatment of aneurysms. After moving to the United States, he pioneered a technique whereby parts of the aortal wall were replaced with a piece from another artery or vein and sewed together; this procedure launched vascular surgery. Carrel's work opened the way for numerous vascular surgical procedures in relation to the larger vessels (aneurysms) and superficial vessels (varicose veins) (**Porter, 1996**).

Vascular surgery began to really take off in the 1950's. The area's expansion was aided by exasperation at the inability to manage common surgical conditions, operative resourcefulness, and the development of effective prosthetic grafts. However, the innovations mostly originated in the USA, and it was only in the 1960's that they began to secure a foothold in the UK. The next step was the establishment of The Vascular Surgical Society of Great Britain and Ireland in 1966. At that time the society had 29 founder members and today there are 626 members. Vascular surgery has continued to develop in the UK aided by such figures as Simon Darke, who acted as a catalyst in the setting up of the Vascular Research Group in 1983. Its prime intention was to collaborate on clinical and scientific trials, thus advancing the development of vascular surgery, treatment, and the knowledge base (**Darke, 1997**).

In doing so, vascular surgery established a 'cognitive basis' (**Larson, 1977:15**), in other words, it defined a distinct body of knowledge, as theirs and theirs alone. The establishment of a cognitive basis enabled vascular surgery to clearly distinguish and differentiate the knowledge, or in Larsonian terms, 'commodity' they were providing from other knowledge bases, in this case general surgery. In the 1990's the leading lights in the speciality began to argue that vascular surgery should seek independence from general surgery.

Laparoscopic surgery (described in the *BMJ* 1987 as 'The New Surgery') developed over the course of the twentieth century. It was initially introduced by Dimitri Ott, Georg Kelling, and Hans Christian Jacobeus. According to Vecchio, Macfayden & Palazzo (2000), Ott began the revolution when he performed an intra-abdominal exploratory procedure on a pregnant lady in 1901 'and afterwards Kelling performed a procedure, called "Koelioscopie", closer to the definition of laparoscopy. In the same year Jacobeus published his first report on what he called "Laparothorakoskopie" (p.87).

Laparoscopic surgery has expanded over the course of the last twenty years. Although, laparoscopic cholecystectomy (surgery of the gallbladder) was the first surgical procedure, of this technique related discipline to be recognised (**Darzi & Mackay, 2002**), many specialities utilise this technology pushing its limits ever further. For example, vascular surgeons have been using this technology to perform endoscopic arterial procedures (carotid endarterectomies), for some time now, and orthopaedic surgeons use the arthroscope for surgery of the joints (**Wickham, 1987**). Many of the pioneers of the technique in the UK in abdominal surgery are pushing vociferously for a pure speciality separate from general surgery.

Once cognitive differentiation is established, the next stage in the professional project is for the group(s) to 'negotiate cognitive exclusiveness' (**Larson, 1977:15**) – that is to say, the authority to be autonomous and self-regulating, with a monopoly and control over recruitment and selection, education, training and the internal evaluation and regulation of standards, around their particular body of knowledge and technical skill.¹⁰

In their quest for speciality status, aspiring speciality groups use the increasing scientific knowledge base and sophisticated technology and instrumentation, that is to say, their scientific capital as tools of 'legitimacy' in their quest for 'pure' speciality status. This is not surprising given the fact that 'science, with the broader, related phenomenon of formal rationality, has become the fundamental ground for the legitimacy of professional techniques' (**Abbott, 1988:189**).

Thus, to quote Foucault (1972):

'Knowledge is not an epistemological site that disappears in the science that supersedes it. Science (or what is offered as such) is localised in a field of knowledge and plays a role in it. A role that varies according to different discursive formations and is modified with their mutations.' (p.203)

Those advocating a 'pure' vascular speciality, separate from general surgery, argue that the practice of Vascular surgery has become complex and extensive, encompassing the factual knowledge, technical skill and judgement required to diagnose diseases of the arterial and venous

¹⁰ Larson (1977) uses this concept in relation to the growth of the 'mature' profession, and not in relation to intra-professional differentiation. However, the concept has utility in relation to intra-professional differentiation.

system accurately and to manage their treatment surgically (**Darke, 1997**). This requires an 'in-depth knowledge of vascular biology, physiology, diagnostic imaging endovascular techniques and an appreciation of the multi-disciplinary nature of vascular surgery' (**ibid:3**).

Laparoscopic surgery is unique in that it is technique based (not organ based). Although practising surgeons require an in-depth knowledge of anatomy and physiology relating to the area they are operating on, the instrumentation and the technique itself provides the scientific 'legitimacy' which Abbott (1988) refers to above. Instrumentation is a mechanical aid based on scientific principles of objectivity, rationality, and exactness. Indeed, Stevens (1998) notes that medical instruments, such as the Stethoscope (1819), Ophthalmoscope (1851), and the Laryngoscope (1855) signified the steady advance of medicine toward a science.

Casper (1998) provides a very useful example from the literature on how foetal surgeons jumped on the physiology 'bandwagon' and used it to make claims about the legitimacy of the speciality. Casper notes that 'foetal physiology offered a mantle of scientific legitimacy for foetal surgery primarily because of the physiologists' influence as one of the most respected basic scientists in the field (**pp.80-81**).

Bucher and Strauss (1961) amplify this idea by observing that proponents of exclusivity tend to proclaim they have unique missions:

'It is a characteristic of the growth of specialities that early on in their development they carve out for themselves and proclaim unique missions. They issue a statement of the contribution that the speciality, and it alone, can make in a total scheme of values and, frequently, with it an argument to show why it is peculiarly fitted for this task. The statement of mission tends to take a rhetorical form, probably because it arises in the context of a battle for recognition and institutional status.' (p.326)

By way of illustration, Bucher and Strauss cite the case of urology and proctology in the United States. They note that when these specialities were struggling to attain identities that were not aligned with general surgery, they contended that they, and they alone, possessed the necessary levels of competence required by their anatomical area and by inference, the general surgeons were not competent to manage these.

The philosophy underlying this sort of argument is one which is frequently used to justify claims for 'pure' speciality status. Whether the argument revolves around a proposed system based speciality (vascular surgery) or a technique based speciality (laparoscopic surgery), the complexity and the challenges of these areas are said to require a specialist, and it is held that specialisation leads to better outcomes for patients:

Vascular surgery has definitely come of age over the past twenty years or so and there is increasing evidence that outcome for abdominal aortic aneurysms is far better when performed by a vascular surgeon. (Mr Z. Consultant Vascular Surgeon – Teaching Hospital)

You cannot expect your colleagues with limited experience in vascular surgery to deal with complex vascular disease (occlusive disease) electively or to have to deal with vascular emergencies! ... in this day and age, it is unacceptable. So, when you ask me whether or not vascular surgery should separate in the future, the answer to that is most definitely yes! (Mr X.T. – Consultant Vascular Surgeon and Leading Light - Vascular Surgical Society of Great Britain and Ireland)

Casper (1998) shows how foetal surgeons used the complicated and often challenging nature of foetal surgery as justification to move the care of the pregnant woman from their obstetric colleagues, whom they contended were incapable. Their justificatory arguments centred around the obstetricians inferior understanding of 'perioperative maternal-foetal physiology' (p.80). According to Casper, foetal surgeons maintained that this deficiency in understanding impacted on the obstetricians ability to improve care for mother and foetus. However, their superior knowledge and understanding of the physiological principles, enabled them to incorporate this into perioperative care and improve outcomes.

Indeed, Atkinson (2017) suggests that professionals utilise their 'rhetorical skills in order to construct a plausible account of what is going on or has gone on, in recommending specific decisions and courses of action' (p.75); it is these rhetorical assertions that form part of the negotiating stage. Possession of scientific capital associated with the development of technical foci and advances in surgical knowledge are a pre-requisite to the negotiating stage. The negotiating stage is pivotal, as it is during this stage that the group has to prove that they, and they alone, possess the necessary knowledge base and requisite technical skill to perform a specified activity(s), and that it would have deleterious consequences if such activities were performed by those without the education, knowledge, and training (Macdonald, 1995), ; indeed,

education and training is pivotal in establishing a basis for exclusion (**Allsop & Saks, 2002**). The central element in the negotiation of cognitive exclusiveness and exclusion is 'autonomy of technique' (**Larson, 1977:38**).

Although vascular and laparoscopic surgeons are not attempting to prove the incompetence of general surgeons, at least not in such harsh language, they are nonetheless attempting to justify their claims for 'exclusiveness' and 'monopoly of expertise in the market' (**ibid.: xvii**) with regard to a specific system – or, in the case of laparoscopic surgeons, technique. Laparoscopic surgeons argue that learning laparoscopic techniques requires a steep learning curve and may take months or years; in the wrong hands things could go horribly wrong, but in the right hands patient outcomes are optimised.

Laparoscopic surgery is a different ball-game to open surgery... it requires a new set of skills and if you make an error then things can go pear shaped very quickly, with catastrophic consequences. (Mr D. – Consultant General Surgeon with a Specialist Interest in Laparoscopic Surgery)

An article in the *BMJ*, by Darzi & Mackay (2002) adds further weight to claims for exclusiveness by reference to the technically sophisticated nature of a specific procedure. In addition, the authors point out the benefits of 'expertise' in terms of cost:

'Laparoscopic colectomy is technically demanding, and most surgeons have been reluctant to invest the time in mastering the procedure. Nevertheless, centres that have gained sufficient expertise report benefits in terms of patients' comfort and disability, length of stay, and cost.' (p.32)

The issue of technique employed in hernia repair also appeared in a report by the UK Medical Research Council's Laparoscopic Hernia Trial Group (*Lancet 1999*) which concluded that:

'the learning curve with laparoscopic hernia repair is steep and relates to the degree of technical difficulties it introduces to hernia repair, and that although there are clear advantages associated with laparoscopic repair, concerns about rare serious

complications and recurrence support a move towards laparoscopic hernia surgery being performed by specialist surgeons.’ (p.189)

Even though laparoscopy has not broken away from general surgery it has nonetheless been able to gravitate towards de facto independence:

The specialist lobby has become very strong ...the surgeons who have pioneered endoscopic abdominal surgery have drawn up rules of specialisation...in a way they have made it more and more of a closed shop and less and general surgery. (Professor C. – Professor of Surgery)

At this stage in the professional project although aspiring specialities seek to justify their claims for professional status in terms of demonstrating exclusiveness, it is by no means inevitable that their quest will be successful. Though the aspiring groups may have a potential market for their services, whether this potential is realised will depend on other variables.

3.4 Knowledge and Technology: Variables Within a Larger Equation

Knowledge and technology are important as they provide a base for the possibility of new boundaries. However, they do not determine whether tasks will be differentiated, or where the boundaries should be. This is reflected in the significant variations in the rate of specialist differentiation within the UK, and between the UK and other countries, despite ‘internationalisation being one of the underlying themes in the practice of surgery in the twentieth century’ (**Rutkow, 1993:506**).

Turning first to the UK and differences in the rate of specialist differentiation: in the UK Laparoscopic surgery has a highly sophisticated body of knowledge, employing the latest techniques and technologies, and linking these to improved patient care in the form of outcomes. However, its quest for ‘pure’ speciality status has as yet been unsuccessful, even though the arguments used to justify exclusivity recall those employed by the speciality of urology, which successfully broke away from general surgery during the 1980’s.

Urology's quest for independence began in the late 1960's. Its justification centred on the introduction of a new technique for removing the prostate gland, known as transurethral resection. A surgeon (anonymous) writing in the *BMJ* notes:

'One in every 10 men who pass the age of 40 will sooner or later need an operation for benign enlargement of the prostate. In England and Wales 80% of these operations are performed by general surgeons using (as a rule) one of the open operations which require an abdominal incision and enucleation of the adenoma from its "capsule." The technique has altered little since the turn of the century. Yet, unless the adenoma is exceptionally large, it may be removed equally completely piecemeal through the urethra using a resectoscope – an operation that is virtually painless, needs half the time in hospital, and has a low complication rate and a mortality less than half that of any of the open techniques. Nor are the results inferior: indeed, the success rate after transurethral surgery is in some respects better than open operations.' (1980:590)

The author then goes on to ask why, if the technique is so successful is it not employed universally. He proposes the following explanation:

'Firstly, a handful of patients have enormous adenomas and the resectoscope cannot be manoeuvred past them with safety, but such people are rare. More usually transurethral resection is not performed because the surgeon has not been trained in the method. The technique is not easy to learn or to teach, and if it is to be done in safety it demands protracted apprenticeship and specialisation in urological surgery. Without this specialisation the resectoscope may cause havoc, and general surgeons without special training are wise to prefer open operations. There is also a clinical argument that the need for urological skill is not confined to the prostate: its advantages are even more definite for patients with cancer of the bladder or urinary calculi, but the numbers are less easy to extract and compare. Alas, for the humble prostate the difference in results between the specialist and the generalist are there for all to see.' (ibid.)

Thus, as in laparoscopic surgery, the justification for exclusiveness centred on the steep learning curve associated with mastering the new technique: in the wrong hands it could cause havoc, yet in the right hands it optimised patient outcomes.

The case of vascular surgery also has similarities to urology; although it is not associated with a specific technique like urology, it seeks to justify its claims for independence based on patient outcomes. It could also claim to have a different knowledge base to General surgery, for it is a system based (not organ based) body of knowledge, requiring knowledge of vascular-biology. Indeed, vascular surgery has many anatomical and practical aspects in common with cardiac surgery. According to one surgeon this was another reason why urology was able to break away from general surgery i.e. because it had a different knowledge base:

We were able to break away because our knowledge base was so different to surgery – about 60 per cent of Urology work is physician work, physiology-bladder physiology and renal physiology because of renal failure. And so, it was that dichotomy which led people to see it as a separate knowledge type. (Mr J. Consultant Urologist – Teaching Hospital)

When comparing the rates of specialist differentiation trans-nationally, the differentials between the UK and the USA are interesting. Ophthalmology provides a good example of how the invention of an instrument (the Ophthalmoscope, 1851, by H. von Helmholtz 1821-94; provided a basis around which specialist interests could develop (**Stevens, 2003**). Yet although this instrument was widely available in both the UK and the United States, specialist differentiation developed at different rates in the two countries. In the US ophthalmology became a recognised speciality with its own speciality board in 1917 (**Stevens, 1998**), yet in the UK ophthalmology did not achieve its own fellowship examination until 1947, when the FRCS (Fellowship of The Royal College of Surgeons) was instituted (**Stevens, 2003**).

The invention of the laryngoscope (1855) provided yet another basis around which specialist interests could develop and, not unlike ophthalmology, despite the technology being available in both countries, the specialities developed at different rates. In the US otolaryngology had its own speciality board by 1937 (**Rutkow, 1993**), yet in the UK it did not obtain its own Fellowship examination until 1947 (**Stevens, 2003**).

Orthopaedics also provides an interesting point of trans-national comparison. Admittedly there may have been differences 'between the members of the BOA (British Orthopaedic Association) and the AOA (American Orthopaedic Association) in their therapeutic orientations' (**Cooter, 1993:37**) around the latter years of the nineteenth century, in as far as the AOA aspired to a 'more credible surgical image' (**ibid.: 34**) while many of their British colleagues favoured a more conservative curative approach as opposed to surgical. Yet this in itself cannot account for the

differential between the formations of orthopaedics as a speciality in the two countries (US – 1934, UK – 1980's (the late 1970's in Scotland). After all, attitudes towards operative orthopaedics and the advancement of science began to change even before the First World War, and afterwards orthopaedics had been able to 'enlarge its borders on the operative side' (**Jones, 1918:41**).

The United States is also one of the few countries of the world where colorectal surgery or proctology is formally recognised as a surgical specialty in its own right, and not a sub-specialist area of general surgery (**Rutkow, 1993**).¹¹ In the UK coloproctology is still a recognised sub-speciality interest within general surgery. During the 1980's a 'small minority of coloproctologists believed that coloproctology should be aiming for fully independent speciality status' (**Jackson, 1992:63**). Conversely, there were those who disagreed with these views. They argued 'that coloproctology is no more than a part of general surgery or, at most, a part of the sub-speciality of gastroenterological surgery' (**ibid.**). Clearly these debates have not been fully resolved.

The examples in this section clearly show that, even allowing for similarities in knowledge and technology, other variables play a part in the equation of what is intra- professional specialist differentiation. Despite the structural functionalist view that the division of labour and structural differentiation naturally evolve as a result of the proliferation of knowledge and technical complexity (**Parsons, 2012**), the advance of science, while vitally important, cannot explain the historical and trans-national variations in the development of specialities.

3.5 Summary

The chapter has argued that knowledge and technology(s) are a means to an end and not an end in themselves. Knowledge and technology are not independent constructs that "cause" scientific sub-division and differentiation according to the laws of the social system. On the contrary, humans actively create knowledge and utilise knowledge as a means to an end. Knowledge and technology(s) provide the basis for the possibility of new boundaries (i.e. specialities), but they do not determine whether groups will be successful in their quest to differentiate and self-regulate.

¹¹ The American Board of Colon and Rectal Surgery (founded: 1949) (**Rutkow, 1993**)

The comparisons between urological surgery, vascular surgery and laparoscopic surgery show this, even though all three areas possess similar characteristics. Specialist differentiation is not consistent. For example, vascular surgery has a different knowledge base to general surgery, a claim which urological surgery made; and laparoscopic surgery is a sophisticated technique based area requiring a high level of technical skill, another claim made by urological surgery. However, one has successfully differentiated, while the other two have not yet done so: there must be other factors which are in play besides knowledge and technology, and trans-national comparisons also lead to this conclusion. Knowledge and technology are global resources, yet despite their availability in both countries, specialities in the UK and the United States have developed at different rates.

CHAPTER FOUR

***Surgico – Power Politics and Intra-Professional
Specialist Differentiation***

1800-1947

4.1 Introduction and Aims

Between 1929 and 1947 intra-professional specialist differentiation radically altered the structure of the surgical field, for obstetrics and gynaecology, ophthalmology and otorhinolaryngology were successful in their quest to differentiate from the general surgical corpus, effectively achieving complete self-regulation. The separation of obstetrics and gynaecology, however, went even further, in that they not only separated from general surgery, but also from the Royal College of Surgeons, a bastion of the general surgical establishment.

The chapter will focus on the factors effecting the pace and direction of intra-professional specialist differentiation during this period. The chapter will clearly demonstrate that the success of obstetrics and gynaecology, ophthalmology and otorhinolaryngology was in no way an inevitable or pre-destined phenomenon based on the advancement of knowledge and technological innovation; rather that, although knowledge and technology were important factors, given each area's unique background, characteristics and development, success cannot be attributed to these variables alone. Success can be explained in Bourdieuan, terms as result of the accumulation of capital or resources, the essential components which would eventually prove vital in their quest for differentiation given the right conditions.

Before focusing on specific areas, it is necessary to analyse the general context. For example, in order fully to appreciate the complexities and the number of variables involved in the success of these groups, it is essential to comprehend the structure and composition of the surgical field, between 1800 and 1947 (when the last separation occurred before the 1970's/80's); the supporting power structures which enabled the surgical establishment to procure the knowledge which supported its purposes, and suppress the knowledge which did not; and the ways in which the establishment adapted to potential challenges at significant contextual junctures as the century progressed.

The chapter will then move on to focus on the specific areas (obstetrics and gynaecology, ophthalmology and otorhinolaryngology) which broke away from general surgery between 1929 and 1947, emphasising their different backgrounds and characteristics, and how they adapted to their context. It will emphasise that, although these areas were successful in differentiating from the main surgical corpus, their historical development clearly shows that there was no conscious strategy to pursue the professional project since their inception, and that this aspiration arose later

in their development. However, accumulated capital became useful when a conscious strategy of differentiation and self-regulation was embraced.

In addition to focusing on the above areas, the chapter will focus on orthopaedics. Orthopaedics was the largest area to break away from general surgery in the 1980's in England (in Scotland it broke away in the late 1970's), but the foundations for its becoming a mature speciality were being laid during the period 1800-1947. It is therefore important to understand what these foundations blocks were and how they impacted on orthopaedics's professional project in the 1960's. Additionally, orthopaedics provides a useful example of an area which survived against the odds: its very existence in 1947 is remarkable, given the obstructions placed in its path by the surgical establishment. Orthopaedics's precarious development adds greater weight to the argument that no area is pre-destined to exist. This is an area which had to fight for survival.

4.2 The Structure of the Surgical Field

Writing about the structure of the scientific field, (1981, 1991), and university field (1988), Bourdieu notes that the field is defined by the distribution of power, between the dominant group(s) and the newcomers, in the case of the scientific field, and in the case of the university field, between the

'temporally subordinate faculties, the science faculty and, to a lesser extent, the arts faculty, contrast with the socially dominant faculties, more or less indistinguishable in this respect, the faculty of law and the faculty of medicine.' (1988:41)

The power differentials within the respective fields is the outcome of earlier struggles, resulting in the 'objectification' of certain types of capital in the structures supporting the field (e.g. the education system) and the habitus and dispositions of the agents, and 'commands the strategies and objective chances of the different agents' (1981:267). The surgical field is no exception to this rule.

However, the objective relations between positions already won may not be determined by struggle alone, as occurred with the profession of surgery in the period 1800 to 1858, but by the interaction of surgery with other social fields.

By 1800 the social status of the surgeon was beginning to achieve parity with the social status of the physician. This was due in no small part to influential figures such as John Hunter and others. In particular, Hunter spearheaded the growth of surgery as a scholarly discipline, this success together with the continuing development of surgical techniques ensured this change in status (**Stevens, 2003**), a development reflected in professional organisation: The Royal College of Surgeons of Edinburgh was incorporated in 1778, The Royal College of Surgeons in Ireland in 1784, and the Royal College of Surgeons in 1800¹²

The professions with high social standing, such as the surgery, medicine and law were a significant feature of the social and cultural landscape at that time.¹³ In this respect, the structure of the surgical profession reflected the hierarchical structure of society and provides a good example of how social fields do not exist in a vacuum. Indeed, Bourdieu contends that the social world is made up of a number of fields, and given this, it is likely that one field may have an effect on the other (**Thomson, 2014**). This is highlighted by Bourdieu's analysis of the faculties and possession of types of capital. Bourdieu revealed that the professors from the socially dominant faculties (medicine, law, and theology), were imbued with the capital of economic and political power, reflected in their 'participation in public bodies - ministerial cabinets, Constitutional Court, Economic and Social Council, Council of State, Financial Inspectorate' (**1988:48**). However, according to Bourdieu, in return, these faculties were not free from government influence, as they were directly responsible for ensuring the state had a strong and lasting relationship with its citizens.

The surgical field is no exception to Bourdieu's rule, in relation to the interaction of social fields. Indeed, not unlike the French university field, the structure of the surgical field at this time was characterised by its interdependency with political and economic power. This was reflected in the social composition of the council of The Royal College of Surgeons, which comprised wealthy 'metropolitan practitioners' with connections to the higher echelons in society and not surprisingly their political affections were mainly Tory, and religious affiliations, either Church of England or Scotland (**Lawrence, 1994**).

¹² Each body developed independently of the others (**Stevens, 2003:12-13**).

¹³ 'In London the Royal College of Physicians still recruited its fellows from Oxbridge' (**Lawrence, 1994:27**).

In order to fully understand the structure of the field of surgery it is necessary to appreciate fully its reflection of the hierarchical nature of society at that time, and importantly how each interacted with and supported the other.

This being the case meant that the dominant or Tory elite seated in the council rooms of the great College(s) were in possession of abundant social capital, which in effect enabled them to garner more capital and consolidate their position over the rank and file members of the Royal College, namely the apothecaries. Apothecaries were the third type of medical practitioner after the physician and surgeon and were lower in status; they were the general practitioners. As a result of socioeconomic changes, people in England were able to pay for more medical care. Since however there were few physicians, the demand for more personnel fell to the apothecaries and the members of The Royal College of Surgeons. In order to provide improved care for patients, the apothecaries, who knew relatively little surgery, joined the College to acquire the necessary surgical skills. A joint qualification, under the aegis of the College, was established as an entrance qualification for general practice: the MRCS (Master of the Royal College of Surgeons), and the LSA (Licentiate of the Society of Apothecaries) (**Rutkow:1993**).

By the mid-nineteenth century the elite had consolidated its position as a significant force in Victorian society, despite the Royal College of Surgeons being the locus of attacks from the rank-and-file during the first half of the century; 'most general practitioners saw the College as the power base of privileged minority who looked only to itself and which failed to protect the interests of its members' (**Lawrence, 1994:35**). The attacks thus centered on institutional reform and the truth of scientific doctrine.

The question is, how did the possession of social capital enable this consolidation of power; in other words, how was this manifested in practice?

The voluntary hospital system was essentially an institution controlled by and reinforced by the social class system at that time, as it was funded by the wealthy elements or the upper strata of society. Stevens (2003) notes that:

'The ancient charity hospitals had employed surgeons to look after their patients on a cash-or-kind basis. But the physicians and surgeons who attended the new voluntary hospitals were expected to give their services free, as did the founders and board members of the

new institutions. Subsequently, the older hospitals conformed and ceased to pay their attending physicians and surgeons. Thus, a pattern of attending “honoraries” was established, drawn from the same social class as the lay members of the voluntary boards (namely the upper classes). This system was continued in the voluntary hospitals established in the nineteenth century and early twentieth century. It placed the physician and surgeon in a superior, non-contractual relationship with the hospital and it naturally excluded from its attending staff the lowly apothecary.’ (pp.14-15)

Because it was a ‘closed’ – appointments system made by the governing board, the number of honoraries was small. Therefore, hospital appointments were the means by which a surgeon could acquire ‘medical respectability’, publicise, and grow his private practice and garner direct financial remuneration from bedside teaching and in the process accumulate economic capital. The teaching of medical students at the bedside was a direct outcome of the growing need for clinical observation, fuelled by the changes in medicine which had coincided with the widespread development of voluntary hospitals; medical science in England followed the general principles of Sydenham. It emphasised the importance of the meticulous observation of symptoms. Thus, hospital beds became an invaluable means for educating apprentices in disease symptomatology and as a result were highly prized and were held by a minority of eminent practitioners. This added another facet to hospital staffing in that each honorary surgeon had his own entourage to whom he explicated the patients disorder. It was around this model, that medical schools began to develop. However, not unlike the appointment system to honoraries, surgical appointments and the selection process for apprentices were based on social class and nepotism **(Stevens, 2003)**.

In 1843, to the existing qualification M.R.C.S. (Membership of The Royal College of Surgeons), a new, superior, and more prestigious one was added: F.R.C.S. (Fellowship of The Royal College of Surgeons). This signified a distinction between the apothecary or general practitioner, and the surgeon of high social standing, in control of his own bed base, and his entourage of medical students **(Stevens, 2003)**. The Fellowship entitled one to vote for the College’s council and rendered one eligible to sit in the Court of Examiners **(Rutkow, 1993)**.

Thus, the elite’ s possession of social capital through its class connections, provided them with the necessary capital of surgical authority and power to take control of the constituent mechanisms of the surgical field, namely the hospital appointment system, together with the examining and teaching systems. As a form of capital, social capital enabled this, as possession of this form of capital is associated with membership in a group. It is the group ‘which provides each of its members with the backing of the collectively owned capital, a “credential” which entitles them to

credit, in the various senses of the word' (Bourdieu, 1986:21); in this case, the ability to control the mechanisms of the field, which in turn enabled them to garner economic, symbolic, and specific cultural capital, all of which, according to Bourdieu (1986), are never completely independent of each other, but are mutually reinforceable and exchangeable.

Social capital, with its norms and values, was then 'objectified' in these institutions, which helped support and perpetuate the established order. Power thus enabled the control, production and definition of knowledge, a central strand in any strategy relating to the conservation of vested interests and the status quo (Flyvbjerg, 1998).

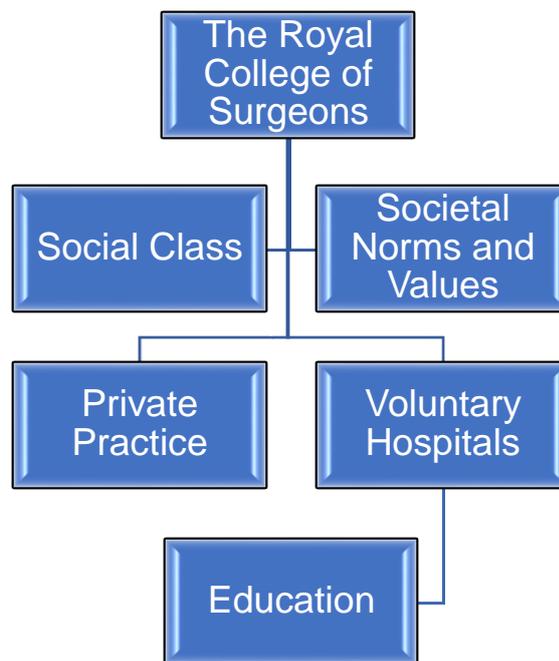


Fig. 4.1 The Surgical Establishment and Supporting Power Structures (1800-1947)

Although Bourdieu's work on the scientific field (1981, 1991) does not discuss knowledge, preferring instead to use the term 'official science' (i.e. 'the principles used by the dominant group in their choice of objects, the solution of problems and the evaluation of solutions' (1981:270)), he nonetheless acknowledges the importance of the education system in inculcating this. For example, when he talks of the struggle between the 'dominant' and the 'newcomers', he notes that the dominant occupy the highest positions in the structure of the distribution of what he terms scientific capital:

'In the forefront stands the education system, the only institution capable of securing the permanence and consecration of official science by inculcating it systematically (the

scientific habitus) upon all legitimate recipients of educative action, and in particular, upon all new entrants to the actual field of production.’ (ibid.:271)

Bourdieu (1988) discusses knowledge more explicitly, in relation to the university faculties. For example, Bourdieu submits that as ‘dominant’ faculties in the university hierarchy, medicine and law are responsible for inculcating the ‘techniques and recipes of a body of knowledge’ (p.63), upon the habitus of all new ‘agents’. Bourdieu describes this as ‘knowledge in the service of order and power’ (ibid.:69). Indeed, the perpetuation and stability of the system is dependent on all agents internalising, what Bourdieu describes as the laws and trajectories of the field. Thus, although structures enable strategies of domination, they would not be possible without the new recruit’s willingness to accept the rules of the game based on the dispositions of the habitus.

Although the structure of the surgical field during the period 1800 to 1858 was differentiated along class lines between the elite general surgeons and the apothecaries, the former being the dominant group as a result of their class background, other developments were also taking place in this period.

To use Bucher & Strauss’ (1961) terminology, new groupings or ‘segments’ began to develop and appear as a result of the interaction of surgical fields from around the world with the surgical field in Britain. In particular Stevens (2003) notes that:

‘From Paris, the centre of medical learning in the first half of the nineteenth century, the scientific study of disease entities was exported to all centers in the Western world. This was a time of discovery, of pushing back the boundaries of surgery, of correlating the pathological findings of anatomists at dissection with those observed through the symptomatology at the bedside. There was a growing need for facilities in which appropriate studies could be made of particular organs, lesions, conditions and diseases.’ (p.26)

The staffing system of the voluntary hospitals stifled innovation. Indeed, admission to the honorary staff was competitive, resulting in aspiring junior surgeons spending a protracted period of time performing junior work in the hospital in the hope that they would come to be regarded favourably by their senior colleagues. The surgeons who ran the voluntary hospitals, were fellows of the Royal College and generalist in terms of their anatomical remit. Throughout the nineteenth century and

beyond, general surgery controlled the largest proportion of the beds in the voluntary hospitals. Though staff might acquire special expertise in a particular area, they were not appointed *qua* specialists (**Stevens, 2003**).

Given the hierarchical nature of the hospital structure, innovative young surgeons interested in a specific facet of surgery, or in progressing new surgical procedures, were not able to gain entry into the elite group. Though by about 1850 the number of hospital beds in England and Wales had more than doubled, totalling almost 8000, there were still not enough opportunities for teaching and research. Although, the majority of junior surgeons in the voluntary hospitals accepted the protracted career trajectory, there was a frustrated minority of juniors that refused to accept this. Therefore, the only option for the disheartened junior or ambitious specialist was to establish their own hospital. Stevens notes that from this compelling movement were to grow special hospitals, e.g. Moorlands Eye Hospital, London (1804); The Royal Ear Hospital, London (1816). It was around these hospitals that the identification of the 'specialist' developed. By 1900 the number of special hospitals in England and Wales was 128. In the last quarter of the nineteenth century medical societies such as The Ophthalmological Society of the United Kingdom (1881) and The British Laryngological and Rhinological Association (1888) began to develop around the special hospitals.

Given that fields are social and do not exist in a vacuum, and the fact that the formation of special hospitals, professional surgical societies, and the development of surgical periodicals were 'important adjuncts to the evolution of surgery' (**Rutkow, 1993:356**) during this time, developments in this respect could be said to be inevitable.

Specialised scientific medicine thus reared its ugly head. However, despite the fact that, as noted above, such developments could be said to be inevitable, specialisation did not necessarily have to lead to specialist differentiation with specialist areas separating off from the main surgical corpus with their own examination structures.

The members of the new groups, belonging to the same privileged social set, were in possession of social capital; they may have been the younger generations interested in particular aspects of surgery, or an aspiring specialist. However, class background and preferences regarding specialisation are not mutually incompatible. This is evident even today, when a member of the upper classes votes for the Labour party, or a member of the working-class votes Tory.

The nineteenth century witnessed a movement from the Enlightenment towards Modernity, and although many of the norms and values of the patronage-based hierarchical society of the Enlightenment remained, members of the surgical profession were being increasingly subjected to global changes in the practice of surgery and medicine at large. When social fields meet and interact change can occur, resulting in different mindsets among individuals from the same class background.

Although the members of the new groups or segments were from the same social background as the dominant group within the field of surgery, this did not mean that their social class could be operationalised successfully to challenge the status quo at that particular time; indeed a group's chances of survival during this context depended on adherence to the norms and values of the 'generalist' culture which pervaded the surgical world (for detailed discussion see below).

In addition to the above, two related points need to be made from the outset: Firstly, specialisation in the nineteenth and early twentieth centuries did not render differentiation from the main body or corpus of surgery inevitable, but rather stimulated 'the formation of a specialist hospital or society, consolidated by the foundation of a specialist section of the Royal Society of Medicine' (**Stevens, 2003:39**). Thus, individual groups did not consciously set out with the intention of playing the long game of accumulating capital which could be operationalised when the context was right, hence enabling successful differentiation. Secondly, though they were founded around a similar time, there were differentials in terms of the amount of capital or resources possessed by each individual group within the field. Groups may start off with different chances owing to factors which are peculiar to their particular areas, like genetic predispositions in humans. This may go some way towards explaining why, given a similar time trajectory, specialist differentiation cannot be said to follow any specific pattern between 1929 and 1947.

Thus, in terms of the structure of the field there were polarisations between the dominant group and the newcomers, and between the new groups themselves. This resembles the gradations of the class system in Britain, e.g. between the upper middle class and the lower middle class.

Capital was objectified slower in the U.S. than in Britain. Indeed, the structure of the field in the U.S. developed in an entirely different way. In Britain, which exhibited 'autocratic' professionalism, the likelihood of specialist differentiation depended on the structure of the field. By contrast, in the United States this sort of structure was very much absent until the 1940's and 1950's, and the States exhibited 'democratic' professionalism (**Stevens, 1998**). Although there may have been a

field, it was not bound by any underlying social undertones and could be said to be more fluid and transparent.

4.3 The Royal College of Surgeons' Strategies and Responses to the Challenges of Specialisation: The Dominant vs. The Newcomers, and Patterns of Specialist Differentiation 1858-1947

The development of surgery and specialist differentiation should ideally be divided into four different phases or epochs, the first comprising the period 1858-1947. As alluded to above, in this period the British surgical profession operated very much along the lines of what Stevens (1998) terms "autocratic professionalism", as opposed to the "democratic professionalism" of the United States. To understand this epoch, we must realise that the Royal Colleges were part of a Conservative establishment which pervaded society at this time. Specialisation was not seen as 'natural' and, thanks to the structure of healthcare at that particular time, the 'general Surgeons' were able to ward off any usurpers.

The medical and surgical Royal Colleges were both generalist in their orientations, emphasising an integrative and broad approach to medicine and surgery.¹⁴ Advances made in the specialist hospitals were viewed as improvements within the generality of surgery, and not in any way separate from it. Such integrative notions were buttressed by the hierarchical system of hospital medicine, which in turn was reinforced by societal values at that time. Before the foundation of the NHS, the majority of consultants held honorary positions in the prestigious voluntary hospitals. General surgeons stood at the pinnacle of the medical order and it was therefore vital for those with special interests to express these in terms of aiding the scientific advance of generalists and the generality of surgery. To express these in any other way risked alienating the general surgeons and given that the only route to private practice was to obtain an appointment as a general surgeon in a voluntary hospital, it would be financially deleterious to do so (**Cooter, 1993**).

¹⁴ This may have stemmed from the Enlightenment, for example, 'elite concepts of the body and disease in the eighteenth century dwelt on the importance of harmony, of natural place and the serious consequences of bodily matter crossing its proper boundaries' (**Lawrence, 1994:29**).

In many respects, specialising in one operation or disease between 1858-1947 was considered tantamount to admission of limited competence and training. Furthermore,

‘specialising entailed putting oneself above one’s peers and this went contrary to the notions of medical equality. It meant telling the public directly or indirectly that this disease or that operation was best handled by a specialist with greater experience and skill. It could involve poaching patients and thus transgressing the conventions of medical etiquette.’
(Bynum, 1994:192)

Just as in the Enlightenment, surgeons were chosen for their civility and conduct befitting a gentleman as much as their medical knowledge and skill (**Lawrence, 1994**), and in the societal values held by the upper and middle classes at that time the ‘generalist’ enjoyed higher status than the specialist. Thus, obtaining an appointment as a consultant general surgeon in a voluntary hospital was the accepted route of acquiring the cachet required to access the lucrative private practice market (**Cooter, 1993**).

The logic of the field at this time draws parallels with the structure of the university field, between ‘knowledge in the service of order and power’ and ‘knowledge confronting order and power’ (**Bourdieu, 1988:68-69**). Bourdieu’s analogy of two opposing poles is germane, as the surgical field at this time was organised according to two opposing ideologies: at the dominant pole the old knowledge of the generalists was confronted by the new knowledge of scientific medicine and specialisation.

As alluded to in the previous section (4.2), there is a distinct difference between specialisation and specialist differentiation, and the elite within the profession chose to pursue a strategy of not totally quashing specialisation as long as these ideals were first and foremost part of the general science of surgery. Thus, from the middle of the nineteenth century The Royal College of Surgeons sought to legitimise scientific medicine and specialisation by defining the boundaries of new knowledge. This way they could control the evolution of specialisation more effectively. This was reflected in a report in the Westminster Review in 1881 on the progress of the various special departments in surgery:

‘With the increasing cultivation of specialism, the integrity of medicine is maintained by the greater recognition of broad scientific principles as the only true basis in every speciality.

The advancements in the special departments are refinements of surgery, and not in any way independent of it.’ (Westminster Review., 116 (1881) pp. 403-39 at p.432. cited in Cooter, 1993:38)

Thus far from reflecting a capitulation, the Royal Colleges strategy was a pragmatic one, which had the effect of bringing onboard potential stray elements which, left unto themselves, could have generated challenges to the status quo, as Abbott (1988) notes:

‘Unlike the mainstream medical institutions, the new specialist institutions outside the medical establishment claimed legitimacy precisely on their technical and scientific expertise. Only the threat of these alternative institutions and the necessity of controlling them led the medical establishment to move towards a scientific legitimization of medical techniques.’ (p.189)¹⁵

Embracing science with its underlying ideology of ‘naturalism’¹⁶ enabled the surgical elite to consolidate and maintain its position, despite having to transform itself along with the rest of elite Victorian society. The central tenets of the naturalism ideology held that steady natural progress had shaped the current milieu and that the same steady natural progress would secure a better future (**Lawrence, 1994**), providing a justification for specialisation, and helping it to become accepted under the general umbrella of surgery, even though many in the profession viewed it very sceptically.

Given the suspicion and scepticism which existed at this time, any area which appeared as a potential threat to the status quo, was effectively quashed. The development of the so-called ‘new orthopaedics’ (**Cooter, 1993**) and the profession’s reaction (see below) provides a good example of this. However, potential threats did not always come in the shape of a new area: metropolitan authority could also be challenged by the development of surgical expertise in the wealthy provincial cities a case of periphery challenging the centre. It is to this theme that we shall now turn.

¹⁵ France was different: ‘the high medical establishment had adopted an absolutely scientific basis for legitimacy from the start of the nineteenth-century’ (**Abbott, 1988:189**).

¹⁶ ‘Doctors of all political persuasions were significant figures in the creation of this ideology of naturalism. The new doctrine was proclaimed to be based on legitimate physiological enquiry. Its thoroughgoing naturalism was completed by linking it to Darwin’s theory of natural selection; this new naturalism was becoming, the culture of the Victorian elite’ (**Lawrence, 1994:58**).

In 1883, two hundred surgeons, mainly from the provincial centres, and all of whom were members of the Royal College of Surgeons, united behind the call from the Birmingham gynaecologist, Lawson Tait, to organise a British Association of Surgeons, along the same lines as their US counterpart.¹⁷ The Royal College of Surgeons responded by allowing provincial surgeons' representation on its council: the strategy was to circumvent Tait's proposals, and it effectively quashed them **(Cooter, 1993)**. Indeed, The Royal College prevented the foundation of new national associations of surgeons in Britain before the First World War. The Association of Surgeons of Great Britain and Ireland was not formed until 1920 **(Platt, 1982)**.

During this time, it was virtually impossible for a surgeon from the provincial towns, irrespective of his surgical skill, to acquire a post in the London hospitals, so some of the most modern surgery was performed in the provincial towns. This was especially the case with the 'new orthopaedics', which provides the next example of a direct threat to the general surgical establishment. Of all the new areas which formed during this period, orthopaedics was seen as the greatest threat to the elite of the profession, i.e. the general surgeons. In the early nineteenth century, British orthopaedics was concerned with treating club feet (talipes).¹⁸ However, as the century progressed, invasive surgical procedures began to be used alongside mechanical ones. The 'new surgery', and 'new orthopaedics' was developed in institutions outside of the major hospitals, for example private clinics or children's hospitals. Indeed, children's hospitals were central to the advancement of skill and expertise in bone and joint surgery, for by the end of the century a high proportion of inpatients required surgical intervention in the treatment of tuberculosis of the bones. Unlike the voluntary hospitals, Children's hospitals were not controlled by general surgeons, and as a result provided professional refuge for ambitious surgeons eager to experiment with innovative new techniques **(Cooter, 1993)**.

By the end of the century, however, those practising orthopaedic surgery were being subjected to the powerful claim of general surgeons all over the country, that the proper place for surgery was in the major voluntary hospitals. The word from the metropolitan surgical establishment was that orthopaedic hospitals and children's hospitals practising orthopaedic surgery were, 'like other specialist hospitals, inimical to the essential unity of surgery.' **(Little, 1862, p.561. cited in Cooter, 1993:17)**

¹⁷ The American Surgical Association was formed in 1882 by specialist general surgeons. **(Cooter, 1993:49)**

¹⁸ Three infirmaries were established for the treatment of Talipes: The Royal Orthopaedic Hospital (1838), the City Orthopaedic (1851), and the National Orthopaedic (1864) **(Cooter, 1993:13)**.

Despite the attraction of specialising in a particular area of surgery (especially amongst provincial surgeons), such surgeons were strongly committed to the idea of the essential unity of surgery. Indeed, given that many were also practicing general surgeons anything less than a full commitment to the general principles of surgery would have resulted in them being shunned by their surgical peers (**Le Vay, 1990**). In spite of this their focus on surgical expertise was viewed as a direct threat to the generalist surgical establishment in London who asserted their adroitness across the whole of surgery and not specific anatomical areas. It was a direct assault on their anatomical territory and a challenge to their supremacy. This was compounded on two counts: firstly, the growing international acclaim of British orthopaedists stemmed from their work performed in the specialist hospitals, children's hospitals, outpatient and private clinics, especially Robert Jones's¹⁹ clinic in Liverpool; secondly, the development of professional connections with pre-eminent American surgeons,²⁰ at a time when the image of orthopaedics in America was transforming, so that any association with America was going to create a certain amount of anxiety (**Cooter, 1993**). For example,

'By 1894 the leading lights from American Orthopaedic Association (AOA) were referring to the orthopaedic surgeon as one 'has been thoroughly schooled in all aspects of medicine, who will have a perfect knowledge of pathology, surgical bacteriology, and anatomy.' (**ibid.:35**)

Two years later the American field of orthopaedics was defined as 'That division of surgery which treats disabilities and diseases of the locomotor apparatus and of the prevention and treatment of deformities of the body' (**ibid**). This definition effectively set out the basis for the modern specialism by recognising the locomotor system as its anatomical domain. However, it was not until the First World War (1914) that leading lights in Britain defined orthopaedics as 'the treatment by manipulation, by operation, and re-education, of disabilities of the locomotor system, whether arising from disease or injury' (**ibid.**).

Although in the post-war period (1918) the reputation of orthopaedics had significantly improved, there were signs that the professional ambit was barely more than before the start of war. Indeed, Cooter observes there was evidence of decline as the 'old-guard generalists' felt threatened. At

¹⁹ LeVay refers to Robert Jones as: 'quite possibly the greatest orthopaedic surgeon the world has ever seen' (**1990:137**). Indeed, Jones was a pioneering figure behind the development of the 'new orthopaedics' (**Cooter, 1993**).

²⁰ For example, William and Charles Mayo, of Minnesota, and J.B. Murphy of Chicago. 'Most of these surgeons had more than a passing interest in bone and joint surgery and ran private clinics where they routinely dealt with such cases' (**Cooter, 1993:49-50**).

St. Bartholomew's this resulted in a reduction in the orthopaedic bed base by four. In addition, a member of the general surgical staff at Guy's hospital tried to interdict an orthopaedic department surgeon from performing a surgical procedure known as Meniscectomy. The surgeon in question would not give way and this attempt was eventually defeated.

Clearly such disputes typify the enduring tension between the traditional generalists and the new consultant surgeons pursuing modern orthopaedics, as Bristow tried to explain to the readers of the *Journal of the American Medical Association* in 1927:

'In the old hospitals, tradition plays a great part and change is not lightly undertaken. The men who control medical education, and who in reality control the teaching hospitals, are in a position of great responsibility. Many of the very best among them view the encroachment of so-called specialism with alarm.' (p.1922)

As far as the elite of the Royal College of Surgeons were concerned, this 'new orthopaedics' was an affront, a direct threat to their power and traditional territory. 'Openly expansionist (in part because of its generalist orientation), its scope seemed to some almost limitless' (Cooter, 1993:132). As one complainant in the *BMJ* in 1925 noted: 'I cannot see anything that is excluded by the modern orthopaedic surgeon' (Cheatle, 1925:959).

Indeed, the feeling pervading the Royal College was so strong that in July 1918 a special committee of the Council was formed, its objective being to place limits on orthopaedics expansionist tendencies. The meeting was presided over by the President of the Royal College (Makins). The committee stated that it regarded with:

'Mistrust and disapprobation the movement in progress to remove the treatment of conditions always properly regarded as the main portion of the general surgeon's work from his hands, and place it in those of 'Orthopaedic specialists'; and thus to educate the layman to the belief that the British surgeon is incapable of dealing with the majority of the most serious injuries the body may sustain.' (Royal College of Surgeons, Minutes of Council, 16th July 1918, pp.159-60 cited in Cooter, 1993:133)

In light of the meeting, figures such as Jones felt that the only way to protect the future development and prospects of orthopaedics was to adopt a concessionary strategy:

'Thus, in accord with the recommendations of the committee of the Royal College of Surgeons, the name of the centres was changed from 'Orthopaedic' to 'Special Military Hospitals,' to avoid the implication that only specialists are capable of carrying on the surgery practised in the centres and to avoid the recognition of a class of practitioners who may, or may not be competent general surgeons.' (ibid.)

Jones made further attempts to placate the establishment when he argued that:

'there need be no sharp demarcation between generalists and orthopaedic specialists, and by 1920 he was insisting that the general surgeon must have an absolute right to treat any case and as many of any type of cases as he desires.' (Cooter, 1993:133).

However, the onslaught from the 'old-guard' generalists in surgery continued without abatement, this time with regard to the control and treatment of fractures. Orthopaedists were particularly concerned that the treatment of fractures in the large teaching hospitals left much to be desired. 'The handling of fractures had passed largely into the hands of junior officers.' Thus, although the 'honorary surgeon (general surgeon) was nominally in control, the hospital resident was actually responsible for the treatment in practice' (Bristow, 1927:1920). Indeed, Bristow²¹ notes that figures such as Jones advocated:

'the removal of fracture cases from the general wards into special wards, and the transfer of fracture cases, by those hospital surgeons not especially interested in the work to a fracture department staffed by men whose work and interest lay in that field.' (ibid.:1922)

Despite the elite general surgeons' disdain for fractures, they refused to relinquish control of them. Their general argument was that transferring any department of surgery from the general surgeons to the specialist would have a deleterious effect on the students education, since 'the purpose of the teaching hospital is to educate men so that they should be fit to go out from the hospital into

²¹ Took up orthopaedics after appointment to Shepherd's Bush under Robert Jones (Le Vay, 1990).

general practice' (**ibid.:1923**). Indeed, it is was not until the late 1950s that general surgeons began to relinquish the treatment of fractures to orthopaedists (**Le Vay, 1990**).

The scepticism shared by the elite of the profession was still present in 1945, although in the run up to the new National Health Service in 1948, the Royal College was to have an increasing role in strategic planning and the formulation of policies (**Stevens, 2003**). This necessitated an acceptance that specialisation was here to stay and that the service had to be planned around this. Thus:

'The recommendations of the college followed the strong conviction expressed in the Goodenough Report,²² that consultant practice should be based on the general surgeon and general physicians with special interests, rather than on specialities per se. Not only undergraduate but also much of the postgraduate education was to be primarily general in orientation. The FRCS (Fellowship of the Royal College of Surgeons) was, at least in theory, an ideal examination for the general surgeon, and thus by implication for all those in the surgical sub-specialities.' (**ibid.:116**)

An anonymous article published in *The Lancet* in 1945 (18th Aug) and entitled "*Clinical Specialism*" reiterates the sentiment of the Royal College and the Goodenough Report, but also goes a little further, and its main points are worth examining in some detail. The author begins by focusing on the disadvantages of narrow specialisation: 'There is no doubt a limit beyond which increasing experience in a restricted field warps judgment instead of refining it' (**p.210**). However, the author then rather curiously begins to describe two functions of specialism in the pattern of medical organisation, and in doing so he differentiates between 'pioneers' and 'settlers' (i.e. specialists and generalists):

'It is necessary to distinguish between two functions of specialism in the pattern of medical organisation. One is routine diagnosis and treatment, which is the application of existing knowledge with judgment and skill. The other is the advancement of knowledge and the improvement of technique... A few of the workers in a given field are 'pioneers,' who break new ground; the majority are 'settlers,' who occupy it. The conditions in which the pioneer does his best work are often different from the settler.' (**ibid.**)

²² The Report of the Inter-Departmental Committee on Medical Schools (1944), under the chairmanship of the banker Sir William Goodenough (**Cooter, 2003**).

The author then goes on to describe how this would work in terms of the structure of service provision:

'An intensive study of a narrow field is one pioneering method. Clinics for the observation and treatment of cases suffering from the same disease, and institutes, hospitals, or special departments for handling restricted groups of patients, are appropriate for this purpose. There should be as many of them as there are pioneers of good quality to staff them. They will be found mostly in large centres of population. They should be allowed to specialise as narrowly as they wish, so long as they fulfil their prime function, which is not just treating patients but adding to knowledge.' (ibid.)

However, the author clearly proceeds to state that the majority, namely the 'settlers' best work is done as 'generalists' with 'specialist' interests:

'But for the settlers, too fine a ramification of subdivided specialism carries no advantages and is fraught with the dangers of narrowness and monotony. Their best work is done in a fairly wide and varied field, though one corner of it may often attract their special interest: they may be general surgeons with a special experience of one region or one type of operation; but their outlook should remain general.' (ibid.)

It is this emphasis on the many versus the few, on the generalists versus the specialists, which becomes the crux of the article. The author warns of the dangers and folly of over-specialisation, and challenges the assertion that brilliance in a field should equal a monopoly:

'Although organisation is a necessary tool in as far as it is modern societies only tool for creating what it lacks – in this case a comprehensive medical service. It is a dangerous tool. The planners of specialism are in danger of arguing that because pioneers have done brilliantly in their restricted field, they should effectively have a [monopoly]. Any claim to the monopoly of work within a special field should be examined critically. It cannot be justified by the interests of the pioneers, for there are not enough of them. For routine work it can be justified only when the technique involved is so difficult that constant full-time practice is necessary to maintain it.' (ibid.)

The author cites neurosurgery and orthopaedics as examples in this argument:

'Among the subdivisions of surgery, neurosurgery has probably a good case for a monopoly of its highly technical field. Whether the same can be claimed for orthopaedics is still a matter for discussion. It is questionable whether the inherent complexity of orthopaedic principles and technique justify it. Chest surgery faces the same problem... It is short-sighted to argue that, because the orthopaedic surgeon can treat a hundred fractures better on average, than the general surgeon, therefore every fracture should be treated by an orthopaedic surgeon.' (ibid.)

The author goes on to note that the relationship between the intensive specialists and the general surgeon should rather be this:

'It is the duty of the pioneer to teach the general surgeon as much of his art as the latter can reasonably be expected to acquire and practice; it is the duty of the general surgeon to learn and use it as far as he can, to know his own limitations, and to seek the expert's help, without fears for his own prestige, when faced with a problem that goes beyond his competence This sort of relationship between general surgery and its subdivisions will not develop if the latter are organised into watertight compartments.' (ibid.:211)

For this reason, the author argues, there should be no further divisions within surgery. However, in doing so the author does acknowledge that ophthalmology and otorhinolaryngology are both well-defined specialities, even though it was not until 1947 that they fully differentiated from general surgery with their own examinations:

'On this, the pattern of any national service of specialists that may be instituted, and the official recognition accorded to higher qualifications, will have an all important influence. Therefore, we would urge that the categories in such a service be as few as possible, Medicine and surgery, as now generally recognised, should not be further subdivided. This would not apply, of course, to the already well-defined specialities which lie outside general medicine and surgery; obstetrics and gynaecology, radiology and anaesthetics.' (ibid.)

The author backs up his arguments utilising the Darwinian Biological model as an analogy:

'The biologists have taught us that man achieved his superiority over the animals not merely by developing a superior brain but also by preserving a generalised adaptable bodily structure. We are led by the evidence of comparative anatomy to ponder upon the freedom of the will, or at least freedom of action, which we have because our bodies are versatile, untrammelled by specialisation for extreme but particular skill, and capable of any task the mind may imagine. The body politic is analogous; overspecialisation in the long run will hinder growth and adaptation, and it is at this stage in development most carefully to be guarded against.' (ibid)

During the closing paragraphs the message is clear and strong: there should be no further differentiation into separate speciality areas, and general surgery should remain in the state it is in at the time of writing. It is also quite interesting that the biological analogy is used here, almost one hundred years after its adoption and assimilation into surgical parlance. It is interesting to note that the author alludes to obstetrics and gynaecology as being well-defined specialities, however he omits to mention the foundation of the Royal College of Obstetricians and Gynaecologists (registered in 1929, with Royal assent in 1938).

The author also fails to omit whether the Royal College 'capitulated' in the face of adversity with regard to the foundation of a new Royal College for Obstetrics and Gynaecology, However, despite the omission in the article, this is an important point. 'Capitulation' is a strong word, and the question is, is it applicable to the case of obstetrics and gynaecology

In the case of obstetrics and gynaecology, the strategy of the Royal College of Surgeons was, from the outset, outright opposition to the proposed foundation of a new Royal College. The Royal College of Physicians also objected to any suggestions of a rival college. Fletcher-Shaw (1954), notes that the opposition of the two Royal Colleges stemmed partly from a real difference of opinion with their opponents about the conduct of qualifying examinations:

'The conjoint examination at that time was very much the province and the property of the two Colleges, which they naturally wished to safeguard. They thought the emphasis placed on midwifery in the Final Conjoint examination was correct, while those who founded the new college made no secret of the fact that they considered the midwifery portion of this examination most unsatisfactory.' (p.29)

At the same time, it is clear that the nub of the issue was the proposed foundation of a new College to rival their power as Stevens explains:

'Up to this point the specialities had been contained within their walls either because specialisation naturally followed from the MRCP or FRCS diploma, or through the speciality diplomas arranged between the two Royal Colleges through their own Conjoint Board. University diplomas did not present a problem to the Colleges, but the creation of a new professional College challenged their traditional supremacy as the great leaders of medicine and surgery.' (2003:45)

This apprehension is reflected in the closing paragraph of an article written by an eminent member of the Royal College of Physicians which appeared in the March 26th edition of the *BMJ*, in 1929. The writer points to the failings of the two Royal Colleges with regard to training in obstetrics and gynaecology:

'The present movement is due to the neglect of obstetrics and gynaecology by the Royal Colleges. The Royal College of Physicians instituted a special diploma in 1783, and has conferred its fellowship on a number of its obstetrical and gynaecological members; but it cannot be said – although Harvey, Blundell, Denman, Matthews Duncan, and others received that honour – that, in recent years, the Fellowship has been conferred as freely as on its medical members, or as the importance of the subject and the character of its practitioners deserved. An improvement in this respect is overdue and would be welcomed.' (Spencer, 1929:523)

The author even goes as far as to suggest that these failings could be addressed effectively if the two Royal Colleges amalgamated into a Royal Academy of Medicine:

'But to form a new college, which could not, at least for many years, compete in tradition, buildings, library, or funds with the existing Royal Colleges, would be to place obstetrics and gynaecology in a position of inferiority which its importance and achievements do not deserve. Far better would it be to extend the work of the Conjoint work of the two Royal Colleges by a complete amalgamation, as Clifford Allbutt suggested, into a Royal Academy of Medicine.' (ibid.)

That this would ever have happened in practice is highly unlikely, given that both the Royal Colleges had their own unique histories and traditions and were fiercely competitive. The absence of any response from either the Presidents of the two Royal Colleges speaks volumes.

The Royal College of Surgeons and the Royal College of Physicians had neglected obstetrics and gynaecology for many years, and to suggest improvements at that stage in the game, especially after the Articles of Association had been submitted to the Board of Trade, was akin to trying to close the stable door after the horse had bolted. The intervention of the state in asking the Presidents of the two Royal Colleges to meet with Blair Bell (Chairman of the Council of Signatories of the proposed College of Obstetricians and Gynaecologists) shows the gravity of the situation. Blair Bell had already proposed an amendment to Articles 3 (e) and 3 (f)²³ before the meeting, as a concessionary move in order to meet the objections raised by the Royal Colleges. The President of the Royal College of Physicians (Sir John Rose Bradford) decided to give his consent to 'this compromise', while the President of the Royal College of Surgeons (Lord Berkley Moynihan) refused to change his position in relation to this; towards the end of the meeting, however, Moynihan accepted the suggestions after additional negotiation (**Fletcher-Shaw, 1954**).

There was an assumption 'that this agreement would be put before the Comitia of the Royal College of Physicians and the Council of the Royal College of Surgeons at their next meetings' (**ibid.:38**). The Royal College of Physicians did this on July 4th, and the motion was carried unanimously. The President of the Royal College of Surgeons, however, played a different game:

'He called a meeting of those who had examined in obstetrics for the Conjoint Board, and the upshot was that a committee of the two Presidents, and four of the signatories of the proposed new College including myself (Fletcher-Shaw) was formed to draw up regulations for a new diploma in obstetrics and gynaecology of the Royal Colleges.' (**ibid.**)

²³ Article 3 (e) To take part (if invited) in the examination of candidates for admission to the British Register of Medical Practitioners in co-operation with teaching and examining bodies authorised to conduct medical examinations for the purpose of qualifying candidates for admission to the British Register of Medical Practitioners.' Article 3 (f) To grant to Registered Medical Practitioners certificates or equivalent recognition of special knowledge in Obstetrics and Gynaecology either alone or in co-operation with teaching and/or examining bodies authorised to grant such certificates provided always that every certificate shall contain on the face of it a statement to the effect that it does not, of itself, confer or purport to confer any legal qualification to practise gynaecology or obstetrics and that it is not issued under or in pursuance of or by virtue of any statutory or government sanction or authority. But should the Royal College of Physicians, London, and the Royal College of Surgeons, England, jointly agree to invite the co-operation of obstetricians and gynaecologists in an examination for the granting of a diploma in obstetrics and gynaecology and for so long as this arrangement shall remain in force the College shall alone not grant a diploma in obstetrics and gynaecology but shall be debarred from entering into similar arrangement with other bodies authorised to grant such certificates (**Fletcher-Shaw, 1954:37-38**).

However, approval was still not forthcoming from the Royal College of Surgeons. The College's strategy was to play the signatories of the proposed new College at their own game, namely, to establish a diploma in obstetrics and gynaecology which would rival any diploma from a new College in advance of the college being 'registered'. The Royal College of Surgeons employed a further delaying tactic when it tried to amend the disputed clauses even further, but in the end the signatories refused this and submitted the Articles to the Board of Trade. These were accepted, and the new College was established in 1929 without the formal backing of the Royal College of Surgeons (**Fletcher-Shaw, 1954**).

Thus, the Royal College of Physicians capitulated as soon as it realised the overwhelming odds of its ever being able to turn the situation round. The Royal College of Surgeons did quite the reverse, choosing instead to play the politics of delay and distraction, but to no avail. Both Colleges had acted far too late, despite opportunities to improve the teaching of obstetrics and gynaecology in the early years of the twentieth century. A precedent had now been set!

In the case of ophthalmology and otorhinolaryngology, the Royal College faced pressures for change, internally and externally. This primarily centred around the necessity to clearly delineate a 'specialist' and implement the proposed specialty training programme. Additional factors were the size and influence of the specialist groups within the College walls and the significant effect they had on the generalist ethos of the Royal College (**Stevens, 2003**). Last but not least was the increased role of the Royal College as a source of professional expertise (**Rivett, 1998**) in policy matters in the run up to the NHS.

The Royal College of Surgeons was thus faced with the fact that the size and influence of these groups meant that there was a danger that if their demands were not taken seriously, they would establish new Colleges outside of its authority. The College was also faced with the fact that it had to come to some decision on its structure and role as educator and representative body in the new health service; 'the numerical balance of rapidly growing specialist fields would be of increasing importance in the National Health Service where the consultant staffing pattern would change quickly under the program of expansion' (**Stevens, 2003:106**), together with the need to define what exactly a specialist should be provided additional momentum.

The request from the British Association of Ophthalmologists and the British Association of Otolaryngology for separate Fellowship examinations was granted by the College Council in July 1943. 'A similar request was made by the British Association of Otorhinolaryngologists on behalf

of its members in 1945. The FRCS in ophthalmology and otorhinolaryngology were instituted in 1947' (**ibid.:112**).

Prima facie, one could say that the Royal College of Surgeons capitulated under pressures from various sources, but it could also be argued conversely that the stated aims of the Royal College of Surgeons was to retain surgery as a unified whole, as well as maintaining jurisdictional control over surgery; and that, although it failed on the former, it succeeded with the latter. Therefore, it could be argued that given the contextual pressures at that time, the Royal College had little choice but to act in the way it did; but that rather than as a sign of weakness, this should be viewed as a rational and pragmatic strategy which would safeguard the College's jurisdictional hold over surgery as a whole, in as far as the areas in question remained within the walls of the Royal College, unlike obstetrics and gynaecology. Thus, in many respects this example is similar to the Royal College's decisive move in terms of legitimating scientific medicine, resulting in maintenance of jurisdictional claims: adaptation can be a sign of strength and not weakness, survival and not extinction.

4.4 Knowledge is Power, and Power is Knowledge

Francis Bacon famously said that 'Knowledge is power,' and this has been regarded as 'encapsulating one of the most fundamental ideas of the Enlightenment' (**Flyvbjerg, 1998:226**). However, during what could be termed as the first era in surgery, i.e. 1800-1900, it could be said that Power and Knowledge cannot be separated from each other in the way Bacon does. Flyvbjerg argues that:

'The relationship between knowledge and power is commutative: not only is knowledge power, but more importantly power is knowledge. Power determines what counts as knowledge, what kind of interpretation attains authority as the dominant interpretation. Power procures the knowledge which supports its purposes, while it ignores and suppresses that knowledge which doesn't serve it.' (**ibid.**)

Power during the first surgical era derived primarily from social class, which effectively enabled control over knowledge; the knowledge of the dominant group or elite was embodied in the health

care structures (the medical curriculum and the hospital), which buttressed the status quo and were mutually reinforcing, thus enabling the elite general surgeons in the Royal College to promote or suppress knowledge, with the result that they were able to consolidate their power over the field.

However, surgery then entered what could be termed a 'transitional phase', during which the prospect of 'New Knowledge' began to rear its ugly head. This process was fuelled by the advent and legitimisation of scientific knowledge, which began to develop during the second half of the nineteenth century. Though the elite general surgeons were still the dominant group within the Royal College, the seeds of change had been sown during the first half of the twentieth century. The transitional phase ended, and the context changed. Specialisation was here to stay, as reflected in the growth of specialist groups. World War II had seen the development of new techniques, and as medicine and surgery became even more scientifically advanced and the membership of specialist groups increased, the old conservative surgery of the generalists was challenged. Also, the proposed introduction of a National Health Service would effectively dismantle the old health care structures which buttressed and supported the elite generalists of the Royal College.

Given the changing context, knowledge could potentially equal power; yet conversely power could still equal knowledge. Whether the former was possible would very much depend on the amount and type of accumulated capital/resources possessed by the groups in question, and importantly, the right variables being in place at the right time in order for knowledge to become effectively operationalised.

The following sections of this chapter focus on the development of obstetrics and gynaecology, ophthalmology, otorhinolaryngology, and orthopaedics, paying particular attention to the accumulation of capital/resources, which would eventually prove vital in their quest for specialist differentiation. Of the four areas, orthopaedics is the odd one out, in that it did not differentiate from surgery until the 1980's. Nonetheless, foundations were laid during this period which would later prove essential in their quest for specialist differentiation.

As alluded to earlier, (in section 4.2) it may be useful to view the profession of surgery as a collection of segments, but as in any other field there are multiple inequalities: between those that hold the reins of power, and between those that do not. In many respects, and particularly the potential to rise may be dependent on having access to the right resources at the right time

inasmuch as, one could liken this field or structure to the class structure: some will rise and some will not.

4.5 Obstetrics and Gynaecology – A New Professional College is Born

Obstetrics and gynaecology achieved the ultimate accolade with the foundation of its own professional college in 1929. This was a triumph of specialist differentiation. However, its beginnings were humble. In terms of its position in the structure of the surgical field during the nineteenth century, obstetrics, and gynaecology, possessed less inherited or initial 'capital' than ophthalmology and otorhinolaryngology; in many respects it shared a similar position to orthopaedics, in so far as the elite of the profession viewed it with disdain.

Obstetrics and gynaecology also had the problem of bestriding both medicine and surgery, so that its fate was tied up with both the Royal College of Surgeons and the Royal College of Physicians. For example, in the early part of the nineteenth century when attempts were being made to force the Royal Colleges to found examinations in midwifery both reacted in a less than positive manner:

'At one time the Prime Minister was approached, and in reply to his enquiry for information from the Royal College of Physicians, the President, Sir Henry Halford, replied by saying that no man who has an academic education ought to practice obstetrics. Soon after, at a Comitia, he stated that obstetrics is no calling for a gentleman. The Royal College of Surgeons at this same period gave no greater encouragement to the man-midwives and excluded from its Council and Court of Examiners anyone who practised obstetrics.'
(Fletcher-Shaw, 1954:5)

Although, the advent of anaesthesia advanced the field of gynaecology, and antiseptics improved the safety of obstetrics, the relative position of obstetrics in relation to medicine and surgery was that of a minor component:

'The Royal College of Physicians was more interested in medicine than in obstetrics. The Royal College of Surgeons was more interested in surgery than in gynaecology, and obstetrics and gynaecology received the minimum attention from both.' (ibid.)

Change was also obstructed by the hierarchical structure of the voluntary hospitals and the inflexible system in relation to the way the bed base was allocated. 'The physicians and surgeons in the teaching hospitals in London retarded the development of obstetrics and gynaecology departments', and furthermore 'would not give up beds for the proper teaching' (**Stevens, 2003:44**) of this branch.

The foundation of departments in obstetrics and gynaecology encountered resistance from physicians and surgeon's country wide. Such opposition was counteracted by the formation of separate special hospitals. 'The hospitals in London²⁴ founded specially for obstetrics and gynaecology were uninfluenced by conservative physicians and surgeons and as a result were free to develop as they wished' (**Fletcher-Shaw, 1954:9**).

This freedom was a mixed blessing, for on the one hand it allowed the Gynaecological group to play an important role in the expansion of gynaecological surgery, but on the other hand it opened up the real danger of a separation of obstetrics from gynaecology, given its surgical outlook. Fletcher-Shaw uses Victor Bonney, a brilliant gynaecologist in the forefront of the development of surgical gynaecology and at the height of his career in the 1920's, as an example when making the point with regard to the real danger of the separation of obstetrics and gynaecology:

'Now in the nineteen-twenties, Bonney wished all gynaecologists to follow in his footsteps, to be Fellows of the Royal College of Surgeons, to be trained abdominal surgeons, and to consider each gynaecological problem from the surgical angle.' (ibid.:10)

In addition, given that Bonney had a cult following amongst the trainees, together with the fact that around the turn of the century the London based gynaecological trainees took the examinations for the Royal College of Physicians (M.R.C.P.) and the Royal College of Surgeons (F.R.C.S.).

²⁴ Queen Charlotte's, the City of London, and York Road, for obstetrics and Chelsea, Samaritan and Soho for gynaecology (**Fletcher-Shaw, 1954:9**).

Then within ten years, they were satisfied with taking the F.R.C.S. on its own, pointed to the potential for separation (**Fletcher-Shaw, 1954**).

Despite obstetrics and gynaecology's low level of 'initial capital' however, it was able to differentiate almost sixty years before orthopaedics, with which it shared similarities, and twenty years before ophthalmology and otorhinolaryngology, which started off with higher levels of initial capital. The question which arises is: how was this possible?

From the outset it should be stated that obstetrics and gynaecology's differentiation from medicine and general surgery was not in any sense predestined. In this regard it has something in common with all the other areas which eventually differentiated. In many respects, the remarkable success story of obstetrics and gynaecology only reinforces the argument propounded throughout this thesis, namely that specialist differentiation is not an inevitability. Obstetrics and gynaecology's success, not unlike that of other areas, is attributable to the accumulation of capital/resources throughout the nineteenth century and into the twentieth century, even though the specific types of capital it possessed at the outset were scanty.

Despite obstetrics and gynaecology's initial handicap, there were three indirect factors which probably worked in favour of their accumulating specific types of capital – social capital, symbolic capital, scientific capital, specific cultural capital and economic capital which would prove useful in the long-term: firstly, the development of obstetrics and gynaecology, especially surgical gynaecology, was faster in the provincial centres outside of London itself, simply because it was performed outside of the teaching hospitals and although special hospitals were founded in the capital, the special hospitals in the provinces grew in size and significance as they became the designated teaching units for undergraduates; secondly, the development of surgical gynaecology under figures such as Bonney, a general surgeon who had a good reputation and following (**Fletcher-Shaw, 1954**), helped gynaecology as an arm of general abdominal surgery to become more attractive; thirdly, given that surgical gynaecology became a recognised arm of general surgery, and its techniques were developed and perfected, it was likely to attract private practice, another attraction for new recruits.

As with all groups there will be leaders and pioneers, as well as the rank and file membership. Leaders and pioneers may disagree on the objectives of the group, and rank and file members who may or may not be fully cognisant of the objectives of the leaders (**Larson, 1977**).

It is also likely that objectives change with contexts. In this respect, obstetrics and gynaecology's early development was no different to the other areas. During the group's early years, special hospitals were established, followed by the formation of medical societies which were set up by likeminded surgeons in and around the 'special hospitals'. During the maturation stage - the final stage in the development of the specialist area during the latter years of the nineteenth century – the area was to become a specialist section of The Royal Society of Medicine (**Stevens, 2003**).

However, although part of the capital (in Bourdieuan terms) accumulated during the nineteenth and early twentieth centuries was due to indirect factors, this does not negate that there were conscious efforts to accumulate types of capital. Indeed, Bonney, not unlike his trusted adviser (Sir John Bland-Sutton), became an 'abdominal and gynaecological surgeon'. His own operative skill put him at the forefront of operative gynaecology, and during the early years of the twentieth century he set out on his quest to ensure fellow gynaecologists followed the same path, to be fully trained abdominal surgeons and Fellows of the Surgical Royal College (**Fletcher-Shaw, 1954**).

However, this conscious effort to accumulate capital on the part of Bonney was purely for the establishment and betterment of surgical gynaecology, and in no way represented an attempt to accumulate capital to realise a long-term goal such as specialist differentiation for obstetrics and gynaecology, and the foundation of a professional college. Bonney's reaction to the suggestion to found a College clearly backs this up. Fletcher-Shaw documents that when the suggestion was publicly proclaimed, Bonney, who by then was a member of the Council of the Royal College of Surgeons, strongly opposed it, as he feared that it might be a retrogressive step which could lead to gynaecology taking several steps backwards. This is not to say however, that there were no obstetricians or gynaecologists whose dream it was to found a separate college. Fletcher-Shaw reflected on what some began to think towards the end of the nineteenth century:

'While I was undergoing a full five years' apprenticeship in resident appointments it seemed to me to be pointless to spend a further two years of study on subjects little related to this chosen branch of medicine. Clearly, however, the young physicians and surgeons had always gained much by being compelled to prepare for higher examinations after their junior appointments and before being elected to senior posts. This period of mental digestion and mental stimulation would be invaluable to the young gynaecologist if only it could be obtained in his own subject. If only the long clinical training in some schools could be combined with the discipline of working for a higher examination in obstetrics and gynaecology, what an improved what an improved race of candidates both types of school would provide.' (ibid.:6)

Fletcher-Shaw then goes on to opine that the only way to achieve this was through the foundation of a Royal College:

'The only way to achieve this was by setting up a Royal College which would insist upon both clinical training and examination as being equally important factors in entry to its membership. And this would at the same time advance the teaching of Obstetrics and Gynaecology and restore to a proper partnership the three main divisions of the great body of medicine.' (ibid.)

However, this wouldn't be an easy dream to realise, for obstetrics and gynaecology had arms on both sides of the divide, namely medicine and surgery, and there were forces pushing and pulling in both directions. In particular, there were four different factors in the equation: obstetricians (physicians); gynaecologists (general surgeons); general practitioners; and midwives.

Midwifery was well on the way to becoming a separate self-governing area. A register was introduced through the Central Midwives Board in 1902 and produced stringent regulations for practice. Midwifery's skills base and respect as a profession is reflected by their central role in childbirth (**Stevens, 2003**). Thus, obstetrics was being practised on two levels: by consultants in the special hospitals, and by midwives and general practitioners in the community. This raised an important question: was obstetrics and gynaecology one field of practice or two?

This question was not resolved at the time, although, if Bonney's movement had succeeded there wouldn't have been any need for this question, as a permanent separation would have occurred.²⁵

Despite Bonney's movement there were gynaecologists who wanted to prevent the divorce of obstetrics and gynaecology. At the same time there was another factor which called for a College: 'the failure to raise the standard of medical teaching in obstetrics had become a scandal' (**Stevens, 2003:44**), the most serious effect being the 'high maternal mortality rate, then 4.33 per thousand live births' (**Fletcher-Shaw, 1954:12**).

²⁵ Two or three universities did separate the teaching of obstetrics and gynaecology, although at succeeding elections they were amalgamated (**Fletcher-Shaw, 1954:11**).

The difficulty lay in trying to find a group of leading gynaecologists who were likely to carry the obstetricians and gynaecologists of the country with them:

'Often over the years, I had compiled a list of leading Gynaecologists, men of character as well as ability, who were likely to carry the Obstetricians and Gynaecologists of the country with them, provided that all in the group agreed upon a policy and would whole-heartedly support it. There lay the difficulty. In such an individualistic profession as ours there were likely to be differences upon detail, and these were likely to be exaggerated into principles unless the whole group could be brought together for discussion. This was impossible during these years, and any attempt would have ended only in bringing together an unrepresentative group from one of the five obstetric societies.' (ibid.:13)

The following account of events from 1923 onwards provides more clear evidence that the foundation of a professional College was far from inevitable. It was not until 1923 that Fletcher-Shaw realised that a body already existed for the purpose, namely the Gynaecological Visiting Society. This society had been founded back in 1911 by Blair Bell, a gynaecologist from Liverpool, and its thirty members were chairs in all British universities except for two. In view of the fact that Blair Bell was leader of the society, it was he who was approached by Fletcher-Shaw in 1924:

'Blair Bell at once saw the value of a College and grasped the broad outlines of my proposals, but he also saw the difficulties and asked for a little time to think it over. During the December examinations he discussed the matter with his external examiners, Sir Ewen Maclean and Mr Comyns Berkeley. After some correspondence, it was finally agreed that I should bring up the matter for discussion at the next meeting of the Gynaecological Visiting Society, which was held in Cardiff on February 2, 1925. The necessity for such a College was acknowledged, the general principles unanimously accepted and Blair Bell, Comyns Berkeley, Ewen Maclean and myself were elected to form a committee to explore the possibilities of founding such an organisation.' (ibid.:14)

Fletcher-Shaw goes on to note that it was not until the 22nd April 1925 that the committee was able to hold its first meeting, and that it was during that meeting that the committee received its first bit of bad news:

‘Comyns Berkeley had busied himself in getting information as to the procedure in founding a Royal College and now he dampened our ardour by telling us that a Royal Charter was never given to an organisation to which there is opposition. Opposition from the Royal Colleges was one thing we could be certain of, so this information brought our activities to a halt.’ (ibid.:17)

Berkeley had, however, discovered an alternative way of proceeding: to establish the College as a company with Limited Liability, with approval from the Board of Trade to remove “Limited” from the title. Fletcher-Shaw recalls that it was decided to accept this route after much debate and a decision was made to propose to the next meeting of the Gynaecological Visiting Society that the establishment of the college was achievable, albeit in a more modest form (**Fletcher-Shaw, 1954**).

However, Fletcher-Shaw also notes that the success of the proposals was doubtful without the adequate support of the leading figures in obstetrics and gynaecology in London:

‘Before the next meeting of the Gynaecological Visiting Society, in June 1926, it was clear that the success of the College was very doubtful unless we secured the support of the leading senior obstetricians and gynaecologists in London. It was too much to expect young men to give enthusiastic support to a movement opposed by their seniors, or even one which did not have their full support.’ (ibid.:19)

With this in mind, Sir Francis Champney’s, Sir George Blacker, Dr Herbert Spencer, Dr Watts Eden²⁶ and Dr Fairbairn were all approached, and a meeting over dinner was arranged:

‘At the end of the evening, Champney’s, Eden and Fairbairn promised qualified support to the College. Champney’s and Eden were opposed to the word College, preferring Association, while Fairbairn opposed examinations. Sir George Blacker opposed for the curious reason that he disliked the other two Royal Colleges and would take no part in founding a third. Herbert Spencer was undecided that evening, but apparently after sleeping on it, decided against.’ (ibid.:22)

²⁶ Fletcher-Shaw notes that Watts Eden was ‘accepted as a leader, not only in London alone, but in British obstetrics generally’ (**1954:21**).

The atmosphere had thus changed, the members of the Gynaecological Visiting Society had accepted the broad principles set out in the first memorandum and had worked towards these aims. Conversely the

'older men accepted only the necessity of founding somebody to ensure co-operation amongst gynaecologists. The idea that a College could be founded on the lines of the two older Royal Colleges, to which they had given allegiance all their professional lives, and that its examinations could ever rival theirs, was to their mind unthinkable.' (ibid.:23)

However, according to Fletcher-Shaw the whole question of title, College or Association was settled tactfully and cleverly:

'This question of title, College or Association, was settled tactfully and cleverly by Comyns Berkeley. He asked me to give a written description of the organisation as visualised by the Committee, but without any title, so that he could the matter further with Champney's. He subsequently suggested that I should get a memorandum in favour of the title College signed by a considerable number of professors who supported the plan. I quickly and easily secured a memorandum signed by professors of obstetrics and gynaecology in Edinburgh, Glasgow, Newcastle, Leeds, Liverpool, Manchester, Sheffield, Birmingham, Bristol, Wales and Belfast. Apparently, this impressed Champney's; at any rate he now agreed to the title College.' (ibid.)

According to Fletcher-Shaw,

'having obtained the tentative support of Champney's, Eden and Fairburn, and the unconditional support of the members of the Gynaecological Visiting Society, the next move was to proceed with the drawing up of the Articles of Association.' (ibid.)

At the next meeting of the Gynaecological Visiting Society, in February 1927, the registration documents which had to be submitted to the Board of Trade had to carry nine signatures. As Fletcher-Shaw notes this was not without hitches:

'The meeting decided that on the nine signatories, and by this time all accepted the principle that the College should have the power to choose its Members by examination, if it so desired, though Champney's, Fairbairn, and I think Eden, still hoped that this would not be necessary. To claim also the right to institute an examination for undergraduates and postgraduates was strongly opposed by them and a number of others, on the ground that it was foolish to ask for something unattainable.' (ibid.:25)

Issues such as these would not be

'resolved until the whole project of founding the College, together with the proposed Articles, was put before a meeting of consultant gynaecologists invited from all the recognised hospitals in the British Isles. This took place on 26th April, 1927. On the following day, the British Congress of Obstetrics and Gynaecology opened in Manchester.' (ibid.:26)

The outcome was positive, and the memorandum and Articles of Association were submitted to the Board of Trade. Additionally, the General Medical Council and Ministry of Health were approached without objection. In June 1928 a notice was posted in the Times advising that any 'objections' should be lodged up to and including the 11th July (**Fletcher-Shaw, 1954**).

Although everything appeared to be running smoothly, an objection from the solicitors of the Royal Colleges emphasized the precarious nature of the process. The Royal Colleges' objection was: 'That the granting by the proposed College of Certificates for proficiency in Obstetrics and Gynaecology would be an infringement of the privileges granted to the two Royal Colleges' (**ibid.:28**).

As time moved on, the opposition from the Royal College of Physicians began to wane, but that of the Royal College of Surgeons increased. This obviously placed the Board of Trade in a difficult position:

'The arguments were in favour of granting registration to the new College, but it was very difficult to do so in the face of opposition from the Royal Colleges, which for so long had dominated medicine. We knew that the Board of Trade and the President of the Royal

College of Physicians were consulting Sir George Newman, Principal Medical Officer to the Ministry of Health, as, there is little doubt, did also the President of the Royal College of Surgeons. But as one of his senior officials said, if the delay is due to Newman, he is in a fix, as maternal mortality is one of his greatest problems.” It was evident he wanted an amicable settlement, and he advised Blair Bell to invite the two Presidents to dinner to discuss the matter in a friendly way. This he did but unfortunately without reaching any agreement.’ (ibid.:35)

Despite this setback, it appears that fortuitous circumstances had the potential to place the process back on track. According to Fletcher-Shaw, a chance meeting between Sir Boyd Merriman (Solicitor-General)²⁷ and Neville Chamberlain (Minister of Health), who happened to be staying at the same club in Manchester, gave him the opportunity to tell him informally about the College.

The resignation of the Baldwin government cleared the way for a new administration headed by Chamberlain. The new Prime Minister’s first speech made maternal mortality a priority in the government’s reform agenda. This was obviously ‘political capital’ from heaven, so to speak, and such heaven-sent opportunities could not be passed up easily! Fletcher-Shaw immediately wrote a letter to Sir Boyd Merriman, describing the aims and objectives of the College-to-be, as well as noting that the Board of Trade was hindering its establishment:

‘I pointed out that maternal mortality was now in the public eye, as evidenced by speeches made by the Minister of Health and now by the Prime Minister, but for a much longer period it had been gravely considered by the teachers of obstetrics, who believed that the only way to achieve a permanent reduction in mortality was by improved teaching and training of medical students and graduates. We all held that this could be best brought about by the creation of a College in line with the older Colleges of Physicians and Surgeons. I gave him a detailed history of our discussions and the enquiry and told him how the Board of Trade was delaying our registration. I ended with the statement that, as the Prime Minister had brought the subject of maternal mortality into party politics, it seemed unlikely that the present election could be fought without some public manifesto from the obstetricians.’ (ibid.:36)

²⁷ Boyd-Merriman had worked closely with Chamberlain when preparing his National Health Insurance (Fletcher-Shaw, 1954:35).

The outcome of the letter was the intervention of Neville Chamberlain, who at short notice, requested a meeting with Blair Bell and the Presidents of the two Royal Colleges at the Ministry of Health. The outcome of the meeting was that there would be an amendment to the Articles of Association, namely that any diploma or certificate in obstetrics and gynaecology granted by the College should carry no legal qualification to practice these. The President of the Royal College of Physicians, Sir John Rose Bradford, agreed to the compromise, but the President of the Royal College of Surgeons, Lord Moynihan would not move. However, despite Moynihan's intransigence, the amended clause was submitted to the Board of Trade and the registration was finally accepted on 9th September 1929. On the 13th September 1929 the official Limited Company documentation was received, with consent to remove the word "limited" (**Fletcher-Shaw, 1954**). The College of Obstetricians and Gynaecologists was born!

As in medicine and surgery, College membership became the recognised route for consultant appointments in obstetrics and gynaecology. Obstetrics and Gynaecology were combined. The symbolism and kudos attached to a new College was reflected in the increased standing of the specialty and its practitioners, this was even more marked following the bestowing of a Royal title to the College in 1938, although the charter was only approved in 1946, because of the Second World War. Clearly the Royal College of Obstetricians and Gynaecologists was not destined to exist: its very existence was a triumph over strong opposition. As alluded to earlier, the formation of a professional College is the ultimate form of specialist differentiation (self-regulation). Although the magnitude of this should not be understated, it is the underlying rationale which acts as a precedent, e.g. for the need to raise standards of training and be fully represented in the undergraduate curriculum (**Stevens, 2003**).

4.6 Specialist Differentiation: The Cases of Ophthalmology and Otorhinolaryngology

Ophthalmology and otorhinolaryngology were the second success stories of the first half of the twentieth century. They were able to secure the support of the Royal College of Surgeons for their requests to have fellowship examinations in ophthalmology and otorhinolaryngology alone, which effectively meant complete separation from general surgery, their own examination structures and control over speciality standards, and a monopoly in the market for services based on their expertise. In this respect they were both successful in pursuing the 'professional project'

Ophthalmology and otorhinolaryngology were possibly more loosely attached to general surgery than orthopaedics, since they both had a medical as well as a surgical aspect/angle. They were also both non-threatening in terms of their remit, whereas orthopaedics was seen as a threat to the territory of the generalist and hence the status quo.

The private practice angle must also be taken into account. Private practice in ophthalmology and otorhinolaryngology was attractive and certainly attracted more interest than that in orthopaedics, which had a lowly image. Thus, as long as the dispositions of the ophthalmologists and otorhinolaryngologists were to play the game, that is to say, they were first and foremost general surgeons with a specialist interest in eye or ear nose and throat surgery, this satisfied the old guard, many of whom 'held dual appointments at the voluntary as well as a specialist hospital' (**Stevens, 2003:28**). Indeed, many of the voluntary hospitals established their own special departments (**Bynum, 1994**). These factors had a potential effect on the interest in these areas, and this increased the numbers – a pivotal factor when it came to self-regulation in 1947.

Ophthalmology and otorhinolaryngology were successful in their quest for differentiation thanks to a change in context, but also because they both had specific capital resources which orthopaedics did not possess, such as scientific capital associated with the development of technological foci (instrumentation); economic capital, due in no small part to its ability to attract private practice and social capital, as the membership of the respective areas flourished and a sense of collective identity developed. In addition, Ophthalmology and otorhinolaryngology had a better start genetically speaking than obstetrics and gynaecology, and certainly better than orthopaedics. Both ophthalmology and otorhinolaryngology were less tightly attached to general surgery, and as a result they were not seen as a threat to the territory of the general surgeons at a time when orthopaedics was.

In consequence it was able to accumulate or garner specific types of capital more readily, so by 1943 they were both large areas with technological foci, and this (together with other variables) enabled them to differentiate. Time may also be a healer in certain respects, as areas may accumulate capital in the form of resources. For example, ophthalmology and otorhinolaryngology did not immediately challenge the status quo, indeed practising ophthalmologists and otorhinolaryngologists continued to practice as general surgeons with a special interest in either ophthalmology or otorhinolaryngology (**Stevens, 2003**).

To have attempted separation from general surgery forty years earlier, at the turn of the century, would have been unthinkable. As with many things, timing was of the essence. As noted in the previous chapter, both ophthalmology and otorhinolaryngology developed around specific instrumentation, namely the ophthalmoscope and the laryngoscope, and at the turn of the century they were fairly well developed areas with special hospitals devoted to their fields, and diplomas organised jointly by the Royal College of Surgeons and the Royal College of Physicians.²⁸

The interplay of these factors enabled ophthalmology and otorhinolaryngology to demand their own examinations within the College structure. Admittedly, it is difficult to gauge the weight of separate factors, since they are very much interlinked. The size and influence of both of these areas altered the power dynamics within the College, and, given the external factors operating at the same time, aided the political outcome.

The College accepted the role 'of spokesman for consultants in the National Health Service negotiations,' the implication being 'that they were equally representative of all groups of specialist practice. In fact, they were not' (**Stevens, 2003:110**). After general surgery, ophthalmology and otorhinolaryngology were the largest groupings at that time, and jointly they outnumbered the general surgery contingent.²⁹

In an effort to placate these groupings the College held a special meeting in May 1944, the aim being to discuss whether to appoint additional members to council. Such a measure would provide representation for these groups, and hence a 'broader base for national negotiation' (**ibid.:112**). However, this was not enough to satisfy the growing demands of these aspirant groups for a separate training structure. Its inadequacy in their eyes is reflected in a piece written in the 1946 edition of the *Lancet* which questioned the value of the FRCS examination, with its emphasis on the generality of surgery, for eye surgeons and E.N.T. surgeons:

'Of what value is detailed knowledge of the anatomy of the limbs or of herniae to an E.N.T. or eye surgeon? Why ask an E.N.T. surgeon about spondylolisthesis or the surgery of renal calculi? No E.N.T. specialist is fit to operate on a hernia or treat a fractured limb or give an

²⁸ The new diplomas which required a modest training period (typically six months), were of particular use to GPs with an interest in eye diseases, or ear nose and throat conditions, but were not of the same standing as the FRCS which was the prerequisite for consultant staff (**Stevens, 2003**).

²⁹ The number of General Surgical Fellows in the College 1938-39 numbered 375; ophthalmology, 244; otorhinolaryngology, 156 (**ibid.:111**).

opinion on an abdomen 5 years after passing the F.R.C.S., so why teach him in the first place?’ (p.978)

The F.R.C.S. in Ophthalmology and Otorhinolaryngology were instituted accordingly in 1947 **(Stevens, 2003)**.

4.7 Orthopaedics: Laying the Foundations for the Mature Speciality

Orthopaedics did not differentiate from general surgery until the 1980's. However, as with all differentiated areas, the mature speciality was not something which developed and came about overnight. Given the various obstacles put in its way by the dominant elite of the surgical establishment, it is nothing short of a miracle that it still existed on the eve of the new National Health Service. Given this, any discussion of specialist differentiation in orthopaedics worth its salt should be a tale in two halves: from the 1800's to 1948, and from 1948 to 1980.

During the 1800's, orthopaedics' relative position within the structure of the surgical field and its initial capital were low, especially in comparison with areas such as ophthalmology and otorhinolaryngology. Inasmuch as it was viewed with disdain by the surgical establishment, it held a similar position to obstetrics and gynaecology (as noted in section 4.5), but unlike obstetrics and gynaecology was seen as a direct threat to the establishment. For orthopaedic surgery was more closely related to general surgery, in that it was especially concerned with the skeletal system and related structures, thus crossing through the organ geography inhabited by the old-guard general surgeons. In this respect, it could be said that orthopaedics was indirectly confronting order and power given their knowledge and anatomical remit. However, in practice orthopaedics did not possess any exchangeable assets to trade on the capital stock exchange, and their knowledge was subordinated to the surgical authority and power of the generalists, and marginalised. Unlike ophthalmology and otorhinolaryngology which had the ophthalmoscope and the laryngoscope, orthopaedics lacked scientific capital in the form of scientific and or technological focus and given that its clinical focus was on childhood diseases and deformities which tended to affect the poor and industrial working class, it was highly unlikely that there would be any opportunity for private practice among the middle and upper echelons of society. One of the only conditions applicable to this section of society was Scoliosis (curvature of the spine) and this was the surgical territory of the generalists in the voluntary hospitals **(Cooter, 1993)**.

This lack of scope for private practice was obviously going to be unattractive to the younger generation of surgeons. Thus, in addition to scientific capital, orthopaedics did not possess symbolic capital ('attached to a proper name and capable, just like a famous brand name in business, of guaranteeing a lasting relationship with a captive clientele' (**Bourdieu, 1988:58**)), given its association with the poor working class, and economic capital ('which is immediately and directly convertible into money' (**Bourdieu, 1986:16**)), in view of the lack of opportunities for private practice.

The fact that orthopaedics was seen as a threat by the establishment and associated with crippled children and the industrial working class resulted in its marginalisation from the established body of British hospital medicine (**Cooter, 1993**). In this respect it resembled obstetrics and gynaecology, which was marginalised from the prestigious teaching hospitals, especially in London. By contrast, it was unlike ophthalmology and otorhinolaryngology, which became part of the prestigious voluntary hospital system in the second half of the nineteenth-century precisely because they were not seen as a threat to the establishment and were not associated with poorer social groups.

Orthopaedics's marginalisation obviously meant that it was absent from the medical curricula, which further resulted in a lack of understanding in relation to the clinical work of the orthopaedists. This would have been especially so amongst medical students and trainee surgeons. Indeed, its low status and general dreary image was reflected in the membership of the BOS (British Orthopaedic Society): the BOS was formed in 1894; it rarely had more than 33 members at its meetings at any one time, and only had a short life (four years) Given the precarious position of orthopaedics within the surgical field at that time it was prone to the effects of the plotting and manoeuvring of the elite general surgeons as it tried to secure a place in the highly esteemed teaching hospitals (**Cooter, 1993**). Indeed, given the anatomical remit of orthopaedics, and its lowly social image, it was in the interests of the elite to control access and thereby circumvent any attempt by orthopaedics to secure a place in the prestigious teaching hospitals. Failure to do so, could have potentially jeopardised the 'conservation and accumulation of the capital' (**Bourdieu, 1986:23**), in this case social capital, which was the foundation for surgical authority and power within the field.

The First World War provides a clear example of this. According to Joel Goldthwait³⁰, writing in the *Journal of Bone and Joint Surgery* 1933, orthopaedics came into its own during the war because:

'The type of injury to be treated had rarely ever been seen by the orthopaedist any more than the general surgeon, but the basic principle of training made the orthopaedic surgeon see from the very beginning an end result, and the special case simply demanded the adaptation of well understood principles to the War casualty.' (p.282)

Indeed, Jones was able to implement this fundamental principle towards the end of 1914, when concerns were being voiced by the War Office about the wastage of manpower. Jones's strategy of experimenting with special hospitals for restorative function (**Jones, 1918**) proved so successful that he 'was given permission to increase the number of beds in Liverpool and start similar establishments in other centres' (**Cooter, 1993:114**).

The ability of orthopaedics to rise to the challenges of war helped to transform its standing. According to Cooter, 'no longer was the specialism the butt of medical jokes – a pretentiously labelled medical backwater for the treatment of crippled children' (**ibid.:106**). Indeed, military orthopaedics clinical territory was extensive, encompassing the treatment of 'gross deformities, the reconstruction of joints, grafting operations on bones, muscles, and tendons, and the repair of injured nerves' (**Jones, 1918:41**).

However, the territorial advances made by orthopaedics during the war were short lived. Although orthopaedics was now recognised its professional territory was barely larger than before the war. Many of the orthopaedic techniques developed during the war were adopted by the general surgeons, especially young men, who were on the whole receptive to the new surgical techniques and knowledge and were keen to perform the most up-to-date treatment (**Cooter, 1993**). But few of these young surgeons had any interest in specialising in orthopaedics. For consultant trainees in hospitals, too, orthopaedics still remained unattractive for, in addition to low remuneration in its practice; it still lacked the appeal of the abdomen (**Jones, 1918**).

³⁰ 'Joel Goldthwait organised America's first clinic for adult cripples (at the outpatient department of Boston's Carney Hospital)' (**Cooter, 1993:39**).

Orthopaedists had accumulated symbolic capital and scientific capital, proving that they were competent and adept at handling complex military injuries, including fractures. Yet they were not able to utilise this, given that they were marginalised and too few to constitute an effective lobby in surgico-politics. For example, the newly formed BOA (British Orthopaedic Association) of 1918 only had twenty-four members, and by 1919 this had only risen to twenty-six (Cooter, 1993). Consequently, orthopaedists were more or less directly constrained by their immediate political context.

Thus, at the end of the war, orthopaedics was no closer to establishing a niche in the prestigious teaching hospitals. Indeed, Le Vay (1990) notes that although there were cases of orthopaedic surgeons being appointed to the teaching hospitals after World War I 'there were often ferocious running battles for beds and services with the general surgeons' (p.142).

In addition, Jones's hope that undergraduate orthopaedic programmes would be established in the London teaching hospitals also proved wishful thinking. Jones was also hopeful that the military orthopaedic centres established during the war years would be equipped for the training of postgraduates in orthopaedics. (Cooter, 1993) These hopes, 'were extinguished however, by 1924 when the Ministry of Pensions (who had taken over control of the orthopaedic centres) relinquished its lease' (ibid.:131) on many of them. The result being that most of the centres were restored to their original function of poor law infirmaries.

The case of industrial injuries also provides another clear example of orthopaedics's precarious position, and its dependence on positive contextual circumstances. Cooter notes that:

'In view of the obstacles thrown in the path of orthopaedic expansion in the voluntary hospitals at the end of the war, one might have expected orthopaedics to seize these opportunities in industry. After all, this was an open domain where new claims for expertise could be staked without fear of vested medical interests. However, despite the encouraging rhetoric and the apparent opportunities Jones and his colleagues were unable to transfer military orthopaedics to industry social, political and above all economic circumstances determined the limits of the possible.' (ibid.:138)

Industrial medicine did not have a very glamorous image, indeed the medical care of workers with disabilities was not overly attractive to the vast majority of wealthy benefactors and local

authorities. Moreover, workers and industrialists viewed it with indifference. Workmen's Compensation acts in operation at the time acted as a disincentive to undergo medical treatment, given that treatment would have a direct affect on compensation payments (i.e. they would be reduced or stop altogether). As far as industrialist employers were concerned, lump-sum compensation settlements for disability were preferable given their convenience and cost-effectiveness, as opposed to indeterminate and inestimable 'weekly payments', and potential rehabilitative treatment. Clearly the absence of industrial rehabilitation schemes in Britain before the 1920's can be explained in terms of economic agendas. Such factors impeded the growth of industrial orthopaedics (treatment of industrial related injuries). Additionally, the absence of special centres for the treatment of industrial injuries (fractures) run by orthopaedists resulted in most industrial injuries being treated by GPs and general surgeons in the voluntary hospitals **(Cooter, 1993)**.

However, despite the lack of opportunities in industrial medicine, orthopaedics found itself being steered towards other causes. Clearly as Cooter aptly notes:

'To some extent all professional agendas are set by circumstances outside the immediate control of the professions involved. But some agendas are determined more than others, and this was especially so for orthopaedics in the increasingly cold economic climates of the post-war years.' (ibid.:152)

The central protagonists who set this agenda were prominent professional figures such as George Newman, public health physician, author of a treatise on the impact of social problems and infant mortality (*Infant Mortality: A Social problem*), and last but not least, Chief Medical Officer to the Ministry of Health. Newman was keen to build on and develop the advances made in the treatment of crippled children prior to the war. Newman argued that scientific advances achieved during the war should make it possible to deal with crippled children more effectively **(Cooter, 1993)**.

Thus, particular circumstances ensured that the health of children was elevated to the top of the political programme and as far as Jones and his colleagues were concerned it was professionally advantageous to take advantage of this potential capital. Indeed, Jones and his colleagues developed a national scheme with the intention of killing two birds with one stone, so to speak: on the one hand curing crippled children and on the other integrating 'orthopaedists into traditional centres of medical authority and status' **(ibid.:154)**.

The plan was that the children's orthopaedic hospitals (COH's) were to be separate from the existing voluntary hospitals and, where possible, located in rural areas. With 'Clinical cooperation' and 'teamwork' in mind it was suggested that if the voluntary hospitals

'would institute an orthopaedic section of their outpatient department and appoint one of the surgeons of the COH's to take charge of it. Outpatients coming up could then be referred readily, for opinion or transfer, from general to the orthopaedic side or vice versa.' (BMJ, 11 Oct. 1919, pp.457-60. cited in Cooter, 1993:154)

Despite Jones and Girdlestone's³¹ best efforts to organise a national scheme and integrate orthopaedics into the teaching hospitals, neither was fully achieved. The failure to fully operationalise the plan was partly due to the sheer scale of its ambition. The idea that the vested interests of the generalists (whether in the provinces or London) would be readily put to one side in aid of cooperation, teamwork and a more patient centred approach was naive. Indeed, teaching hospitals were still highly territorial, e.g. they were reluctant to refer cases of poliomyelitis to orthopaedic hospitals, suggesting that there was a disinclination to recognise orthopaedists' assertions in relation to their knowledge and expert skill and support them in their quest for professional growth (Cooter, 1993).

Nonetheless, despite these failures, by 'the 1930's there were some 40 orthopaedic hospitals and orthopaedic clinics in operation in Britain, run either by voluntary agencies or the municipal and county councils, or by combinations of both' (Cripples' Journal., 3 1927, p.178. cited in Cooter, 1993:162), but, needless to say, their experience with crippled children had not moved them any closer to securing that all important position in the teaching hospitals. Indeed, despite the existence of orthopaedic clinics in the teaching hospitals of London, as in the provincial centres, there was no equivalent increase in the orthopaedic bed base or the organisation of service delivery under the control of the orthopaedists (Cooter, 1993).

Thus, orthopaedics still remained, on the periphery of British hospital medicine. The question is: could fractures provide the necessary capital (in Bourdieuan terms) which orthopaedics needed at that time? Fractures, not unlike crippled children, were a major interwar issue. The subject received much attention not only in the press, but also at governmental level. Indeed it

³¹ When Jones and Girdlestone launched the Central Council for the Care of Cripples after World War I, Girdlestone was its honorary secretary (Le Vay, 1990:153).

'became a subject of government inquiry, and in new ways forged links between medicine, industry, trade unions, and local and national government. The BMA, the British Hospitals Association, the TUC, and the London County Council, along with the Ministries of Health, Labour and Pensions were only some of the more visible parties to become actively involved in the issue.' (ibid.:180)

As far as orthopaedists were concerned, it was imperative that they were able to control fractures, because of diminishing openings in the field of crippled children **(Cooter, 1993)**. Indeed, many orthopaedists feared 'that when there will be no cripples, there will be no orthopaedic surgery' **(Adolf Lorenz, 1936: pp335-6. cited in Cooter, 1993:180)**. Thus, the control of fractures had important implications for the very survival of orthopaedics.

One of the principal figures in the movement was Harry Platt. During the war years and beyond, Platt was a young surgeon who, not unlike his seniors and contemporaries, fought the battle for the control of fractures. Le Vay notes that 'his year in Boston (1913), at the instigation of Jones and the invitation of Brackett, then chief of orthopaedic surgery, exposed him to the influence of Lovett, Bradford and Goldthwait' **(Le Vay, 1990:151)**.

On Platt's return from Boston in 1914, he was appointed to an honorary consultant surgical post at Ancoats Hospital. Ancoats Hospital was a large inner-city voluntary hospital, located north of the city of Manchester in a heavily populated industrial district, with a high incidence of fracture cases. And, significantly, the hospital management board had liberal tendencies. In addition, the hospital had the perfect environment for an orthopaedist enthused with the reformist zeal of American surgery and within months of his appointment Platt was working towards his goal (of establishing a fracture clinic) with two other young and ambitious surgeons (Morley and Douglas)³² **(Cooter, 1993)**. Platt and his colleagues devised a scheme whereby all incoming cases (and hospital beds) were divided 'according to surgical specialities. Thus, Platt was to establish therapeutic control over all incoming fracture cases and establish uniformity in their treatment' **(ibid.:182)**.

In 1921 Platt went on to publish the basic principles of the ideal fracture service in the *Lancet*. His principles were utilised by orthopaedists in papers and lectures from the mid 1920's to the 1940's. In addition, Platt's principles also found expression in a report by the King's Fund in 1924. Despite

³² John Morley (later Professor of Surgery at Manchester University) and W. R. Douglas (later a renowned cancer surgeon at Manchester's Christie Hospital) **(Cooter, 1993:182)**

the committees brief, namely *'The Report on the Disposal of Ambulance Cases,'* it was palpable from the report findings that there was an acute requirement for a consistent and co-ordinated approach to accident services, with the recommendation that the overall control of these services should sit under one specialist group (Cooter, 1993).

The Vienna Accident Hospital also featured in an editorial in the *Lancet* in 1926. The idea behind the hospital was the brainchild of an Austrian physician and surgeon, Lorenz Bohler who had an interest in the treatment of fractures during the First World War. The article highlighted the fact that specialised fracture treatment practised at the hospital had 'saved the insurance societies something in the neighbourhood of £18,000' (p.864). Such a figure acted as a stimulus for debate with regard to the whole question of accident services. In particular it focused attention on the appalling fact that in the UK the insurance companies 'contribute nothing to the treatment of their injured clients in hospital.' Indeed, the article argued that 'both equity and self-interest alike should lead the companies to support an accident department in every hospital' (ibid.).

At this time, however, orthopaedists were selective in the use of the Bohler model, for two reasons:

'the Vienna Accident hospital was intended not just for fractures, but for accident cases of all kinds. References to the hospital did not therefore serve the interests of those seeking to expand their professional space on the basis of fracture treatment alone. The other reason why the orthopaedists had to be selective in their use of the Bohler model was that the Vienna Hospital was an institution separate from other hospitals and medical schools. As such it hardly furthered the orthopaedists' ambition of securing a permanent niche within the major teaching hospitals.' (Cooter, 1993:192)

However, accident hospitals were not rejected outright, as Cooter notes:

'Rather it was by putting accident hospitals forward as one option among others that they exploited the wider social and political issues of accident services, and also served their own in hospital fracture clinics. While explaining the difficulties involved in establishing separate accident hospitals, they revealed the economic viability of accident departments, meaning primarily hospital fracture clinics under their control.' (ibid.:193)

In the 1930's the fracture movement cause was accelerated following an investigation and report published by the British Medical Association in 1935 (**Le Vay, 1990**), the outcome of which was the passing of a parliamentary motion in April 1936, which led to the Home Secretary, the Minister of Health and the Secretary of State for Scotland establishing a committee, under the Chairmanship of Sir Malcolm Delevingne (**Cooter, 1993**). Although the Committee's brief was – 'to report on provision for the rehabilitation of persons injured by accidents' (**Delvinge, Final Report, 1939: pp.4, 23-5, 121. cited in Cooter, 1993:197**) it was not all doom and gloom as the Committee in its 1939 Report focused solely on the organisation of fracture services:

'Like the BMA's Report on Fractures, the Delevingne Reports, by reiterating the orthopaedists' social, therapeutic and economic rationales for efficient fracture treatment, legitimated the professional self-interests behind them. Not only did the Delevingne Committee justify the control of fractures in the hands of fracture experts, but by complying with the notion that voluntary hospitals were the most appropriate place for fracture clinics, the committee also conferred the basis for the status and authority that the orthopaedists had been seeking. Furthermore, it provided a means of reproducing that authority by recommending proper undergraduate training in fracture treatment. Finally, by recommending departure from ordinary practice in respect of remuneration in the form of honoraria of between £300 and £500 per annum to the surgeons in charge of the fracture clinic, the Committee took the step towards accepting a salaried service for orthopaedists within the voluntary sector.' (**Cooter, 1993:197**)

However, if measured in terms of the number of dedicated fracture clinics founded prior to World War II, despite the recommendations of the report the orthopaedists' campaign for fracture services was only partially successful.³³ Indeed, a piecemeal approach was the order of the day, with financial restrictions, ongoing differences between hospitals and the delaying tactics employed by the Ministry of Health. Despite this, the orthopaedists were successful in recruiting working class trade union members in support of rehabilitation schemes. Indeed, by the 1930's economic growth and reduced unemployment figures ensured that the rehabilitation of workers to full fitness gained credence in social and economic thinking (**Cooter, 1993**). Since one of the most important industries to the national economy was the coal industry, orthopaedic interests also found favour with labour leaders. The Miners' Welfare Commission was the perfect conduit

³³ By this date four out of twelve London teaching hospitals had fully-developed fracture clinics, and there were only 74 fracture clinics in the country as a whole, 17 of which were in industrial Lancashire. Among the latter was the clinic established by Platt at the Manchester Royal Infirmary in 1936, four years after his appointment as the infirmary's first honorary Orthopaedic consultant (**Cooter, 1993:196**).

‘through which such support could be fed without causing political and economic commotion’³⁴ This enabled the Ministry of Mines and Supplies (1942) ‘to stimulate the Commission into building rehabilitation centres throughout the coalfields’ (**ibid.:215-216**).

Although it is was not until the late 1950s’ (**Waugh, 1990**) that general surgeons began to relinquish the treatment of fractures to their orthopaedic peers (**Le Vay, 1990**), the orthopaedists were able to accumulate additional types of capital on three counts: firstly, the Delevingne Report was pivotal, for it justified the control of fractures in the hands of experts, namely the orthopaedists; secondly, in accepting the view that the most suitable setting for fracture clinics, is in the voluntary hospitals, supported the orthopaedists in their cause to secure a ‘permanent’ place in the teaching hospitals; thirdly and by no means least, the committee’s recommendation that undergraduates should be trained in the treatment of fractures (**Cooter, 1993**)

The types of capital accumulated were invaluable. The justification for control of a condition based on expertise enabled the accumulation of scientific capital around knowledge and technique; symbolic capital in relation to the expertise of orthopaedists in the treatment of fractures; specific cultural capital, as mastery of the techniques associated with the treatment of fractures would require long-periods of training by experts in the technique. In addition, the recommendation that the knowledge and technique around the treatment of fractures should be an integral part on the medical school curriculum, enabled the accumulation of the capital of surgical authority; a form of social capital which supports the control of the examining and teaching systems (**Bourdieu, 1981**).

Thus, although the orthopaedists did not succeed in taking over the treatment of fractures until the late 1950’s, the necessary foundations were created during the 1920’s and 1930’s and to a certain extent during the Great War. The accumulated capital was then able to be ‘transferred’ when the context allowed. The foundation of the National Health Service in 1948 provided the right contextual conditions, and this will be treated in detail in Chapter Five.

The fact that the context was not right for orthopaedists to take over the control of fractures from the general surgeons, does not mean, however, that some of this accumulated capital was useless

³⁴ Orthopaedic interests had already been generously served by some of the regional Miners’ Welfare Funds. For example, in 1933, Sheffield Royal Infirmary received £25 000 from the fund in order to build a fracture unit within the Miners’ Welfare ward; and Platt’s fracture clinic at the Manchester Royal Infirmary, when it was incorporated into a new Orthopaedic and physiotherapy building in 1938, received £13 000 from the Lancashire and Cheshire Miners’ Welfare Committee (**ibid.:215**).

in the late 1930's and early 1940's. On the contrary it was effectively operationalised in their next quest, to which the focus will now turn.

As in the 1920's, orthopaedics was once again (in the late 1930's) faced with having to make decisions regarding its future survival. Leading orthopaedists leaders such as Rowley Bristow (writing in the *Lancet* (1937) pointed out that 'it was likely, that eventually all fracture clinics will be under the care of the orthopaedic surgeon of the hospital' (p.1063).

However, Bristow was keen that orthopaedics should not rest on its laurels; indeed, Bristow opined that in the interests of professional preservation

'the vision of the future generation of orthopaedists must be to the attainment of a second objective – the furtherance of investigation and active research into the basic problems which form the background of orthopaedics – problems in the applied anatomy, physiology, and pathology of the locomotor system. This can only come about when orthopaedic surgery is accorded its rightful place in the medical schools and universities.' (ibid.)

Conversely, as far as Harry Platt, one of the leading lights in the fracture movement, was concerned, securing a place on the medical curriculum was more of a necessity in order to ensure the survival of orthopaedics.

'I do not think that orthopaedic surgeons will fail to make contributions both massive and audacious to technological advances, but I foresee the danger that our contributions to general ideas may be negligible, unless we can ensure recruitment to our speciality.' (Platt, 1963, pp.32-41, at p.34. cited in Cooter, 1993:240)

As Cooter notes, from Platt's perspective

'the place of the specialism in the structure of medical education was more fundamental than the pursuit of research and development, for upon it appeared to depend not only the

status and security of orthopaedics within medicine's academic echelons, but once again its very survival.'³⁵ (p.240)

Platt was also worried by the signs of a possible decline in the specialism. Despite the fact that the membership of the BOA had risen

'from 24 in 1918 to almost 300 by 1940, since 1934 only nine members had risen from the ranks of 'Associate' to 'Active', with the latter usually indicating full commitment as an orthopaedic specialist to hospital consultancy and private practice.' (ibid.)

Clearly the lack of expansion could be attributable to concerns regarding the lack openings in the field for highly profitable private work, and its association with lowly outpatient departments (Cooter, 1993). Platt was also concerned about the way in which orthopaedics was perceived. In particular he was scathing of the postgraduate course which Jones and his colleagues had established in Liverpool in 1924. Platt argued that such a degree only served to reinforce a 'regard of orthopaedics as a narrow specialism suited only for postgraduate study' (ibid.:242) Such a view, it was feared, would not aid recruitment.

In 1942 Platt's drafted a Memorandum on Education.³⁶ Platt's memorandum called for a formalized national educational programme akin to the Manchester programme which he had been developing since the mid-1930's. In this, 'orthopaedics formed a systematic and examinable part of undergraduate teaching and clinical work in general surgery' (ibid.:244), as he noted in his memorandum:

'During the first two clinical years all students should spend part of their surgical dressership on the orthopaedic unit and should attend a comprehensive course of systematic lectures covering both 'trauma' and 'cold orthopaedics'. In the 6th, the final clinical year, teaching should be available in the general orthopaedic outpatient clinics and major fracture clinics and in revision classes and seminars, where small groups can be

³⁵ Bucher and Strauss (1961) note that the area in which professionals come most frequently into conflicts of interest is in gaining a proper foothold in institutions; a segment must be represented in the training centres or undergraduate curriculum in order to develop and survive (p.331). Halpern also stresses the critical importance for an aspiring specialist group of achieving an autonomous department in a medical school (1988:57).

³⁶ The BOA requested the Memorandum given the impending hearings of the Goodenough Committee on Medical Education (1942) (Cooter, 2003).

brought into contact with the orthopaedic clinical tutors.’ (Platt, 1950, pp.1-4. cited in Cooter, 1993:244)

Fortuitous circumstances had played into the orthopaedists hands; given that Platt had professional connections with Goodenough (Chairman of the Committee) and Sir John Stopford (Vice Chairman of the Committee).³⁷ The Report of the Interdepartmental Committee on Medical Schools (1944) ‘left no doubt that a specialism without a scientific profile was doomed to the proverbial dustbin of history’. Its section on orthopaedics endorsed Platt’s views as well as adding that ‘possibly no other type of surgical condition offers so many opportunities for inculcating the important principle of considering every aspect of surgical illness.’ **(Report of the Interdepartmental Committee on Medical Schools, 1944, ch.3. cited in Cooter, 1993:238 & 246)**

The Goodenough Report had thus given Platt capital towards realizing his ambition, namely, to ensure that orthopaedic surgery became a central component in the medical curriculum. Thus, although the quest for control of the treatment of fractures was not at that time a resounding success, the accumulated capital (namely the findings of the Delevingne Committee, not only in terms of its recommendation that undergraduates should be properly trained in fracture treatment, but the general tone of the report which stressed the importance of orthopaedics as an area) served to make Platt’s words even more poignant given the context and remit of the Goodenough Report itself. The Goodenough Report’s emphasis on the importance of orthopaedics in terms of the benefits of its general anatomical geography in terms of its use and applicability to other surgical illnesses was also very significant. This will be focused on in Chapter Five.

Thus, in light of the central tenet of the Goodenough Report’s findings, namely the necessity for all areas to develop a scientific profile or risk extinction, the orthopaedists were largely compelled to redefine the nature of their speciality as one based on the authority of science. Indeed,

‘scientific and technological research became a strategy vital to professional survival. For it was a means of securing a footing on the top rung within the university medical schools. To argue the case for research and development whether basic, clinical or technological was simultaneously to argue the need for an appropriate place to conduct that work, and increasingly that place would be the university medical school.’ (Cooter, 1993:237)

³⁷ Platt had been a charter member of the Advisory Committee of the Nuffield Provincial Hospitals’ Trust, of which Goodenough was the Chairman. He was also a close colleague of Sir John Stopford the vice-chancellor of Manchester University, and formally Dean of Medicine.

Clearly this understanding vindicated Bristow's (1937) stance on the importance of orthopaedic research, a stance which Platt disagreed with at the time.

4.8 Summary

The period 1800 to 1947 is a very significant epoch in the history of the surgical profession of the United Kingdom; a period in which 'new specialised scientific knowledge', with its emphasis on technical and scientific expertise and clearly defined boundaries of knowledge, confronted the 'old conservative knowledge', with its emphasis on the careful observation of patients symptoms rather than scientific experimentation, and an integrative and broad approach to medicine and surgery. It was also a period of transition, as old health care structures were placed in a precarious position by the proposed introduction of a National Health Service.

The chapter has attempted to demonstrate that, from a sociological standpoint, intra-professional specialist differentiation in surgery cannot be understood in isolation from the contextual junctures in which the areas in question, namely obstetrics and gynaecology, ophthalmology and otorhinolaryngology were located. Correspondingly, while they constitute significant resources, the advent of scientific knowledge and increasing technical sophistication during the period cannot account for the success of these groups if analysed in isolation from characteristics specific to the groups and variables which were operationalised at that time.

Intra-professional specialist differentiation is a journey and not just an end-point. The successful differentiation of orthopaedics from general surgery and the creation of the mature speciality in the 1980's was due in no small part to the vital foundation blocks laid during its turbulent and precarious development from 1800 to 1947. However, the specific forms of capital accumulated during this period was not part of a conscious strategy in terms of pursuing a project towards professional differentiation; rather it was a strategy which was utilised for the very survival of orthopaedics as an area during this contextual juncture. It is during the second epoch in surgery that a conscious strategy was pursued on the road to maturity.

CHAPTER FIVE

***Surgico-Power, the NHS, the State, and
Specialist Differentiation 1948-1990***

5.1 Introduction and Aims

The period 1948 to 1990 is the second surgical epoch. It is a period characterised by the dismantling of old health care structures and the establishment of new ones in the form of a National Health Service (5th July 1948). With new healthcare structures came new relationships, as the profession and state entered into a partnership of mutual dependence: the profession became dependent on the state for incomes and resources, and the state became dependent on the profession for the planning and the smooth running of the service.

In light of this, The Royal College of Surgeons adopted a new role as a policy making body within the National Health Service. The profession accepted that specialisation was here to stay and the new health service had to be planned around this however; despite the plethora of groups within the political infrastructure of the Royal College 'generalism' was still favoured over 'specialism' during the first decade of the health service.

Between 1960 and 1983 the strong 'generalist' tradition was challenged by forces inside and outside of the walls of the great College. By 1988 orthopaedics, neurosurgery, cardiothoracic surgery, urological surgery, and plastic Surgery were fully differentiated and distinct self-regulating specialities in their own right. The tables had now firmly turned, and the emphasis was now firmly on the adequate training of the 'Specialist' and not on the 'Generalist.'

The chapter will begin by focusing on the relationship between the state and the medical profession in the running of the new National Health Service. It will argue that the relationship benefited the profession more than the state. For example, it will clearly show that the profession was placed in a powerful position in terms of influence and control of resources at every level of the decision making machinery (namely the macro-governmental, meso-regional, and micro-hospital levels); and that this provided a context in which specific types of capital could be accumulated by groups. For example, groups would have the potential to access the necessary resources to support the development of new esoteric techniques, which could be used as potential lobbying power if and when they decided to pursue the professional project. The development of Orthopaedic surgery provides a pivotal example of this.

The maturation process of Orthopaedics in the years following the establishment of the health service will clearly show that, unlike the pre-NHS private market, the National Health Service

provided a fertile ground for advancement. Seminal figures such as Sir John Charnley were able to develop sophisticated techniques in the treatment of fractures adding further 'capital' to the case for the complete control of fractures by Orthopaedic surgeons – and not general surgeons, as the case had been since the cessation of the First World War in 1918. In addition, the development of sophisticated surgery for the replacement of arthritic joints by figures such as Charnley enabled orthopaedics to carve out a distinct area of knowledge and technical skill which required special training.

It was during the 1960's that orthopaedics actively pursued the professional project, utilising specific types of capital accumulated throughout its development, particularly the sophisticated technical foci developed and nurtured in a profession driven health care environment conducive to the advancement of knowledge.

Not unlike the discussion in the preceding chapter, the surgico-political machinations between 1960 and 1988 analysed in this chapter will show that, although knowledge and technical sophistication may carve out clear and distinct demarcation lines between different types of knowledge and skill and the justification for self-regulation, this does not determine ultimately whether or not a group will be successful in its quest for separation.

5.2 The Structure of the Surgical Field

On the eve of the establishment of the new National Health Service in 1948, the structure of the surgical field was differed markedly from that back in 1848, both in terms of its composition, and also in terms of its political dynamics. The new structure clearly reflected a new contextual juncture; this juncture being the second surgical epoch.

By 1947 three areas had successfully differentiated from surgery: obstetrics and gynaecology, ophthalmology and otorhinolaryngology. Obstetrics and gynaecology no longer resided within the walls of the great Royal College, given the fact that they now had their own specialist College; by contrast, though they had the status of independent specialities, ophthalmology and otorhinolaryngology remained within the walls of the Royal College, with full representation on the College Council and their own fellowship examinations.

Other areas of specialist expertise with non-generalist orientations were also growing in strength, namely neurosurgery, urology, thoracic and cardiac surgery and plastic surgery (**Stevens, 2003**); last but certainly not least there was orthopaedic surgery, with its vast therapeutic territory and generalist orientation.

Although these areas continued to be attached to general surgery, their growing strength changed the political infrastructure of the College and consequently its internal political dynamics: the position of the abdominal surgeons within general surgery and the College was now openly challenged.

The abdominal surgeons had been the dominant force in surgical politics within the College since the 1880's (**Cooter, 1993**), when abdominal surgery had really taken off. Abdominal surgeons were seen as the natural leaders in surgery. Their anatomical remit was generalist in orientation, contributing to knowledge and technique and the advancement of the craft of surgery (**JBJS, 1946**) Indeed the appeal of abdominal surgery (**Jones, 1918**) attracted many young surgeons. However, this power base began to erode, not only owing to the growing strength of other areas within the College, but also as a result of state intervention, namely the establishment of the National Health Service.

The establishment of the National Health Service effectively dismantled the structures which supported and buttressed the power of the dominant group: the prestigious voluntary hospitals were nationalised, and consultants became salaried employees of the state. Their livelihoods no longer depended solely on a private market, which was at best, unpredictable and was effectively controlled by the elite general surgeons residing in the voluntary hospitals. (**Cooter, 1993**) Competition for patients was going to be a thing of the past. Societal values which had reinforced the hierarchical system of hospital medicine had also changed: by the 1940's specialisation was no longer thought to transgress medical etiquette. Indeed, society had witnessed huge advances in scientific medicine and surgery during the two World Wars and had largely accepted the idea of specialisation (**Bynum, 1994**).

Thus although 'abdominal surgeons sought to cling to their power and authority' (**Cooter, 1993:243**), it proved increasingly difficult for them to do so. The political infrastructure, far more complex than it had been thirty years earlier, could no longer be reduced to a simple common denominator in Bourdieuan terms, between a powerful group imbued with specific forms of capital and a new group(s) with relatively little capital or between the dominant surgical elite and aspiring

specialists from the new groups, that were developing. In its inclusion of more than one group, the political infrastructure of the Royal College of Surgeons was beginning to take on some of the characteristics of the American surgical infrastructure. The authority which regulated specialisation in the United States was the Advisory Board for Medical Specialities. This 'specified standards for the approval of new boards in relation to their organisation, and the general and professional qualifications to be expected of the candidates'. It had the character of an 'umbrella organisation, which included representatives of each specialty board together with representatives from certain other bodies' (Stevens, 1998:245).

Whether each speciality board had the same number of representatives on the Advisory Board is unclear, but Stevens does note that 'acceptance or rejection of new speciality boards was based on the opinion of interested groups' (ibid.:331); 'the new boards were successful on the same grounds as the old, because of their ability to manoeuvre successfully in relation to other speciality groups' (ibid.:327).

Given this sort of pluralistic structure, in which power does not rest with any one particular group, alliances will be formed between groups resulting in a fluid, not static, political dynamic. The ability to form alliances may be determined by the collective social capital possessed by a group(s), that is to say the 'multiplier effect'. Bourdieu describes the multiplier effect as the combined capital of all members of the group and includes 'material profits, such as all types of services accruing from useful relationships, and symbolic profits' (1986:22), such as those resulting from membership of a group with power and status. The resulting benefits from the multiplier effect is not restricted to the group, only, as inter-group relationships and alliances are likely to reap benefits for all groups concerned. Although Bourdieu does not explicitly state this in this particular work (1986), his other works, most notably his work on the French university field, describes the interdependency between groups, for example the interdependency between the dominant groups (medicine and law) in the university hierarchy, and the state.

Although specialist differentiation in Britain had not nearly evolved as far as in the United States, given the changes to the political infrastructure the British political dynamic post 1945 began to resemble the American one, becoming more fluid.

The orthopaedists clearly felt that, in the wake of the erosion of the power base of abdominal surgery, there was in some senses a power vacuum to be filled. This view, though perhaps inevitable during a transition period, when groups jockey for power, was at best simplistic.

The orthopaedists hoped that, given abdominal surgery's precarious position, and their own anatomical remit and generalist orientation, 'authority and leadership in surgery would naturally pass to them' (Cooter, 1993:243). In this situation it is obvious why orthopaedics now more than ever wanted to remain first and foremost part of general surgery, 'advancing the general craftsmanship of surgery', and 'contributing to general ideas' (JBJS, 1946:194). Indeed, the importance of this is underlined by an anonymous source writing in a later volume of the *Journal of Bone and Joint Surgery*. The article notes the appointment of a prominent orthopaedic surgeon to a London Chair of Surgery, not specifically orthopaedic surgery. A feature of the appointment to which the article draws attention is that it enshrines a 'recognition that the surgery of the locomotor system is based no less firmly upon the background of general surgery than the surgery of the viscera' (JBJS, 1948:206).

However, despite orthopaedists hope that leadership in the affairs of surgery would pass to them the realities of the situation were different: abdominal surgeons had not lost power as such, rather the potential for any one group to hold power had been curtailed; power would be held by a plurality of groups. Orthopaedics at this time was still smaller than ophthalmology and otorhinolaryngology: in 1949 there were 227 orthopaedic specialists, in comparison with 295 ophthalmologists, and 276 otorhinolaryngologists. Since orthopaedics was still part of general surgery it numbered 227, out of a total of 1,126 surgeons which included abdominal surgery, urology, neurosurgery, plastic and thoracic surgery. (Stevens, 2003:111)

Thus it would be a little premature to adopt Bucher and Strauss' theory of social movements within a profession, and apply it to the case of orthopaedics:

'Pockets of resistance and embattled minorities may turn out to be the heirs of former generations, digging in along new battle lines. They may spearhead new movements which sweep into power.' (1961:333)

Nonetheless, by 1949 orthopaedics was on the road towards acquiring institutional prestige, and would eventually acquire power in its own right, even though this scenario was not on the cards at that time.

5.3 Fragmentation Ceases

The fragmentation of surgery had thus ceased at this point in time (post 1947). Indeed, given the political infrastructure in the Royal College at this time, further fragmentation would have been political suicide.

The new political context ushered in a new role, and with it new responsibilities for the Royal College of Surgeons: this, and the Royal College of Physicians, emerged as 'policy-making bodies under the new National Health Service' (**Stevens, 2003:106**). It was therefore politically astute for orthopaedics, neurosurgery, urology, thoracic and plastic surgery to remain within the walls of the great College, where staffing levels and the organisation of the service would be planned. Operating from within the walls of the College they would have a central role in policy formation and obviously have the ear of the government of the day. Operating from outside the College, this would have been harder to achieve.

On the whole, generalism was still favoured over specialism; the Goodenough Report (1944) expressed a strong conviction that 'consultant practice should be based on the general surgeon with special interests' (**ibid.:116**) rather than on individual specialities. This view also underpinned the consultant appointment machinery in operation at the beginning of the NHS,

'Consultant status was defined by the review committees set up for that purpose at the beginning of the NHS. Because of the staffing structure of the British voluntary hospitals, recognition of the consultant through staff appointment was an accepted concept. The replacement of the community as voluntary contributor and customer by the community as taxpayer and consumer, made little difference to this basic philosophy. The consultant still had to compete for an appointment by a special hospital board, and the boards, although agents of the Minister of Health were still composed of eminent members of the local community and were likely to favour a man with a general as opposed to a specialised training record.' (**ibid.:186**)

Given that these were the realities of the context of the time, the specialist areas were contented to work hard within the walls of the College, furthering their areas but under the broad umbrella of general surgery. Indeed there were no regrets as far as orthopaedics was concerned when Sir Harry Platt was elected to the Presidency of the Royal College of Surgeons in 1954 (**Le Vay,**

1990), a step of momentous significance not only for orthopaedics, but also for specialisation. This was the first time that a specialist area of general surgery had been represented in the highest seat.

However, this state of affairs would not last forever. The state of equilibrium was altered when fragmentation reared its ugly head once again, this time in the 1980's. Orthopaedics, neurological surgery, cardiothoracic surgery, plastic surgery and urology all differentiated from general surgery when specialist examinations in these areas were instituted by the Royal College of Surgeons.

Given the above events, there is one pivotal question which needs to be asked, namely: to what extent did the context of the National Health Service aid these developments? After all, at the inception of the NHS all of these areas were quite happy to remain under the umbrella of general surgery.

5.4 The Relationship Between the Medical Profession and the State

The foundation of the National Health Service was the product of changing social demands, as well as 'an attempt to solve the major organisational problems caused by the rapid expansion of medicine and medical specialisation in the 1930's and early 1940's' (**Stevens, 2003:353**).

The intervention of the state in creating a National Health Service, a central element in Britain's welfare state, with responsibility for medical services, did not in any way mean that professional authority or power would be weakened. Indeed, the reverse was true. Discussions of medical power frequently employ the concept of professional autonomy to refer 'to the legitimated control that an occupation exercises over the organisation and terms of its work.' (**Elston, 1991:61**) Elston goes on to note that Professional autonomy can be further broken down into three main categories:

'economic autonomy, the right of doctors to determine their remuneration; political autonomy, the right of doctors to make policy decisions as the legitimate experts on health matters; and clinical or technical autonomy, the right of the profession to set its own

standards and control clinical performance, exercised, for example, through clinical freedom at the bedside.’ (ibid.:61-62)

Given the ambit of the government’s role within the proposed health service, it was dependent on the cooperation, expert advice, and the determination of the medical profession to make the service work **(Stevens, 2003)**. Thus, medicine was to retain its professional autonomy. As a gesture of ‘goodwill’, the legislation enshrined ‘the right to private practice in hospital pay beds’ **(Klein, 1995:19)**, and also provided consultants with a new system of financial awards for merit or distinction. As stipulated by Aneurin Bevan, the profession would enjoy ‘direct participation in the planning and running of the service.’ Doctors would serve on the new health authorities, ‘something which the profession had fought for during the planning stage of the health service; regional authorities were also given executive status, instead of being merely advisory bodies’ **(ibid)**. At the level of the hospital, doctors were given complete autonomy to do what they thought right for their individual patients, and it was this drive at the level of the hospital that would be essential in terms of ‘managing the tensions between the demand for health care and the available supply’ **(Salter, 2004:7)**.

Thus, a symbiotic relationship was established between the state and the profession. In the words of Klein **(1990:702)** ‘the politics of the double bed’ that underlay the foundation of the NHS was born, creating

‘a situation of mutual dependency. On the one hand the state became a monopoly employer: effectively members of the medical profession became dependent on it not only for their own incomes but also for the resources at their command. On the other hand the state became dependent on the medical profession to run the NHS and to cope with the problems of rationing scarce resources in patient care.’ (ibid.:700)

Salter builds on Klein when he describes this political relationship as ‘a triangle of intersecting forces between medicine the state and civil society’ **(Salter, 2004:1)**. He notes that:

‘The forces in operation within the triangle follow a certain logic: (1) As members of a welfare state, citizens receive their health care rights from the state delivered to an appropriate standard by medicine. (2) The welfare duty of the state is thus fulfilled, it gains the respect of its citizens whilst relying on the medical profession to manage the inevitable

tensions between the demand for health care and the available supply; (3) By fulfilling its obligation to both, the profession receives the trust of the citizenry, the privilege of self-regulation from the state, and a consequent set of social, economic and political advantages.’ (ibid.:7)

The mutual dependency described by Klein and Salter, takes the interdependency between the surgical profession and the state to a different level. During the first surgical epoch the relationship between the ruling elite/state and the surgical field was based on social class, and the social capital benefits derived by the profession through membership of that set/group. By contrast, the second surgical epoch takes the relationship to a different level of interdependency, based on the exchange of specific capital: professional expertise (symbolic capital) and economic and political capital (incomes, resources, and influence). Thus, the state accumulated symbolic capital, based on its relationship with the medical experts and in return, the medical profession accumulated economic and political capital, as their incomes were guaranteed by the state; they received resources to run the service and were influential at the macro, meso and micro levels of the service.



Fig 5.1 The Triangle of Intersecting Forces (Salter, 2004:7)

Klein and Salter's theories regarding the relationship between the state and the profession (and, in Salter's case, the profession, the state and civil society) will be utilised fully in section 5.5. The following section will focus on the three levels of the decision making machinery within the context of the new National Health Service, namely macro, meso and micro, in order to understand their dynamics and their potential for utilisation of and exchangeability of capital.

5.5.1 Professional Participation in the Health Service: Macro, Meso and Micro Levels

The medical profession always played a crucial part in 'the management process used to deliver health care within the NHS' (**Marnoch, 1986:12**). Indeed, their influence at the national level (government and strategic level the profession was involved) in the organisation and running of the service at operational level. Leaders of the profession

'have also been instrumental in constructing concepts of the population's health needs. Patterns of service delivery and the growth of new sub-specialities and treatments have also been largely shaped by the profession.' (*ibid.*)

Thus, in terms of the decision-making machinery of the NHS, what distinguished the medical profession was the extent to which they permeated every level (**Klein, 1995**).

On a macro-level, within the Ministry of Health, 'doctors were represented at the very top of the Ministry through the Chief Medical Officer' (**Ham, 1999:166**). The Ministry also 'retains a regular panel of "consultant advisers," chosen by the Chief Medical Officer of the Ministry to provide guidance as required on topics concerning particular speciality areas' (**Stevens, 2003:261**). The Central Health Services Council (CHSC), established through 'the 1946 NHS Act, constituted the normal advisory mechanism for the Ministry of Health' (**Rivett, 1998:50**), and the Presidents of all the Royal Colleges as well as other members of the profession were represented on it. Indeed, the medical and surgical Royal Colleges 'maintained powerful positions as sources of expert opinion' (**ibid.:51**).

At the meso-level within the Regional Health Boards (RHBs) 'the medical membership averaged 32 per cent, and in one it reached 42 per cent' (Klein, 1995:51). At the micro-level the profession was well represented on the Hospital Management Committees (HMCs), 'somewhere between 20 and 27 per cent' (ibid.). At the micro-level of the hospital, the medical profession enjoyed an influential position because of consultants' role as the direct providers of services. Indeed, the government guaranteed the clinical freedom of doctors to 'ensure medical participation in the NHS upon its creation in 1948' (Harrison & Schulz, 1989:202). Clinicians were fully responsible for the any decisions made regarding the treatment of their patients, and

'although they were required to act within broad limits of acceptable medical practice and within policy for the use of resources, they were not held accountable to NHS authorities for their clinical judgements.' (Ham, 1999:167)

Despite structural changes following the 1974 and 1982 reorganisations, the medical profession maintained a strong presence, leaving the structure of medical dominance at these levels more or less intact (Saks, 1995).

5.5.2 The Medical Profession, Policy Making, and Implementation: Macro, Meso and Micro Levels

The Chief Medical Officer of Health, the voice of expertise within the Ministry, provided advice to the Minister, to whom he had direct access. George Godber, Chief Medical Officer to the Ministry from (1960-1963) was responsible for placing the idea of a hospital plan on the Ministerial agenda. Godber advocated replacing the outdated old hospitals with purpose built modern ones (Rivett, 1998). The idea of the District General (Hospital) was born, out of Enoch Powell's (Minister of Health) hospital plan for England and Wales (1962) (Klein, 1995). The new District General Hospital's would comprise '600-800 beds, each serving a population of 100,000 to 150,000 people' (Rivett, 1998:176). The medical profession played a pivotal role in providing the necessary expert advice and detailed planning with regard to what a modern hospital service should be like (Klein, 1995).

The Central Health Services Council also acted as a central channel of advice to the Ministry of Health. Its first eighteen months were fairly turbulent as a number of significant issues faced the service (Rivett, 1998). The significant issues included: 'the functions of the District General Hospital (DGH) in light of the developments since the Hospital Plan (1962)' (Klein, 1995:67).

However, the CHSC was not the only channel of advice to the Ministry: there was a 'growing tendency for the Minister of Health to appoint specialist bodies or committees of inquiry to consider each subject as it arose'. Many were set up as 'joint working parties of Ministry and professional representatives, such as the working party on the hospital medical staffing structure (Platt Report, 1961)'. The Platt Committee comprised 'leading members of the Royal Colleges, the Ministry's medical department, and professionals who regularly served on other professional bodies such as the General Medical Council' (Stevens, 2003:263).

At the meso-level regional health authorities were powerful and influential. This, however, is not reflected in diagrammatic representations of the structure of the NHS between 1948 and 1974, which clearly show a line of accountability running from the centre to the periphery. However, this line is always drawn as running one way, which underestimates the level of two-way interaction between the constituent parts of the structure. Indeed, given the substantial executive powers of the regions within this structure, they were not just ciphers through which national policies were implemented, but had their own aims and objectives.

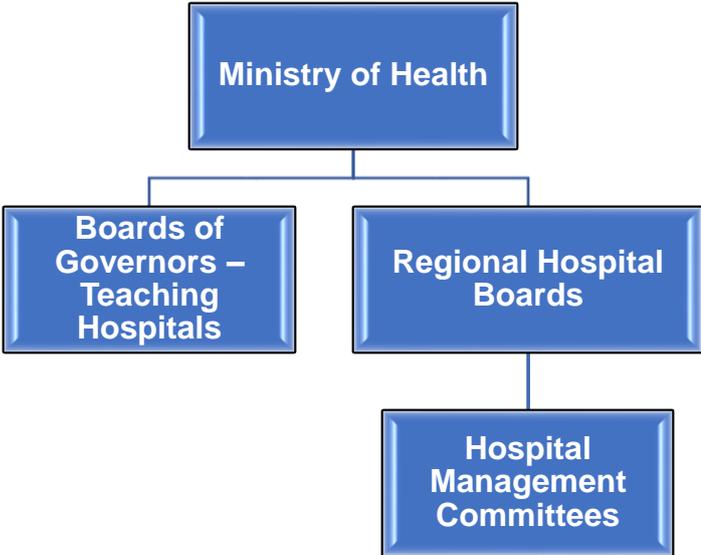


Fig 5.2 The Structure of the NHS 1948-1974

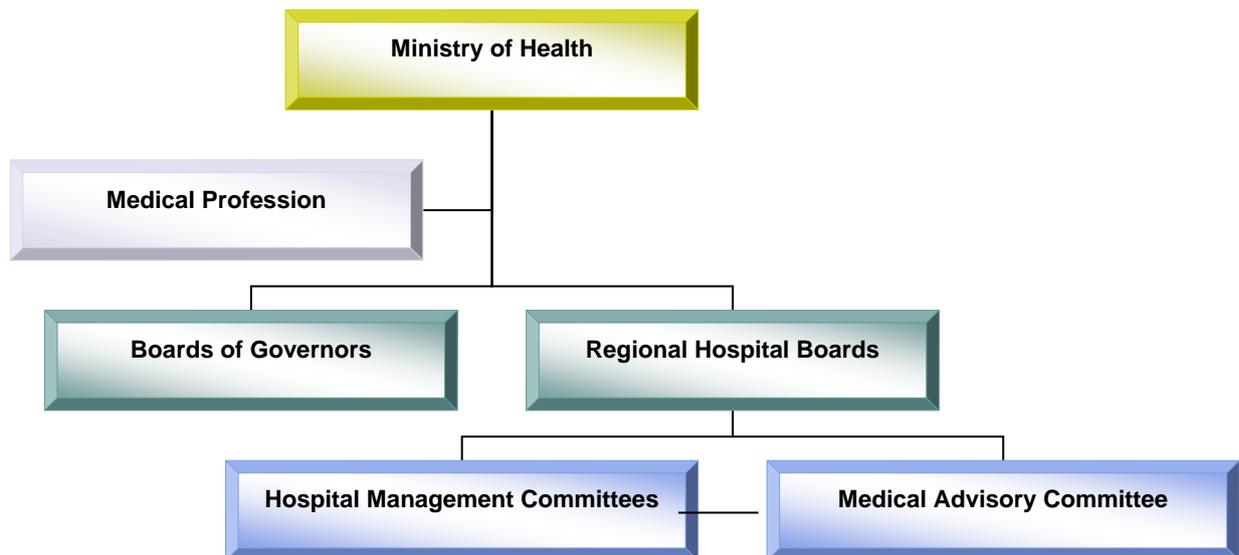


Fig 5.3 The Hidden Structure of the NHS 1948-1974³⁸

The fact that regions were the ‘financial conduit between central government and hospitals’ (Forsythe: 1998:61) meant that they played a proactive part in the battle for funds between the centre and the periphery (between macro and meso). They also

‘allocated capital for medical and surgical equipment as well as new fabric and allocated revenue to the hospital management committees (HMCs). The financial responsibilities were onerous but these gave them power as the main agents of change for the hospital services.’ (ibid.)

Rivett provides a pertinent example of the power of the regional boards in determining the priority of new hospital developments:

‘In the South East Metropolitan RHB specialist services were dominated by large teaching hospitals, Guy’s and King’s. The Senior Administrative Medical Officer (SAMO) decided to raise the standing of the hospitals at Canterbury and Brighton, so that there would be centres of expertise nearer the coast. Money was invested in them. Regions varied in their ethos; those in the south were used to working in close cooperation with the Ministry of Health, which might be to their advantage.’ (1998:172)

³⁸ The information incorporated in the diagrammatic representations of the NHS are taken from Stevens (2003); Forsythe, 1998 and Rivett 1998.

The region was also responsible for medical staffing, 'held most consultants contracts and (save for the teaching hospitals) made senior appointments' Accordingly, 'consultants seeking to influence events had to have influence at regional level. (ibid.).

The power of the regions did not diminish in the wake of the NHS reorganisations of 1974 and 1982; indeed, the regional authorities (i.e. regional medical officers (RMO) after 1974, and regional directors of public health (DPH) after 1988) still retained considerable influence and power (Forsythe, 1998). Given this, it is worth noting a consultant's experiences under the regional health authorities following the 1974 reorganisation:

'Hospital consultants were responsible to the RMO (Regional Medical Officer), who had considerable power. An exceptional RMO like John Revans in Wessex or Rosemary Rue in Oxford had enormous influence in the planning of hospital services, right down to the appointment of extra consultants, and the development and distribution of new services and the necessary capital investment.' (Lee-Potter, 1997:247)

Lee-Potter goes on to note that consultants frustrated by the failure to provide them with the resources that they thought necessary to develop their departments and their speciality could always go and see the RMO about it. If he or she thought that particular consultant worth supporting, means would be found:

'This was the NHS which I found when I was appointed the first consultant haematologist in Dorset in 1969. I spent five years labouring single-handed in the vineyard before going to see Dr Revans with my plans and demands. He listened and more medical staff and resources were provided.' (ibid.)

The regions' role as financial interface between the centre and the periphery (i.e. the macro and the micro), together with the fact that they were not merely neutral but powerfully proactive, with their own objectives and responsible for providing services where professional involvement was strong, exposed them to the lobbying power of the consultant groups, especially those in the acute specialities such as surgery and general medicine, which were the most influential. Indeed, this is not surprising, as it is highly probable that larger groups will be in possession of greater levels of specific types of capital. This was especially the case in this context, as the specialties of general medicine and general surgery, together with their sub-specialist areas, were the largest specialty

groups in the NHS, and collectively possessed social, symbolic, scientific, and economic capital, which provided additional lobbying leverage. Ham's work on policy-making in the Leeds Regional Hospital Board (RHB) reaches similar conclusions: he argues that power on the board was 'weighted heavily in favour of the professional monopolists' who successfully utilised a variety of channels enabling them to 'influence decisions' (**Ham, 1999:171**).

Thus, there was clearly interaction between the meso (regional) and the micro (hospital) levels, but also between the micro level (consultant lobbyists) and the meso level (regions).

The last point in particular highlights the power of the consultant body within the micro context of the hospital, and one which is extremely important. Although, theoretically speaking, the Hospital Management Committees³⁹ were the interface between the region and the consultant body, in practice they were no more than a channel, and a benign one at that, for forwarding decisions and policy recommendations from the Medical Advisory Committee (MAC).

The Medical Advisory Committee has the power to act on behalf of the consultants and put plans into effect; it is the executive body for consultants (**Stevens, 2003**). It considers questions put forward 'by its own members or put to it by the Hospital Management Committee (HMC). These may concern equipment and staffing levels, priorities in building or supplies programs, or drug costs.' If necessary, 'their policy recommendations may be forwarded promptly to the regional hospital board' (**ibid.:265**) via the HMC. Conversely, Stevens notes that the MAC could make direct contact with the regional board in cases of conflict with the HMC.

In the teaching hospitals the structure was different. Teaching hospitals were so designated 'by the Minister, with university advice, because of their special importance to medical education' (**Rivett, 1998:33**). Each teaching hospital board of governors was directly accountable to the Minister, not to the regional board. Given this, the relationship between the two fluctuated between close collaboration and no collaboration of any kind. Rivett provides a pertinent example, of how the board of governors in the teaching hospitals in Oxford and Cambridge bypassed the decision making machinery of the regions and controlled the delivery of hospital care within the city and neighbouring districts.

³⁹ HMCs membership consists of volunteer members drawn from the community, the hospital administrator and representatives of the senior nursing staff and representatives from the consultant body. (**Stevens, 2003:265-266**)

The significance of teaching hospitals to medical education brought with it 'prestige and cachet which, combined with better resources, allowed them to attract better staff and additional resources, which enabled them to influence NHS policy more generally' **(Pollock, 2004:88)**. In addition, the large teaching hospitals in London operated as groups which enabled them to wield more power, given their combined social capital. As alluded to in section (5.2), the collective social capital accumulated by a group is the sum total of its parts, that is to say, the accumulated capital of its members. Bourdieu (1986) describes this as the 'aggregate of the actual or potential resources' **(p.21)**, realisable through group membership. St Thomas' Hospital in London provides one such example of a London teaching hospital group and included the Royal Waterloo Hospital for sick children and women, the general lying-in hospital, and the Grosvenor hospital for women. Thus, teaching hospitals were very influential in shaping the directional flow of NHS revenue. **(Pollock, 2004)**

The potential for consultants/specialities to "directly" influence the development and organisation of acute care is clearly evident. Nonetheless, there are those who argue that resources are not necessarily decided "directly" through the lobbying actions of the consultant group, but "indirectly" through the clinical decisions of the consultant group.

In other words, the influence of doctors was exercised through 'decisionless decisions' **(Bachrach & Baratz, 1970. cited in Ham, 1999:172)**. The clinical autonomy enjoyed by clinicians, 'and the consequent power over resource allocation was thus an important factor limiting the role of health boards and authorities' **(Ham, 1999:172)**. Thus, since consultants had a major influence on the use of resources in the NHS, their behaviour ultimately determined patterns of resource allocation and service development in the NHS:

'From the early days of the NHS, doctors rather than managers (then tellingly, called administrators) had dominant and pervasive influence. The Shape and distribution of services arose from an accumulation of individual clinical decisions, with managers supporting and administering these arrangements rather than seeking to challenge them.'
(Davies & Harrison, 2003:646)

Thus, as Ham notes,

'the power of the medical profession was manifested not so much through formal bids for development considered by regional hospital boards as through the continual process of innovation which pre-empted resources for development.' (1999:172).

This became evident in 1948, when the legacy of spending commitments and developments in specialist areas were inherited by the state upon the establishment of the NHS.

'The need to provide specialised services, and sub-specialisation, had the double effect of driving up the number of consultants from roughly 4,500 in 1948 to 7,000 by 1960; and placed the development of hospital services on top of the agenda.' (Rivett, 1998:137).

Within the context of the NHS, decisions taken by consultants to introduce revolutionary surgical techniques in the treatment of conditions such as varicose veins created a pressure in the system, which impacted on the bed capacity for more acute conditions. This in turn put pressure on the RHBs, who understood the necessity to advance the provision of specialist treatment and ensure equitable access for all (Rivett, 1998).

Thus, returning to the issue of the symbiotic relationship between the medical profession and the state (or in Salter's case, the medical profession, the state and civil society), quite clearly there is a relationship between medicine and the state and civil society: the medical profession became dependent on the state not only for their incomes but also for the resources at their command, and the state became dependent on the medical profession to control the demand supply problem, whilst upholding citizens' right to the health care.

This relationship, however, is not equal, as it first appears, but rather a very one-sided asymmetrical relationship. Accordingly, Salter's use of a triangle, with the implication of equal relationships between the three parties, is inappropriate (even though Salter places medicine at the top of the triangle which would imply a hierarchical relationship between the three).

Salter (2004) notes that 'citizens' receive their 'right' to healthcare, free at the point of delivery, from birth to death, 'from the state delivered to an appropriate standard by the medical profession' (p.6). It is the profession which defines the exact scope of 'comprehensive'; this is related to the

'law of supply and demand', which in this case should perhaps be inverted to the 'law of demand and supply': the profession creates the demand through medical and surgical innovation.

As far as the state is concerned, it has fulfilled its welfare duty aided by the medical profession. Yet it is reliant on the medical profession to manage the tension between demand and supply, when in fact, as noted above, it is the profession which created this tension in the first place. As Klein notes:

'Consumer demand in all health care systems is strongly influenced by medical decisions. If there is an increase in the number of doctors, and if they have an incentive to generate extra activity, one would predict also an increase in demand.' (1995:157)

It is this disparity between patient demand and the ability of the NHS to supply this demand, that has always been a significant characteristic of the NHS. In other words the profession had the state, to put it politely, in a political headlock: the state was reliant on the profession for fulfilling its responsibilities and promises to the electorate, so the profession had both a 'political function and a bargaining position of systemic significance' (Salter, 2004:1), for example, the threat by employees to discontinue their services. The profession also had civil society in a headlock, for the private sector benefited all the more as the disparity between demand and care widened.

The professional (economic, political, and clinical) autonomy of medicine resulted in the so-called symbiotic relationship being very one-sided and the state being open to exploitation from the profession, which had the state exactly where it wanted it. It is also clear that there were also power differentials within the professional field itself, between the powerful teaching hospital consultant cadre and the non-teaching hospitals. The teaching hospitals were closer to the NHS policy making machinery (macro-level), and had the potential to utilise their combined social, economic, and symbolic capital to lobby and influence policy, and attract further economic capital to progress their specialist areas, especially if arguments for greater resources were couched in terms of the benefits for education, medical or surgical. However, this situation could also work against consultants, since they would have been directly accountable through the board of governors to the Minister, who may not have been as malleable as the Senior Administrative Officer's (SAMOs) at regional level. In addition, many of the powerful teaching hospital consultants were also represented in the higher echelons of the Royal Colleges, which had the ear of government.

Despite the power differentials between the teaching and non-teaching hospital consultants at the macro-level, it would be an oversimplification to assume that consultants in the non-teaching hospitals were without power, as the obverse is true. Indeed, all consultants enjoyed the privilege of clinical autonomy, and as alluded to above, clinical decisions taken at the micro-level indirectly influenced the flow of resources. In addition, the Medical Advisory Committees were the conduit for consultant lobbying, either via the Hospital Management Committee's or directly to the Regional Board.

Thus, given the nature of the relationship between the medical profession and the state, the National Health Service provided a context ripe in opportunities for the accumulation of specific capital, in particular the development of esoteric techniques (scientific capital), and with it the growing sophistication of sub-specialities such as orthopaedics, neurosurgery, plastics, cardiac and thoracic's and urology (symbolic capital) (**Rivett, 1998**). As well as further growth in these areas, there was also the further development of sub-specialisation within general surgery, as special interests began to develop, resulting in the growth of areas such as vascular surgery, upper-gastrointestinal surgery, colorectal surgery, breast surgery, hepato-pancreatico-biliary surgery, endocrine surgery, and transplant surgery.

An effect of sub-specialisation is to change the scale at which it becomes appropriate to provide services. Thus, by the 1960's it was clear that the pattern and content of the hospital service had to be rationalised at a district and regional level. The Hospital Plan (1962) was brought in to solve these organisational problems. The plan 'aimed at a network of District General Hospitals (DGH's) of 600-800 beds, normally serving a population of 100,000-150,000' (**ibid.:176**). District General Hospitals would provide the generality of medicine and surgery as well as surgical specialties such as, orthopaedics and ophthalmology and age and gender specific specialities, such as paediatrics and obstetrics and gynaecology. In addition, all DGH's would provide accident and emergency services. The specialities that required a higher population base such as neurosurgery, plastics and thoracics, would require regional level provision. For those areas that were super-specialised for example, transplant surgery, supra-regional provision would be needed. As service provision became increasingly differentiated between the macro (larger regional centres) and the micro (district general hospitals), certain sub-specialist areas of general surgery, such as neurosurgery, plastics, and cardio-thoracics, became increasingly detached from the general surgery practised within the district general hospitals (**Rivett, 1998**).

Orthopaedics too was loosening the link between itself and general surgery. Not only was it practised at a regional level; at the level of the district general hospital some orthopaedic surgeons

tended to deal with fractures, others with joint replacement, whilst general surgery was concentrating more and more on peripheral vessel surgery and the abdominal tract. Orthopaedics, whose future looked quite bleak within the context of the pre-NHS private market, was on the road to maturity at last (**Cooter, 1993**).

5.6 The Road to Maturity: The Case of Orthopaedics

In the run up to the establishment of the NHS, 'scientific and technological research became vital to professional survival' (**ibid.:237**), for it was a means of securing a sure foundation within the university medical schools where much of this research would take place. University medical schools' special status as providers of medical education, with their direct links to the Minister of Health, made it even more necessary to be at the centre of the medical curriculum. To be at the centre opened up the potential to influence the growth and development of special areas, while being on the periphery restricted influence. Orthopaedics achieved the vital position: it became an integral part of the medical curriculum within the university medical schools (1950s), which became central to the structure of medicine under the new health service (**Cooter, 1993**).

By 1970 orthopaedics had been transformed and stood poles apart from the orthopaedics practised before the advent of the NHS in 1948. Orthopaedics was no longer at the periphery of hospital medicine; on the contrary, orthopaedics was now an essential part of hospital medicine. This represents 'a very different set of social relations and professional interests. Of these, the greater kudos, security and income of its practitioners are signs and symbols' (**ibid.:234**).

Signs and symbols of success may well include the above, but the most eloquent status symbol of orthopaedists was becoming an independent speciality with control of its own examinations, and by the 1960's this was being increasingly sought after. The question is what changed between 1948 and the 1964 which altered their goals from gaining a prestigious place in the university medical schools to seeking independent specialist status; and what sort of capital they accumulated during this period which enabled them to differentiate from general surgery in the 1980's.

Despite the fact that sixteen years is a relatively short space of time in comparison with orthopaedics' precarious period of adolescence between 1800 and 1948, much happened over this relatively short period.

By the 1950's orthopaedists were pushing back the boundaries of orthopaedic science and surgery with the development of esoteric techniques, especially through the breathtakingly vast work of Sir John Charnley. Charnley's earlier work was concerned with the management of bone trauma and fusion of joints by compression methods and his work on the treatment of fractures without surgical intervention (**Wroblewski, 2002**), in no small measure demonstrated the skill and expertise required in the effective treatment of fractures. This no doubt provided further scientific, specific cultural and symbolic capital in the orthopaedists' quest for the total control of fractures.

During the post-war period (1945 onwards) 'members of the British Orthopaedic Association (BOA), began collectively to push for the national provision of what they called orthopaedic and accident services' (**Cooter, 1993:193**). Indeed Capener (1958) writing in the *Journal of Bone and Joint Surgery* notes:

'The application of orthopaedic methods to casualty services was a major gain from the two world wars. In many, but still too few, parts of the British Isles, orthopaedic surgeons have assumed a greater responsibility for this work. We emphasise too few. A committee of the British Orthopaedic Association is at present engaged in studying this problem...suffice to say that we cannot be complacent with the present provision. There are too many casualty departments with only nominal consultant supervision. The incidence of major and minor accidents in transport and industry as well as domestic circumstances, demands far better organisation than generally exists, and it is in orthopaedics where this should particularly be found.' (p.617)

Given that trauma injuries (not unlike orthopaedics itself) were not restricted to one area of the body, their treatment would 'cut across the organ geography of other medical and surgical specialities, these changes were to raise serious problems of conceptualisation as well as of hospital organisation' (**Cooter, 1993:181**).

However, within the context of a National Health Service this would change. The opening of the M1 motorway in 1959 led to a new style of driving. Rivett (1998) explains, that the types of injury

sustained were more traumatic, took place over a 24 hour period, and given the distance covered by the motorway, were spread over a wide geographical area. In 1962 the Standing Medical Advisory Committee (SMAC)⁴⁰ set up a group to study the provision and organisation of accident services, chaired by the eminent Orthopaedist and President of the Royal College of Surgeons, Sir Harry Platt. Rivett notes that the committee recommended a system whereby a

‘central accident unit would be attached to every teaching centre, and there would be other accident units in selected hospitals, and support from peripheral casualty services. It was also agreed that effective treatment not only required good facilities but also experience.’ (ibid.145)

The argument for trauma surgery being entrusted to orthopaedics was a success. This was due in no small part to the strenuous work and accumulation of specific types of capital (scientific capital, symbolic capital, specific cultural capital and the capital of surgical authority), by the fracture movement prior to the establishment of the NHS, and of course to the major advances under key figures such as Charnley in the 1950’s. However, the scientific capital accumulated prior the establishment of the health service, although significant, was not of the level accumulated in the 1950’s, that is to say, the orthopaedics practised in the 1950’s was poles apart in terms of its scientificity. This was also reflected in Charnley’s surgical endeavours in the 1960’s, especially in relation to his revolutionary surgical procedure for the treatment of the arthritic hip, namely the ‘low frictional torque arthroplasty (LFA)’ **(Wroblewski, 2002:824)**.

Charnley received funding from the Manchester RHB (Regional Health Board) and made an unrivalled and major contribution to 20th century surgery, by developing revolutionary surgical techniques combined with meticulous scientific research around implant fixation and longevity. In 1962 he was the first surgeon to introduce acrylic cement (polymethylmethacrylate PMMA). From 1962 onwards Charnley chose to concentrate all of his energies on hip replacement surgery. After perfecting the surgical technique, he began to impart his knowledge to other surgeons **(Rivett, 1998)**.

As he observed in his lecture to the British Medical Association in 1959, the technique’s sophistication required an unprecedented degree of training. ‘This type of surgery demands training in the mechanical techniques which, though elementary in practical engineering, are as

⁴⁰ The SMAC - a committee of the Central Health Services Council **(Rivett, 1998:50)**.

yet unknown in the training of the Orthopaedic surgeon' (**Wroblewski, 2002:825**). By the late 1960's the success of the procedure created a high demand (**Rivett, 1998**), as it became the treatment of choice for Osteoarthritis of the hip joint. Knee replacement surgery was also being developed at this time by Michael Freeman of Newcastle, who introduced a prosthesis in 1968 (**BMJ, 1967**).

Joint replacement surgery became synonymous with orthopaedics. The demand it created, however, could not be easily supplied by the NHS. By the early 1980's the need for hip replacements 'overwhelmed the wards allocated to the trauma service and spilled into the beds needed for general surgery and elective orthopaedics' (**Rivett, 1998:311**).

By the 1960's orthopaedics had control of fractures and had developed sophisticated esoteric techniques, which required special training; the focus had moved from the acquisition of general skills to the narrow and in-depth training required to master these highly specialised esoteric techniques. Orthopaedics was so highly specialised that it no longer identified itself as part of the generality of surgery. Orthopaedists such as John Charnley called for

'a primary examination for orthopaedic surgeons orientated intelligently towards orthopaedic surgery and traumatology, and a final examination with examiners who were orthopaedic surgeons. In other words, there should be an FRCS in orthopaedics as a specialist examination to bring it in line with the American boards.' (1964:1249)

In particular Charnley was frustrated to see that, in desperate attempts to get the final fellowship examination, young specialists were 'returning to their flat in the evening to start reading about gastrectomy or cerebral tumours instead of being able to immerse themselves in orthopaedic surgery' (**ibid.**).

Orthopaedists clearly had good arguments to back up their proposals: they had become highly specialised and, in the process, accumulated much capital. However, sophistication in terms a widening knowledge base and the development of esoteric techniques alone, though pivotal in any argument in favour of cognitive exclusiveness and differentiation, do not suffice to guarantee it. Other factors would need to enter into the equation in order for knowledge and technology (scientific capital) to be operationalised.

5.7 Specialist Differentiation and the Royal College of Surgeons

Within the Royal College there was a basic conflict between two types of groupings: generalists, who advocated the continuation of the 'strong postgraduate generalist tradition embodied in the Goodenough Report (1944), and which the general FRCS was the last bastion' (**Stevens, 2003:349**); and specialists, who advocated the institution of specialist examinations and a movement away from broad generalist education, beginning with the 'acquisition' of specific narrower skills.

During the early 1960's three groups were venting their spleen regarding what they saw as the deficiencies of the general FRCS in relation to orthopaedics, ophthalmology and otorhinolaryngology.

The orthopaedists, on the other hand, were concerned about the lack of focus on the theory and principles of orthopaedic surgery under the general FRCS. Although both ophthalmology and otorhinolaryngology were both fully differentiated specialities in their own right, with their own specialist fellowship examination, they were still required to sit the College's primary examination in the basic medical sciences. Given the College's generalist slant, this resulted in candidates being examined in the general anatomy of the body and not only the eye, or ear, nose, and throat, as one an ophthalmologist wrote in 1963:

'It seems quite unacceptable that keen aspiring ophthalmologists should be failed because they do not know the minute anatomy of the pudental nerve, and psoas major, the external pollicus longus, and the pubic bone. Is this essential or even useful knowledge for an ophthalmologist?' (Morgan, 1963:743)

In terms of the College's political infrastructure at this time (1964), there were 1,794 general surgeons – which included orthopaedics, neurosurgery, cardio-thoracics, plastics and urology as well as the new sub-specialist areas of vascular, upper-gastrointestinal, colorectal, breast, endocrine and transplant; out of the 1,794 the orthopaedists numbered 394. The ophthalmologists numbered 306 and the otorhinolaryngologists numbered 312. Thus, at this particular juncture in time, the grouping together of orthopaedics, ophthalmology and otorhinolaryngology would not carry enough might if it came to the stage where pressure needed to be applied, given that together they numbered 1,012, as opposed to 1,400 (**Stevens, 2003**).

The generalists, however, were concerned that any 'further changes in the FRCS would create a new rash of qualifications in the sub-specialities of neurological surgery, thoracic surgery and plastic surgery and urology' (**ibid.:348**). Given that there were no murmurings coming from these areas, at this stage their worries seemed unfounded. These arguments would go on for another decade before any decisive movements were made on behalf of the groups advocating changes to the FRCS.

Given that in the period 1948-1974 the consultant numbers tended to double every ten years (**Godber, 1961**), by the mid 1970's the number of consultants under general surgery and related specialities was likely to be somewhere around the figure of 2,800⁴¹. This would mean that any potential grouping involving orthopaedics, ophthalmology and otorhinolaryngology would be around the 2,024 mark.⁴²

Despite the protestations from ophthalmology and otorhinolaryngology, when it came to the crunch another grouping stuck their heads above the parapet. Several specialities (including, as can be deduced from the range of speciality examinations introduced by the Edinburgh College in the late 1970's, orthopaedics, neurosurgery and cardiothoracics) voiced their concerns regarding the lack of 'formal assessment of specialist knowledge or skills acquired by UK and Irish trainees during specialist training'. Indeed, English (1989) notes that 'they were sufficiently concerned by this state of affairs that they indicated that unless the Surgical Colleges did something to rectify matters, they would consider mounting their own examinations' (**p.31**).

The Royal College of Surgeons however, appeared to drag its feet. This is probably attributable to the fact that, even though these bodies were powerful, and allowing for the fact that their numbers were likely to have doubled by this stage, their combined might did not equal the combined might of the general surgical body which still included the other sub-specialist areas.

For example, if one assumes that orthopaedics' numbers had doubled since 1964, then by the 1970's it would stand around the 788 mark; likewise, if neurosurgery had 31 consultants in 1948 (**Stevens, 2003:114**) it was likely to have around 127 by this time. Although there are no figures

⁴¹ Stevens notes that in 1964 there were 1400 general surgeons (including related sub-specialist interests). The figure 2800 was obtained by doubling Stevens figure. (This is based on Godber's observation that consultant numbers tend to double every ten years).

⁴² This figure was obtained by doubling Stevens's figures for 1964 (**2003:111**).

for urology, if one supposes that it had 100 plus surgeons, the combined figure would have been around 1015, while that of general surgery and related specialities would have been 1785.

Even if, hypothetically speaking, cardiothoracics and plastics⁴³ had joined the band-wagon the respective figures would have been around 1572 (general surgery and related specialities) vs. 1228 (orthopaedics, neurosurgery, urology, cardiothoracics, and plastics).

In the event it was the 'Edinburgh College which seized the political opportunity and the initiative' (**Kirk, 1989:29**) and in the 'late 1970's started to institute specialist examinations for its Fellowship, first in orthopaedics, neurosurgery and cardiothoracic surgery' (**English, 1989:31**). The Edinburgh College also planned to 'institute similar examinations in all of the surgical specialities' (**Royal College of Surgeons Edinburgh, 1994:18**). Thus, the Royal College of Surgeons as leaders of surgery had been beaten to it by its rival College north of the border.

The Royal College had little choice now but to act, in order to avert further damage being inflicted on its reputation as the great leader in surgery. An excerpt from the Royal College of Surgeons (minutes of Council meetings on the 10th October 1985) clearly indicates the urgency of the situation. For example, it notes:

'That a commitment be made now to explore the various options for introduction as soon as possible, of a two-tier examination in surgery, the first part of which would test basic surgical principles and the second part of which would consist of which would consist of an Intercollegiate assessment of higher surgical training.' (p.32)

By 1988 'complete Intercollegiate agreement was reached regarding the necessity for separate assessment of basic training in surgery in general and of higher surgical training in the specialities'. The Colleges agreed that 'the new FRCS examination would incorporate desirable components of the basic sciences'. It was also agreed that 'assessments of Higher Surgical Training would be carried out by Intercollegiate Boards in each of the specialities' (**Kirk, 1989:29**). The successful completion of 'these higher examinations would entitle a Fellow of a Surgical College to place a

⁴³ Godber (1961) notes that thoracics had 44 consultants in 1948 and plastics had 27 Consultants. The figure above was obtained by working on the premise that the figures for the above would have been: thoracics (132) and plastics (81). These are of course only approximations.

suffix indicating his or her surgical speciality after the letters FRCS' (**Royal College of Surgeons Edinburgh, 1994:19**).

Thus, had the College not moved when it did, there could have been catastrophic results. For example, the fellows of the Royal College of Surgeons in these specialist areas might have defected to the Edinburgh College, or as in the case of (ophthalmology which founded a College in 1988 and received a Royal Charter in 1993, www.rcophth.ac.uk/about/college/history) they might have insisted on forming a brand new specialist College. Either of these scenarios, or a combination of them, would have effectively meant that the Royal College of Surgeons would have been left with a generalist core, as well as otorhinolaryngology. Its leadership in surgery could have been considered defunct, and the government might have been left with no other choice, but to intercede, given that such questions were of importance to the health and wellbeing of the general public (**Stevens, 2003**).

5.8 Summary

This chapter has focused specifically on a new contextual juncture characterised by new structures and new relations; paying particular attention to how these provided the potential for the further growth and maturation of groups as distinct areas of knowledge and technical skill during this period; and ultimately how these effected the pace and direction of intra-professional specialist differentiation during this period. The maturation of orthopaedics during this period has provided a specific example.

At the inception of the National Health Service in 1948 orthopaedics had fulfilled its primary objective, namely, to become an integral part of the medical school curriculum within the university medical schools. There was no conscious strategy towards separation from general surgery at this stage given the exigencies inside and outside the walls of the College operating at that time. Its immediate aims were to take advantage of abdominal surgeries precarious position as leaders of the general surgical tradition, as well as the political opportunities afforded by the Royal Colleges central role in the planning and organisation of services within the new health service. Remaining inside the walls of the college could potentially enable them to influence the planning of services around their area.

By 1964 orthopaedics was consciously pursuing a project towards professional differentiation and self-regulation; no longer content to remain part of the general surgical corpus as it had been in 1948. The foundation of the National Health Service in 1948 which was very much professionally driven provided the necessary conditions in which orthopaedics was able to build on the developments made prior to the health service for example, in the treatment of fractures; developing sophisticated esoteric techniques a fundamental bench-mark in the professional project towards differentiation and self-regulation.

Despite the success of orthopaedics in developing a distinct and clearly delineated knowledge and technological base requiring narrow and in-depth training reflected in no small part by their success in completely taking over the treatment of fractures from general surgeons during the 1960's; it was not successful in operationalising this capital until the 1970's (Scotland) and 1980's (England) when self-regulation became a reality.

The experience of orthopaedics and other aspiring groups at this time, for example, neurosurgery and urological surgery clearly demonstrates the politically contested nature of knowledge. Although these groups had grown in number and strength over the years; the general surgeons still outnumbered these groups and remained a dominant grouping within the Royal College with the capacity to veto any further attempts at differentiation from the surgical corpus at that time. However, roughly twenty years later the exigencies of the immediate situation left the Royal College of Surgeons with no choice but to grant independent status to these groups.

Challenges to generalism thus arose on two fronts. Within the walls of the College, the growth and increasing scientific complexity of the aspiring specialist groups raised the issue of the lack of formal assessment of this specialist knowledge or skills at the postgraduate level. This issue, which was becoming of concern to the government of the day, was taken up enthusiastically by The Royal College of Surgeons of Edinburgh, the rival College north of the border, thus creating an external challenge.

CHAPTER SIX

***The State, the Profession, and Collective
Professional Autonomy 1990-1997***

6.1 Introduction and Aims

If the preceding surgical epoch was characterised by a strong emphasis on the 'generalist' and general surgical training; then the third surgical epoch 1990 to 1997 was characterised by a strong emphasis on the 'specialist' and specialist training. The change in emphasis necessitated a new and enlarged surgico-political structure in which cooperation between old and new structures became the order of the day. However, irrespective of the prominence given to specialism over generalism paediatrics and maxillofacial surgery were the only areas to break away and differentiate from general surgery during this period, despite vociferous campaigning from the peripheral vascular surgical lobby.

In addition to the changes experienced by the surgical field, the relationship between the medical profession and the state which had characterised the delivery of care since the inception of the National Health Service came under attack from a Conservative government intent on curtailing the spending power of the medical profession. The reforms that followed were revolutionary in nature: the creation of an internal market in health care with new structures; the intention being to shift the balance of power from clinicians to managers.

Given the changes to and complexity of the new surgico-political arena it is essential to fully understand these structures and elucidate where 'power' inheres. The thesis has focused on the English Royal College given its power, status, and leadership in surgery not only in England but in the UK as a whole. However, given that the emphasis has now changed from the training of the generalist to the training of the specialist – with the corollary being the Royal College now finds itself occupying a common political space with the other Royal Colleges together with a plethora of specialities; and (specialist associations) – it is important to understand the structure or structures where decisions regarding specialist differentiation are taken, and by whom. The opening two sections of this chapter will provide a full analysis of the new power structures.

The previous chapter stressed the importance of the relationship between two social fields (i.e. the state and the medical profession) in the running of the health service; and in particular the power of the medical profession in this relationship which resulted in a clinician led service and copious amounts of capital for aspiring specialist groups. Given the revolutionary changes to the structure and delivery of services brought in with the new NHS White Paper (1990) the chapter will analyse the power of the profession *vis- a-vis* the state and its new cadre of managers.

The chapter will clearly show that despite the structural changes, the state and management relied heavily on the profession; indeed, the very success of the reforms rested on the goodwill and expertise of the profession. Furthermore, the profession's ability to adapt to a situation which threatened the clinical autonomy of its members enabled the profession to reassert and strengthen its position in the concordat between itself and the state. In adopting a position of 'collective professional autonomy' (Klein, 1995) the profession effectively enhanced its political autonomy as national guidelines for service development and provision were adopted by government, purchasers of health care and trust managers.

In addition, the chapter will argue that collective professional autonomy also resulted in greater central control over individual clinicians at the level of the hospital. Leaders of aspiring specialist groups at the macro-level were able to clearly delineate areas of knowledge and skill more than ever before at the micro hospital level as procedures were equated with volume and outcome and demarcation lines were drawn between the type of hospital where they could be carried out (i.e. specialist centres or district general hospitals). This, it will argue, had a political logic to it as the potential existed for aspiring groups to build up greater volumes of 'capital' to justify their quest for self-regulation and specialist status.

The chapter will then move on to focus on the success of paediatrics and maxillofacial surgery in differentiating from general surgery, and conversely the failure of vascular surgery. It will focus on specific contextual factors during this period as well as other factors which can account for success and failure.

6.2 The Structure of the Surgical Field and its Evolving Political Infrastructure

By the 1990s the plethora of fully differentiated specialities with their own postgraduate examinations and with a powerful interest in advancing the status of their speciality, markedly changed not only the surgico-political infrastructure, but also the structures within which these professionalized groups would operate. The general agreement reached by 1988 regarding the necessity for separate assessment of basic training in surgery in general and of higher surgical

training in the surgical specialities necessitated the development of a new structure with a plethora of committees (political arms) supporting it.

The emphasis had now moved from generalism to specialism; generalism no longer defined surgical practice and the specialist was in the ascendant. Thus, two opposing positions in social space changed places (**Bourdieu, 1988**), and the social field (surgical field) now valued scientific capital over social capital, based on class background. Co-operation also became the order of the day as the great surgical institutions (namely, the Royal College of Surgeons of England, The Royal College of Surgeons of Edinburgh, The Royal College of Physicians and Surgeons of Glasgow and The Royal College of Surgeons in Ireland) jointly co-ordinated specialist training across the UK. The independent surgical institutions each with their own histories and each with their own political infrastructure, although still independent, became institutions within a larger surgical structure; the arms of surgery had come together as one.

The four surgical Royal Colleges were each individually responsible for basic surgical training, the aim of which was 'to provide a common-trunk of training in the principles of surgery in- general' (**Galasko, 1997:6**). This would also be

'assessed by each of the four surgical Royal Colleges individually through their own Collegiate examination; the Royal College of Surgeons of England being responsible for the basic surgical training in England and Wales. An Intercollegiate Committee on Basic Surgical Training and Examinations was established to standardise the requirements for the basic training examination and the content of the examination.' (ibid.:5-6)

Although the Royal Colleges were individually responsible for basic surgical training, higher surgical training was handled jointly by the four surgical Royal Colleges. From 1991 onwards,

'higher surgical training required the successful completion of the Intercollegiate Fellowship Examination in the relevant surgical speciality. These examinations are run by Intercollegiate Boards, each surgical speciality having its own board, and the board and the board chairman form a sub-committee of the Senate. Higher Surgical Training is co-ordinated through the Senate of Surgery of Great Britain and Ireland and its committees.' (ibid.:6)

The Joint Committee on Higher Surgical Training (JCHST) is the body responsible for advising the surgical Royal Colleges on all matters pertaining to higher surgical training. It is supported in the day-to-day management of the scheme at operational level by specialist advisory committees (SACs). There is an SAC for each of the surgical specialities, namely general surgery, otorhinolaryngology, orthopaedics, neurosurgery, plastic surgery, cardio-thoracic surgery, and urology (JCHST, 2005). The JCHST is funded on a proportional basis by all four of the surgical Royal Colleges (Galasko, 1997).

Given the emphasis had changed from the surgico-political machinations of groups within the structure of the individual surgical Royal Colleges to broader structures, questions pertaining to whether there is a dominant group operating within this structure and if so where within the structure power inheres would no doubt receive rather more complex answers. The complexity of the new structure and the plethora of interests which resides within these structures precludes against any simplistic answers.

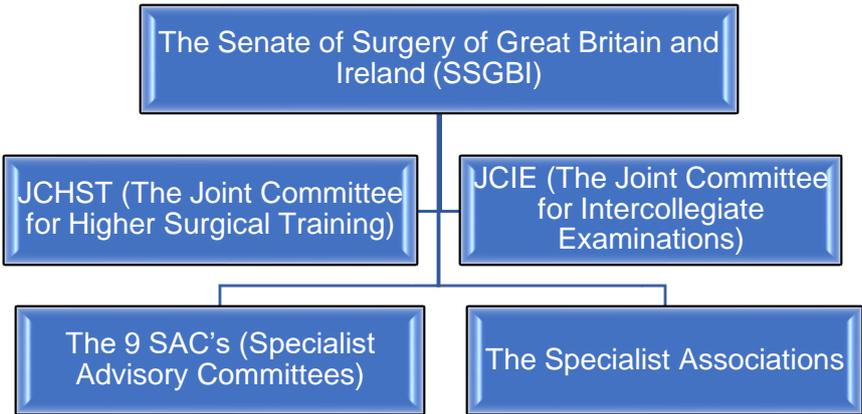


Fig. 6.1 *The Current Political Infrastructure in Surgery*

In light of this the most appropriate starting point would be to focus in greater depth on the component/constituent parts of the surgical structure beginning with the surgical Royal Colleges. Given that the thesis has focussed on the Royal College of Surgeons of England throughout it is therefore pertinent that the focus remains on this institution, and its role in the wider surgico-political arena.

Organisations and structures are created by groups; the foundation of the Royal College of Surgeons as a professional organisation at the beginning of the nineteenth-century is no exception

to this rule. The Royal College was created by the members of the surgical profession in order to educate surgeons, but also it acted as a licensing body in order to protect against unqualified practitioners and hence protect its professional monopoly in the market place.

As with any organisation over time 'the groups it embodies and the vested interests they have created' (**Selznick, 1957:16., cited in Cropper, 2001:84**) become institutionalised. Given that the Royal College was founded by, and dominated by, surgeons who were "general" in the true sense of the word the values of surgical generalism were embodied within the institution.

The Royal College of Surgeons was surgery institutionalised; its status was derived from its Royal Charter which implied professional eminence, its power from its 'statutory role' as educator and 'maintainer of standards in surgery' (**Galasko, 1997:5**), and reflected in its central policy making role as the voice of surgery and the profession within the National Health Service (**Stevens, 2003**).

As with any institution, survival is of paramount importance; institutions 'are affected, even penetrated by their environments, but they are also capable of responding to these influence attempts creatively and strategically' (**Scott, 2001:179**); conversely institutions are also faced with situations whereby their position becomes untenable resulting in changes which are neither creative, nor strategic, but forced.

The Royal College is not unlike other institutions; its role as the voice of surgery has to be protected and preserved this can be seen throughout the history of the Royal College. Over the course of nearly two centuries the Royal College as an institution has faced situations where it has adapted creatively and strategically but has also been faced with situations where it has been forced into making necessary yet unpalatable changes.

Thus, the Royal College of the twenty-first century is markedly different to the College of the nineteenth century, and indeed the College of the twentieth century. The body of surgery has been slowly dismembered as specialist groups have broken away and founded their own Colleges the first being obstetrics and gynaecology in 1929, and latterly ophthalmology in 1988; and specialist groups have been granted their own specialist examinations with ophthalmology and otorhinolaryngology being the first in 1947, and paediatrics and maxillofacial surgery being the last in 1992 and 1994; and latterly the changes to the examination structure following the introduction

of higher surgical training necessitated new relationships with the other surgical Royal Colleges as well as the specialist associations.

According to an eminent Professor of Surgery in London, the pendulum has shifted away from general surgery, which dominated the College Council as well as the office of President, to other groups such as the orthopaedic surgeons who are a large grouping within the College:

Now the Council of the College, who are elected by the fellows, have traditionally until recently – the Council has been heavily dominated by general surgery, and most of the Presidents in living memory have been general surgeons; but it has changed. Now the orthopaedic surgeons of whom I think there are nine hundred or a thousand – it's a big grouping have large numbers of their colleagues on the Council of the College – the current President is an orthopaedic surgeon. But the general surgeons must feel a bit dismayed by this move, because you look around the Council of the College now, and you don't see many people that you know. There is an ENT surgeon and a neurosurgeon on, and these are quite small specialities; so, the pendulum has shifted away from general surgery on the College Council. (Prof W. Professor of Surgery)

There are those however, who disagree with Professor W. and argue that the values of the College are still very much 'generalist'; this comes interestingly enough from an orthopaedic surgeon:

Well the number of orthopaedic surgeons in this country is either greater than the number of general surgeons or it's the same; and the Royal College of Surgeons is a general surgical club. It produces a thing called The Annals of the Royal College of Surgeons, 85 per cent of which is general surgery, and it has a token orthopaedic section... (Mr D. – Consultant Orthopaedic Surgeon – DGH.)

Irrespective of whether this is the case or not there is a debate amongst the surgical community regarding the power and influence of the Royal College given the introduction of higher surgical training and its associated structural changes; there is a dichotomy between those who argue as Professor C. and Mr XT. that the College has become weaker in the face of the growing strength of the specialist associations:

I don't think that the Royal College is a powerful political force anymore; I think that the Royal College of Surgeons has become weak now because the tail that used to be part of it and wagged by the College is now the specialist associations which has lots of tails and is wagging the College instead. (Prof C. – Professor of Surgery)

Within the new structure some bodies have become stronger while others have become weaker; the specialist associations have become stronger and the Royal College has become somewhat weaker. Within this structure the SAC has become powerful. The SAC has the power to grant or withdraw educational approval for a post, so if I want to train a vascular surgeon here I have to have SAC approval; if they come along and say you are not training to a certain standard they can withdraw that, which would mean I wouldn't get anybody coming here to work for me, which would be worrisome in service terms and professionally. (Mr X.T. Consultant Vascular Surgeon and Leading Light – Vascular Surgical Society of Great Britain and Ireland)

And those who argue like Professor W. that the new surgico-political structure whereby the Royal College is obliged to share a common political space with the three other surgical Royal Colleges has resulted in a dilution of its power:

The Senate is the body which upsets all the Colleges because for historical reasons you have two other Colleges in Scotland and you also have the Royal College of Surgeons in Ireland. The Colleges power is to some extent limited by the fact that there are four Royal Colleges in these islands which is quite unnecessary but one we are left with. We have got one in Ireland, and we have two in Scotland which is absurd – all of which seem to carry the same weight as the Royal College of Surgeons. (Prof W. Professor of Surgery)

Conversely however, there are those on the other side of the divide such as Professor M. who argue that the Royal College is still not only a powerful political force in terms of its political clout, but it is still surgically powerful in that it has retained control of the examination structure as well as having statutory responsibility for the maintenance of standards in surgery:

The College still has tremendous political clout and statutory responsibility with regard to the maintenance of standards; it's also powerful because it controls the examination structure. A dignified statement from the President actually does get the press of the world

around, and they do actually listen; The President of the Royal College of Surgeons usually has a direct voice to the Minister of Health if not the Prime Minister himself. If a surgical question comes up, he is usually the person to ask because the College is still very powerful. (Professor M. – Professor of Surgery)

And The President of The Royal College of Surgeons of England fires a salvo when he disagrees with Mr XT's assessment when he notes that the specialist associations are merely carrying out their educational duties; duties which the Royal College has bestowed upon them:

The SAC (Specialist Advisory Committee) is a sub-committee of the JCHST (Joint Committee on Higher Surgical Training) which is a sub-committee of the Senate. If you say it is the SACs that have the control that's their function. The JCHST meets quarterly and all the SAC chairman are on that as well as the Presidents and representatives from all four of the Royal Colleges, and the SAC chairmen give a report to the JCHST. So, to say that the Colleges have become weaker at the expense of the SAC's is untrue; the SAC's are the Colleges with the specialist associations, but on the SAC's, you will have representatives from the four Royal Colleges and the specialist association. (President – RCS)

As with most things there are elements of truth on both sides of the divide. The Royal College is still responsible for training as well as maintaining the standards in surgery. In basic surgical training the College holds the ultimate veto as to which junior hospital posts in NHS Trusts are sanctioned for training **(Salter, 2004)**. This work is carried out by the 'Hospital Recognition Committee' **(Galasko, 1997)** which is run solely by the Royal College of Surgeons. According to Salter each post

'carries an accreditable value – the period of accreditable higher specialist training that can be gained in each speciality for which the post is approved – and the withdrawal of College approval means that, for training purposes, the post ceases to exist. The exercise of this sanction in circumstances where a College deems that a post, and the resources attached to it, no longer meets the educational criteria generates much heat.' (p.111)

A hospital in the southeast (1991) provides a pertinent example of the contentious nature of College sanctions:

We were one of the first hospitals to be inspected for our surgical posts following the introduction of basic surgical training in 1991, and immediately we were blown out of basic surgical training and they de-recognised our posts because we couldn't conform with the criteria which they had laid down, namely that basic surgical trainees should not be involved in significant amounts of service work (i.e. routine work on the ward) which is fine if you've got pre-registration house officers to do it, but if you're in neurosurgery and you haven't got pre-registration house officers you can't fulfil this. Now the Society of British Neurosurgeons have had a battle with the College over this and it is now appreciated that there has to be some element of flexibility. (Mr Y. – Consultant Neurosurgeon – Teaching Hospital)

Another instance of this was recorded during the Bristol Royal Infirmary Inquiry (1999) (Hearing Summary 14th June), when the then President of the Royal College of Surgeons Sir B. J. gave evidence. He recalled a case where he took the decision to de-recognise a post at a hospital:

'The Hospital Recognition Committee believed that the trainers concerned were unsuitable for training their senior house officers at basic surgical training level and this was reported back to me personally as President of the College by the chairman of the Hospital Recognition Committee, and I took the view, given the evidence that had been provided to me, that instant de-recognition should take place and that happened.' (p.10)

In higher surgical training, although there is a close overlap between the specialist associations and the College in all aspects of speciality training, from the Speciality Fellowship Examination to the inspection of higher surgical training posts, and although the College is represented on all the committees dealing with higher surgical training – the Joint Committee for Intercollegiate Examinations (a sub-committee of the Senate), the Joint Committee on Higher Surgical Training and the Specialist Advisory Committees – its wings have been clipped.

The Royal College has been forced to occupy a common political space with the three other surgical Royal Colleges; and although its original role in training and maintaining standards in surgery has not changed, the goal posts have; old structures are now obliged to congregate around specialist surgery, therefore, 'The important political point is that the primary unit of epistemic power is the speciality around which other structures are obliged to congregate' (Salter, 2004:109).

Thus, irrespective of the fact that the Royal Colleges are represented at every level of specialist training, at the end of the day the Royal Colleges are dependent on the specialist knowledge, which is the domain of the speciality itself, this is reflected throughout the higher surgical training structure. Epistemologically speaking the speciality possesses the knowledge and expertise; accordingly, the training curriculum and examinations are developed by the speciality in conjunction with the specialist advisory committee and intercollegiate board for the speciality **(Salter, 2004)**.

The Association of Surgeons of Great Britain and Ireland (ASGBI) provides a pertinent example. The ASGBI is the speciality association for general surgery and the SAC defined sub-speciality associations within general surgery.⁴⁴ Issues pertaining to higher surgical education, curriculum and training are dealt with by the Association of Surgeons Education and Training Board (ASETB) This 'Board will liaise with the Intercollegiate Board in General Surgery, as well as the SAC in General Surgery' **(ASGBI, 2004:47)**. The composition of the Board is as follows:

'the Chairman, the President of the Association, the Chairman of the SAC in general surgery and representatives from the Education Committees of the SAC defined sub-speciality organisations within general surgery (breast, endoscopic, vascular, coloproctology, transplant, upper-gastrointestinal and endocrine).'' **(ibid.)**

So, within this political space (i.e. the Senate of Surgery of Great Britain and Ireland) you have the surgical Royal Colleges and the nine SAC-defined surgical specialties and their representative Associations; this is akin to a political melting pot where a plethora of interests are represented. Thus, for example, the President of The Royal College of Surgeons of England will not only represent the interests of surgery as a whole, but also the particular interests of the English Royal College, not unlike the Presidents of the other surgical Royal Colleges; and not forgetting the specialty associations, the representatives of specialist surgery, will have the interests of the specialty at heart. Thus, each group has a delegated representative or representatives with power to 'speak and act in its name' and 'shield the group as a whole' and its interests, that is to say, the social capital and associated capital, 'which is the basis of the group' **(Bourdieu, 1986:23)**. The protectionism employed in the interests of the group is echoed by two consultants, with experiences of college council and specialty associations:

⁴⁴ The Association of Breast Surgery (BASO); The Association of Coloproctologists of Great Britain and Ireland (ACPGBI); The Association of Endoscopic Surgeons of Great Britain and Ireland (AESGBI); The Association of Upper Gastro-Intestinal Surgeons of Great Britain and Ireland (AUGIS); The British Transplantation Society (BTS) and The Vascular Surgical Society of Great Britain and Ireland (VSGBI).

You see you have the College interested in the College, and the associations interested in the speciality. The Association don't have the statutory responsibility in terms of the Royal Charters, recognition by government and so on, but they have the grass roots membership; they could then take that away from the College; however, I think that most people would wish to maintain the position of the college. (Mr N.P. – Consultant Surgeon and Member of Council The Royal College of Surgeons)

For twelve years I was a member of the Council of this College, then I became President of the ASGBI, and now I am Chairman of the Federation of Surgical Speciality Associations; I chair all of the Speciality Associations. The Speciality Associations want the Colleges to be responsive to their needs and demands, but they do not want to in any way damage the Colleges, therefore they will work with the College. (Professor V.J. –Professor of Surgery)

Thus, the Senate sits at the apex of the surgico-political infrastructure, effectively controlling what happens in surgery:

The Senate is the voice of surgery; it controls what is happening; it is the voice of British surgery with government. Things will not happen in British surgery without the approval of Senate. (Professor V.Z. – Royal College of Surgeons of Edinburgh)

Therefore, aspiring groups wishing to pursue a professional project whereby they differentiate from their parent speciality to form an independent speciality will require the permission of the Senate:

Surgical problems, surgical solutions are aired/discussed. These can be problems brought forward that fall within the respective speciality organisations; or they can be problems brought forward by the colleges themselves. Also, if you are talking about the decision to create another speciality then that would have to be a decision of the surgical Senate; that would be a major decision. If the underlying principle is that they do not want to have anything to do with the general surgery anymore; they want to be independent, then that would require the agreement of the Senate and the Associations. They would also have to find a mechanism for them to set up a similar structure to inspect posts, to approve training, to conduct exams; and these three components are very specialist and very costly; I don't think any individual sub-speciality group would have the will, or the funding

to do this as an independent exercise. (Professor V.Z. – Royal College of Surgeons of Edinburgh)

However, this does not negate the fact that given the number of groups and interests represented on the Senate, it is highly likely that power will inhere in more than one structure, in other words important decisions regarding specialist differentiation and the creation of further specialities may be decided not only by intergroup alliances on the Senate, but by the machinations and power struggles within the specialist associations themselves before they even have a chance of reaching the Senate. The Association of Surgeons of Great Britain and Ireland (ASGBI) provides a good working example of this.

6.3 The Politics of Specialist Differentiation: The Association of Surgeons of Great Britain and Ireland

The Association of Surgeons of Great Britain and Ireland (ASGBI) is the speciality association which represents general surgery and its sub-specialist areas. Given that the Association represents what is the largest speciality within British surgery it holds an influential position within the Senate which (according to a former President of the Association) gives it a priceless advantage over the Royal College of Surgeons of England given the political machinations within the structure:

The ASGBI has one priceless advantage over the College, in that it represents Great Britain and Ireland, so it can speak for the totality of general surgery. Whereas the Royal College of Surgeons of England as its name suggests represents English surgery. At the same time The English College does not get on well with The Royal College of Surgeons of Edinburgh, and that does create a certain amount of problems. (Professor A.V.P. – Professor of Surgery)

It is therefore not surprising that there are struggles and tension within the structure for control of the reins of power:

The Association of Surgeons has become stronger; the ASGBI is becoming increasingly influential; it doesn't have any executive power, but into that feeds all the sub-speciality associations; and there's a certain amount of conflict between these groups about who's holding the reins. (Mr X.T. – Consultant Vascular Surgeon and Leading Light – Vascular Surgical Society of Great Britain and Ireland)

There is also likely to be conflict for the reins of power given that those who control the association are able to negotiate with important special publics outside the field of surgery, namely the state. This is akin to the point made by Bucher and Strauss (1961) in their work. In particular they note that there is a struggle for control of the professional associations given that 'those who control the professional associations are able to negotiate with relevant special publics' (p.332). The ability to negotiate with the state could be potentially advantageous for those sub-specialist groups within the association who aspire to separate from general surgery as potential 'capital' could be accumulated aiding their lobbying power within the surgico-political arena of the Senate towards their goal of achieving 'pure' speciality status. Conversely it could be advantageous for those wishing to block further specialist differentiation within the speciality.

Thus, it could be said that the structure of the ASGBI is a social field within a larger social field (i.e. the surgical field). In other words, it is a sub-field of the field of surgery and given that this is the case it will display some of the characteristics of the surgical field. For example, it is likely that there will be a powerful group or groups and thus inequity in the distribution of specific forms of capital. As is the case with all sub-fields, it will have its own 'internal logics, rules, and regularities' (Thomson, 2014:70). For example, the ASGBI has its own unique history, executive board, internal governance structure, rules, and regulations around elections to council, and strategic aims. The sub-specialist areas (sub-fields) it comprises are sub-sub fields of the surgical field and the same principle will be replicated throughout each sub-sub-field.

Although it is difficult to ascertain exactly who is holding the reins of power within the association, it is highly likely that the executive members will wear two hats: the hat which represents the interests of the speciality of general surgery, and the hat which represents the interest of their sub-speciality group. Thus, not unlike the Senate of Surgery, the Association is a political melting pot where a plethora of interests are represented and the potential for intergroup alliances is high, especially if the future and combined capital of the group is under threat, from aspirant specialty groups.

In many respects the Association of Surgeons faces a similar problem to that faced by the Royal College of Surgeons during the 1940's, namely, how to prevent the fragmentation of general surgery. In particular the advent of speciality fellowships and speciality associations being able to control their own training and standards with regard to higher surgical training (HST) has resulted in aspiring speciality groups within general surgery (such as the vascular surgeons and colorectal surgeons) beginning to call for a recognised speciality separate from general surgery. These groups are pushing hard for recognition, as they are afraid, they will end up being trapped in the speciality of general surgery and as a result, will not be able to control their own work and decide their own fate **(Kirk, 1989)**.

Jackson (1992) notes:

'there are several loud and persuasive voices now arguing that peripheral vascular surgery should seek independent speciality status and others are suggesting that the surgery of children should be carried out exclusively by paediatric surgeons.' (p.63)

For example, the vascular surgeons argue that:

The movement for independent speciality status is certainly being led by vascular surgery. Urology separated some years ago now, but there is no reason why vascular surgery should not become a pure speciality too...there is no reason why urology should be any more of a speciality than vascular surgery. For technical reasons vascular surgery is different to the other sub-speciality areas of general surgery...a vascular surgeon can do virtually anything in the abdomen as when fixing an aneurysm, they are dealing with the abdominal cavity; a colorectal surgeon can do anything except vascular procedures as they won't have undergone the necessary training...likewise with breast surgeons. So technical reasons set us apart from our surgical colleagues. (Mr W. – Consultant Vascular Surgeon – Teaching Hospital).

Jackson also notes that there are those who believe that coloproctology should also aim for independent speciality status. However, Jackson an exponent of sub-specialisation within general surgery is against further specialist differentiation and fragmentation of the speciality. He argues that 'the case for coloproctology and other disciplines seeking separate speciality status separate from general surgery is not made' **(p.65)**.

Jackson argues that:

‘the consequence of splitting away from general surgery would be considerable and to the ultimate detriment of the patient. The status of the few remaining general surgeons would diminish – they would become second rate surgeons in the eyes of their specialist colleagues and in the eyes of the patient, being looked upon as failed specialists. They would be insufficient in number to train the large number of embryo specialists in the vital core general surgical training that all specialities accept as necessary before embarking on specialist training.’ (ibid.)

Clearly there are internal struggles; however, strategies aimed at conserving the status quo may serve to resolve these disputes or at least placate these groups to a certain extent should these discussions reach the Senate for further consideration. For example, the President elect of the Association notes that:

There is an increasing fragmentation of general surgery into these component parts and the question is will the whole remain? And will the Association of Surgeons be able to survive? I’m pretty sure that both will. Indeed, I think that the Association of Surgeons has been quite intelligent in that it has not procrastinated as this ferments unrest. For example, it has agreed to find ways of addressing the problem of specialist training in vascular surgery through opening up discussions with the Senate regarding the proper assessment of sub-specialities within the general surgery examination. It has also offered time at its annual meetings for each of these groups to have symposium within the confines of that meeting and because there are still only about 1300 general surgeons within Britain that’s still small enough to want to remain a group. (Professor G.W.A.– Professor of Surgery)

Professor G.W.A. also notes another seminal example of a conservation strategy employed by the Association with regard to laparoscopic surgery. Laparoscopic surgery is a relatively new area and is something of a test case between ‘organ related’ disciplines and a ‘technique related’ discipline. Indeed, parallels can be drawn with orthopaedics in the 19th and early 20th century, as not unlike orthopaedics, laparoscopic surgery cuts across the organ geography of the body of surgery. By placating this group, the association may be able to contain this group within its walls, possibly arresting plans for them to seek independent speciality status in the future. Professor G.W.A. documents the problem and the outcome in detail:

Laparoscopy came in around the late 1980's and all of a sudden established surgeons had to learn a whole new bag of tricks because it's very difficult operating with cameras...if we come back to the sub-specialisation issue there is a very active group called the Association of Endoscopic Surgeons of Great Britain and Ireland, and in (C) you have one of the leading lights, a man called Mr P. It is largely through his persistence that he now has a seat on the Council of the Association of Surgeons representing endoscopic surgery. A number of people feel that this is a bastard sub-speciality and that it will wither as it were and that this new grouping which has been sort of a ginger group won't survive. Minimal invasive surgery is appropriate to vascular, lower GI as well as upper GI, and a number of us feel that actually endoscopic cholecystectomy is the province of upper GI surgery, not some separate sort of technique related grouping. So, it's an uneasy alliance at the moment; it's quite a big group and they have good symposia and it's a developing area, so the ASGBI felt obliged to have them in the party pissing from inside the tent rather than from outside the tent as it were. But when it comes to whether they should have their own training scheme, then people get a little bit concerned about that and this is an unresolved argument. So, Mr P. is pushing hard for endoscopic surgery as a separate speciality; a number of us don't actually agree with that. It is a terribly important technique and it needs to be properly taught and so on, but endoscopic surgery of the of the gallbladder belongs with open surgery of the gallbladder, endoscopic surgery of the colon with open surgery of the colon. So, this is actually something of a test case where you have got a 'technique related discipline' competing against an 'organ related discipline'. There is a clash of interest here which I would have thought was very germane to your thesis... It's unresolved at the moment; so, there on the Council of the ASGBI we have P. representing the Endoscopic Surgery and we have somebody else representing Upper GI Surgery, which includes quite a lot of Endoscopic surgery – and who shall decide on the proper training of somebody coming through who wants to be an Upper GI surgeon? Does he have to have some sort of dual accreditation? (Prof G.W.A. – Professor of Surgery)

The conservation strategies utilised by the ASGBI with regards to vascular and laparoscopic surgery were very perspicacious. For example, proactively agreeing to liaise with the Senate on behalf of the vascular surgical cadre not only served to placate this group, but also would enable the ASGBI to control the pace and direction of any changes to specialist training. Likewise, offering the laparoscopic group a seat on the council of the ASGBI not only placated them, but would enable the council to manage their ambitions and maintain organ boundaries where possible.

However, it is unlikely that the vascular or laparoscopic surgical cadres would risk breaking away from the generality of surgery at this point, given the specific capital benefits accruing from membership of a large and powerful group, with all of its combined capital. As alluded to in previous chapters, membership and participation in a large group concentrates social capital, as the group is the sum of its parts, that is to say, individual members bring with them their accumulated capital in all of its forms, and in return secure the benefits of the combined capital resources of the group, as a whole (**Bourdieu, 1986**). Given the prestige and political influence of the Association on the Senate, and its potential to lobby government, it is highly likely that the specific types of capital to be garnered by the sub-specialty associations, besides social capital, is symbolic capital (attached to a name of repute, guaranteeing mutually beneficial relationships), and political capital (**Bourdieu, 1988**).

Conversely, given that the group is the sum of its parts, it is important for the ASGBI to retain the sub-specialty areas of general surgery under their umbrella, as if they were to lose these areas, this would have a deleterious effect on the combined capital resources of the group. Thus, in addition to the conservation strategies outlined above, the association's strategy is to be 'a thriving institution that is recognised by members as useful and important'; the association intends to fulfil this strategy by adopting a 'proactive philosophy', with an emphasis on getting things done, as opposed to being reactive. The association contends that this is imperative in the current surgical field, where the 'Royal Colleges, The Senate of Surgery, Specialty and Sub-specialty Associations jockey for attention', resulting in 'duplication of work and effort across professional bodies and poor decision-making processes' (www.asgbi.org.uk/about-us/strategic-aims).

However, despite the placatory measures adopted by the Association, in order to indirectly thwart the aspirant sub-specialist groups in their quest to achieve 'pure' speciality status, the success or failure of these groups will be very much dependent on their ability to accumulate specific forms of capital from other social fields which could possibly be utilised as lobbying power in the surgico-political arena. The state and the internal market context of the NHS may provide such opportunities.

6.4.1 The State and the Profession: Redressing the Balance

Since its inception the NHS has been dogged by an inequity between the demand for its services which is medically created, and what it can realistically be expected to supply given the financial constraints which exist.

With the increasing disparity between patient demand and expectation, and the ability of the medical profession and NHS to supply this demand for healthcare, the government reached the conclusion that more robust systems of 'accountability were required to ensure that doctors carried out their part of the concordat between medicine and the state' (**Salter, 2004:193**).

The Thatcher government was no longer content with the medical profession having the state in what was akin to a 'political headlock,' and set about re-engineering its macro-level relationship with the medical profession. In January 1988 the NHS review was conducted by the Prime Minister and cabinet colleagues, and on this occasion the medical profession were not invited to participate in this process. Indeed, this was a first, as in the past the medical profession were always represented at the table. (**Rivett, 1998**)

The philosophy espoused by the new managerialist agenda (**Klein, 1995**), with its emphasis on key performance indicators (KPI's), organisational effectiveness, population needs analysis, the commissioning and contracting of services and the optimum use of resources, was a perfect fit with the ideological values of the Thatcher government with their emphasis on competition and the free market, greater public choice, and the need to remove the over reliance of the state on the medical profession. Given the attraction of a managerialist agenda, the state began to progressively unpick the close relationship it had with the medical profession in favour of cementing a closer relationship with NHS managers (**Salter, 2004**). Indeed, the underlying motivation for the reforms introduced by the *NHS and Community Care Act* (1990), was to address the disparity in the relationship between doctors and managers, in favour of managers. Certainly, it was a priority for the Thatcher government to curtail the autonomy of clinicians and hold them to account as their spending decisions were seen to be unregulated (**Hunter, 1994**).

6.4.2 The Internal Market or Purchaser Provider Split (PPS)

Given the above, the central foundation block of the NHS reforms which began to be implemented in April 1991 was the purchaser-provider split or PPS.

The key concept of the purchaser-provider split was the separation of the functions of purchasing and service delivery. According to Ham (1997):

'Before the reforms were introduced, district health authorities (or boards in Scotland) (DHAs) received a budget from regional health authorities (RHAs) to manage the hospital and community health services in their areas.' (p.16)

However, Hunter notes that:

'conflating the purchaser and provider functions in a single organisation was regarded as resulting in a potential conflict of interest between the preferences of providers on the one and those of the users on the other.' (1994:6)

The environment post *Working for patients* was, by contrast, theoretically market choice driven. The reforms were 'designed to break the strong link that existed between district health authorities and their local providers' (Ham, 1997:16), in order to liberate and encourage 'health authorities to develop services appropriate to the assessed needs of their populations' (Hunter, 1994:6).

Given this logic, the providers (acute hospitals) 'would be transformed into autonomous NHS Trusts whose budgets would depend on their competitive efficiency in getting contracts from purchasers (health authorities)' (Klein, 1995:184). Thus, in theory 'the contracting system would allow the purchasing authority to shop around for the best deal on quality and price' (Hunter, 1994:6). It was not only health authorities that would have the ability to shop around, as one of the central tenets of the NHS reforms was, to enable General Practitioners to become fundholders (Marnoch, 1996). This was in-keeping with the importance attached to their so-called 'gate-keeping' role, in relation to secondary care since the establishment of the National Health Service. (Roland & Coulter, 1992).

As fundholders, GPs would be allocated a budget which would enable them to purchase specific types of care, (e.g. elective surgery) from public and private providers (**Marnoch, 1996**). Thus, in effect GPs would act as informed purchasers on behalf of their patients and in the process would use health service budgets more economically (**Newdick, 1995**).

In view of the fact that service delivery in secondary care is clinically led, and that clinical decision making impacts on spend and quality of service provision, clinical performance management would be fundamentally important in terms of influencing a unit's market position (**Marnoch, 1996**). Markets are driven by competition. This essentially means the seller would be unwise to charge above the market price for any length of time. To do so will court competition from competitors,

'either existing or prospective, to enter the market and swallow up the expensive sellers' share. This simple mechanism based on a constant threat from the purchaser to buy someone else's product, provides a strong lever against costly inefficient behaviour on the part of producers.' (*ibid.*:28)

The NHS reforms presented managers with a range of mechanisms (**Hunter, 1994**) in order to ensure that doctors 'formed part of the corporate effort to fulfil the contractual agreements with commissioning agencies' (**Salter, 2004:193**). In doing so the state began to extend into professional territory, and in doing so challenged the profession's right to professional autonomy, embodied in the relationship between the state and the profession, established in the run up to the NHS in 1948.

Professional autonomy is multi-faceted; although these were highlighted in Chapter five, it is worth noting them again. Professional autonomy can be broken down into three main categories:

'economic autonomy, the right of doctors to determine their remuneration; political autonomy, the right of doctors to make policy decisions as the legitimate experts on health matters; and clinical or technical autonomy, the right of the profession to set its own standards and control clinical performance, exercised, for example, through clinical freedom at the bedside.' (**Elston, 1991:61-62**)

The state had already begun to undermine the profession's political autonomy given the fact that the Thatcher government chose not to involve the profession in the NHS review held in 1988 or consult them on the proposed changes which were later embodied in the White Paper (**Rivett, 1998**). The economic and clinical/technical autonomy were next in the firing line.

6.4.3 Professional Autonomy at the Micro-Level: Consultants Contracts, Appointments and Distinction Awards

As alluded to in the previous chapter consultant contracts were held at the regional level, however under the new plans consultant contracts would be handled by the new NHS Trusts. This provided Trusts with the authority to reach decisions on the terms and conditions of consultants and other staff groups. This was a direct threat to their professional independence, and understandably the profession was concerned about the ability of self-governing hospitals to depart from national remuneration levels (**Lee-Potter, 1997**).

On the question of consultant appointments, the Department of Health had one major change in mind. This was that the district general manager should join the appointment panel as a full voting member. This would enable a manager to ascertain how amenable a potential appointee might be to managerial priorities if they differed from medical ones. The Secretary of State for Health Kenneth Clarke also felt that as part of the move towards greater management control of consultants, this should also include clearly defined roles and responsibilities and disciplinary processes. (**Lee-Potter, 1997**). This would enable managers to openly discuss contracts with their consultants and provide clarity around their roles and responsibilities (**Hunter, 1994**).

At the inception of the NHS (1948) distinction awards were introduced to secure the backing of hospital consultants. In effect, this would 'give consultants deemed to be meritorious by their peers special financial rewards, over and above their basic salaries' (**Klein, 1995:19**). Under the new proposals the awards became another tool in order to ensure consultants compliance with the government agenda. On distinction awards,⁴⁵ the main proposals were:

⁴⁵ The distinction awards scale ran from C to A plus (**Lee-Potter, 1997**).

'That awards would be regularly reviewed and could be withdrawn if performance was shown to have fallen; that the lowest, 'C' award should only be given to those who had a commitment to management and the development of the service; that no one should be allowed to obtain a higher award without joining the ladder at 'C' award level; and that managerial input should be increased on the regional 'C' award committees which recommended who should receive one. In addition, the regional health authority chairman would now chair these regional committees instead of a senior consultant, and he would be joined by five senior managers.' (Lee-Potter, 1997:128-9)

6.4.4 The Development of a Corporate Culture: Audit and Directorates

The NHS reforms also firmly established the importance of medical audit for consultants. (Marnoch, 1996).

'Medical audit can be defined as the systematic, critical analysis of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patients.' (Newdick, 1995:171)

The logic behind medical audit is clear. 'Quality and costs' should play a significant role in the operation of a competitive market in health care. The use of key performance standards or indicators (KPI's), for benchmarking and 'regularly' evaluating the processes in relation to patient care (Marnoch, 1996) should ensure the efficient use of resources. By 1990 medical audit became a compulsory facet of patient care and was stipulated in hospital clinicians contracts (Palmer, 2002); clearly this had 'major implications for the accountability of consultants and therefore their management' (Hunter, 1994:7)

Conversely, this was a means of bringing consultants on-board. Given the purchaser provider splits inbuilt market mechanism Trusts would have to develop a culture which was more 'corporate' in style. However, this could only be achieved if the consultant body played a significant role in it (Hunter, 1994). Thus, in addition to medical audit, clinical directorates were established in which consultants 'as directors assumed responsibility for the performance of a particular part of a

hospital's activity' (**Newdick, 1995:168**). According to Frostick & Wallace the effect of this initiative was that the:

'day-to-day management of resources for each speciality' was 'devolved to the clinician level (i.e. the clinical directorate)' and directorates were also expected to 'develop the strategy for the speciality (or specialities) they represented, putting the case to the hospital management board for the appropriate level of finance.' (1993:246)

6.4.5 Management Arrangements and Structural Changes - Macro and Meso-Levels

As well as the micro-level changes, the White Paper aimed to strengthen management arrangements at macro and meso-levels.

In the new Department of Health (DH), this was to be achieved by appointing a Policy Board and NHS Management Executive. The policy board was responsible for overseeing matters of policy and was appointed and chaired by The Secretary of State for Health. 'The Board would set objectives for the NHS Management Executive' (**Lee-Potter, 1997:62**).

The NHS Management Executive (ME) was established as the pinnacle of the health service (**Ham, 1999**), and at its helm was, Duncan Nichol, a seasoned administrator with over twenty years of experience in the health service (**Lee-Potter, 1997**). According to Ham, the ME was in a good position to ensure that the reforms worked given that it comprised experienced professionals, ranging from senior health service managers, businessmen and businesswomen, and civil servants. However, it was acknowledged that it was unrealistic for the Management Executive to assume direct control of all 190 district health authorities (**Lee-Potter, 1997**). Conversely, greater control could be exercised over the regional health authorities. This would be achieved through slimming them down.

As alluded to in (Chapter Five Section 5.5.2) RHAs were powerful strategic planning bodies with numerous responsibilities including: ensuring parity in specialist service provision and medical

staffing (consultant contracts). However, the eventual destruction of the region's role was inevitable, 'because regional planning did not fit in the new market dogma'⁴⁶ (**ibid.:63**).

At a local level, the composition of health authorities was to be revised along business lines. This came under 'Other Issues' in the White Paper:

'Chairmen and members of health authorities will continue to have a vital role in the management of the service and will need to spearhead the changes that the Government is proposing in their White Paper. Because so much management responsibility is now to be delegated to local level, the Government have decided that the membership of authorities should reflect this new role.' (**ibid.:73**)

Thus, the membership of RHAs and DHAs were cut back. Originally both types of authority were composed of 15 to 20 members; their number was reduced to no more than 11 members, comprising: non-executive (5 members) executive (2-5 members) with a chairman who was a non-executive. The Secretary of State for Health would appoint the Chairmen and the RHA non-executives and the RHA's would be responsible for the appointment of the DHA non-executives. It was proposed that non-executive members be appointed based on their respective skill sets and previous experience. For example, the government were keen to appoint businessmen and women who it hoped would bring business acumen into the health service. The appointment of the executive members had to comprise the following: a general manager, finance director and a maximum of three other executives. It was the responsibility of the non-executive members to appoint the general manager, and it was the responsibility of the general manager and the non-executives to appoint a director of finance and three other members of the executive team. (**Lee-Potter, 1997**) The result being: structures which represented government philosophy on health care.

⁴⁶ In 1994 eight regional offices were created, replacing 14 regional health authorities. Whereas regional health authorities and regional health boards had been significant bodies in their own right with a visible role in the NHS, regional offices as arms of the civil service with far fewer staff worked much more in the background. Not only this, but regional directors were accountable directly to the Chief Executive of the NHS Executive and sat alongside him as members of the NHS Executive Board (**Ham, 1999:155**).

6.5.1 New Structures, Old Dynamic

Despite the creation of new organisational structures and the development of a corporate culture, the NHS according to Klein (1995) 'had a number of features that made the notion of an internal market problematic'. The theory of

'the internal market was that it would be driven by purchasers, thus reversing the dominance of providers that had characterised the NHS in the previous four decades It was the purchasers who would determine what their populations required in the way of services, and then shop around accordingly. No longer would service developments be driven by the interests and ambitions of consultants.' (p.205)

In practice however, things worked differently. The success of the reforms were dependent on receiving the backing and cooperation from the medical profession. (Klein, 1995). This would require an element of mutual-dependence on a macro-level between government, purchasers, and the profession, and on a micro-level between management and clinicians and purchasers of health care Thus, changing the institutions and the labels on them proved easier than changing the dynamics of the service.

6.5.2 Macro-Level Health Planning and the Voice of the Expert

Thus, despite the fact the reforms at government and strategic level advertised the impotence of the profession in the policy arena; the fact that the dynamic had not changed meant that the profession was not totally impotent.

The White Paper *Working for Patients* encouraged patients to behave as 'consumers with market power and product choice; patients could now expect not just health care, but better quality health care also' (Salter, 2004:5). If the logic underlying Salter's Triangle of Intersecting Forces is utilised here then the state was still dependent on the profession as it had been in the past not only in the day-to-day running of the service, but in planning and strategy necessary to meet these

expectations. Indeed, the centrality of the profession(s) as a source of expertise is documented by Salter ⁴⁷ as an integral part of the 'mutual penetration that results from the interdependence' of profession and state; and 'an integral part of the agreement accompanying the foundation of the NHS' (**ibid.: 13-14**). Thus, despite the sidelining of the profession during the consultation stages in the run-up to the reforms, the government could not afford to sideline the profession during the implementation stages of the reforms, and beyond.

If the relationship during the second surgical epoch could be described as being based on the exchange of specific capital: professional expertise (symbolic capital) and economic and political capital (incomes, resources, and influence), then the relationship between the state and the profession during the third surgical epoch, should be described as one of necessity, on the part of the state. Indeed, the state grudgingly involved the profession, as opposed to embracing the relationship and gleaning symbolic capital in the process. However, regardless of this, the relationship placed the profession in an advantageous position to influence the direction of policy and garner political and economic capital.

Thus, the surgical profession proactively responded to the 1991 reforms in recognising that it was their 'responsibility' for explicitly delineating best practice and in doing so providing exacting standards against which surgeons' could be evaluated (**Klein, 1995**). In this respect the profession was reasserting its right to 'self-regulation' a central tenet of professional autonomy; a tenet enshrined in the agreement accompanying the foundation of the NHS, and importantly a right which formed the basis for the triangle of intersecting forces (**Salter, 2004**). In reasserting this fundamental right, it could be said that these steps taken by the profession strengthened its collective professional autonomy (**Klein, 1995**).

6.5.3.1 The Role of the Surgical Profession in the Running of the Health Service: Clinical Guidelines

One of the central concerns of the surgical profession was the necessity of 'establishing national minimum standards of service provision' (**Ham, Smith & Temple, 1998:6**). Given that this was the

⁴⁷ Salter utilises the works of Moran: *Governing the health care state. A comparative study of the United Kingdom, the United States and Germany* (1999); and Moran and Wood: *States, regulation, and the medical profession* (1993).

case the Royal Colleges together with the specialist associations were not backwards in coming forwards when it came to advising the government on this matter. Indeed in 1991 ministers established the Clinical Standards Advisory Group (CSAG), in response to the profession's concerns regarding the potential impact of the internal market on clinical standards (**Rivett, 1998**).

This group was 'statutory and multi-professional and its remit was to advise ministers on standards of clinical care' however, its function was not to set clinical guidelines⁴⁸ (**ibid.:430**). Although, the CSAG's function was not to set clinical guidelines, between 1990 and 1997 the Royal Colleges and specialist associations produced these for the government. The guidelines were then filtered down through the NHS Executive to the purchasers of surgical services, and to NHS Trusts. For example, the NHS Executive produced guidelines on contracting for specialist services.⁴⁹ Many of the specialist associations also produced guidelines which were disseminated directly to the purchasers of surgical services, namely district health authorities and GP fundholders.⁵⁰

6.5.3.2 The Surgical Profession and Training

In addition to the profession's role in producing guidelines regarding standards of surgical care, it was also responsible for approving training posts for basic surgical and higher surgical trainees. In particular, 'the ability of the colleges to give and withhold basic surgical training approval' (**Ham, Smith & Temple, 1998:6**) and the ability of the Joint Committee on Higher Surgical Training (JCHST) via its Specialist Advisory Committees (SACs) to withhold training approval for higher surgical training posts, gave the profession a useful means by which it had the potential to move service provision in the direction it wished. This ability became even more significant following the Calman Report on Specialist Medical Training 1993; and the Calman-Hine Report on the organisation and delivery of cancer services 1995. Both reports clearly showed that the voice of the expert was by no means defunct!

⁴⁸ Each group had a lay chairman and members appointed by the Royal Colleges (**Rivett, 1998:430**).

⁴⁹ The emphasised that: 'Sensible contracting needs to take into account the optimum population size not only for the stability of contracted referrals but also to give sufficient 'critical mass' for clinical effectiveness' (**Contracting for specialist services, NHS Management Executive, 1993 cited in British Association of Paediatric Surgeons: 1994:4**).

⁵⁰ See the list in Senate of Surgery, 1997:37-41, esp. 11, 18, 29, 33, 36, 40-46, 55, 63-65.

6.5.3.3 The Calman Report on Specialist Medical Training-1993

In 1992 the Chief Medical Officer Sir Kenneth Calman chaired a working group on specialist medical training. The groups objectives were two-fold: 'improving the quality of higher specialist training and bringing UK higher medical training in line with European Community requirements for specialist training and recognition' (**ibid.:4**).

The working group's recommendations were published in 1993 as the 'Calman Report' (*Hospital Doctors: Training for the Future, the report of the working group on Specialist Medical Training*). The Report recommended that 'the period of training including general professional training, should not exceed seven years after full registration for most specialities' (**Hunter & McLaren, 1993:1281**).

The recommendations were intended to facilitate 'an expansion in consultant numbers in hospital practice supporting a movement towards a more consultant-based delivery of patient care' (**Ham, Smith & Temple, 1998:5**).

6.5.3.4 The Calman-Hine Report on the Organisation and Delivery of Cancer services - 1995

In October of the same year Sir Kenneth Calman and Dame Deidre Hine (Chief Medical Officers of England and Wales respectively) set about developing a model for specialist cancer services; an expert advisory group was appointed, and the report was published in 1995.

The report recommended that 'everyone should have access to a uniformly high quality of care to ensure maximum cure rates and the best quality of life' (**Rivett, 1998:402**). The report proposed a structure comprising three essential components of care: the 'primary care team, district general hospital cancer units, and designated cancer centres' (**Calman, 1998:213**). The cancer units based in district general hospitals (not all district general hospitals) would be responsible for treating the more commonplace cancers, such as breast, colorectal and lung. The cancer centres

would be responsible for treating the cancers that were less commonplace and rarer, and that demanded particular esoteric skills and specialist support services (Rivett, 1998). For example, many cancer centres would deal with diseases affecting children and adolescents (Calman, 1998).

6.5.3.5 The Surgical Profession and Models of Service Provision

As documented above (Sec 6.5.3.1) the profession was concerned with establishing national minimum standards of service provision hence their central role in the work of the CSAG; related to this the Senate of Surgery of Great Britain and Ireland and the Royal College used their position to recommend models of service provision.

For example, reports published by the Senate of Surgery of Great Britain and Ireland: *Consultant Surgical Practice and Training in the UK* (1997); and The Royal College of Surgeons of England: *The Provision of Emergency Surgical Services: An Organisational Framework* (1997), recommended radical restructuring of the delivery of surgical services following the development of the internal market and the requirement to alter training arrangements as a result of the Calman Report 1993. The reports also reflected the findings of the expert advisory group on cancer services 1995:

‘Changes continue to take place in the delivery of healthcare in the United Kingdom following the development of internal markets in the National Health Service (NHS) and the requirement to alter training arrangements. The Senate of Surgery fully recognises the opportunities to maximise efficiency of services and training and to deliver cost effective quality health care but is concerned about potential threats to the standards of surgical care.’ (The Senate of Surgery of Great Britain and Ireland, 1997:1)

The Senate of Surgery of Great Britain and Ireland (1997); and The Royal College of Surgeons of England (1997) believed that bigger hospitals (acute general hospitals – AGH’s) were necessary in order to meet the current pressures for change and provide the best clinical outcome for patients:

'The ideal model for organising healthcare would be served by a population base of 450-500,000 because of the critical requirement for increasingly specialist expertise, the pressures for change brought about by recent changes in working and training arrangements... Existing hospitals serving smaller populations should consider coordinating services or develop arrangements with other centres in order to ensure the highest quality of service for their surgical patients.' (The Senate of Surgery of Great Britain and Ireland, 1997:1)

However, they also recommended that in the remote smaller hospital, in which an emergency service must be maintained, surgeons would need to be more generally trained to continue to practice a wider range of surgical care for both emergency and elective admissions. However, the recommendations emphasise that surgeons practising in remote hospitals...

'should develop links with more specialist professional colleagues so as to enable the ready transfer of appropriate patients without contractual or organisational impediment to a larger centre with the available expertise and resources. There will remain a continuing need for generalists in both surgery and medicine.' (Royal College of Surgeons of England, 1997:7)

6.5.4 The Realities of the Purchaser Provider Split and Meso-Level Health Planning

Despite the wide ranging organisational and structural changes which accompanied the creation of the purchaser provider split, namely the introduction of separate purchaser provider roles; the restructuring of health authorities (DHAs and RHAs) in particular the trimming down and eventual disbanding of 'the traditionally powerful and insulated regional tier' (Ferlie et al., 1996:52), the dynamic remained professionally/provider driven. This is due to a number of inherent features in the NHS. This can be further evidenced when analysing the 'quasi-market' (ibid.) in action (i.e. the purchaser provider split).

At the time of the reforms (1991) 'the NHS was, as it still is today, a collection of different types of markets for surgical services, making generalisation a high risk activity' For example, there is an

'oligopoly of providers dominating the market' (Klein, 1995:205-206). Supra-regional specialities such as liver transplantation and complex cranio-facial surgery are provided by a single provider, covering a number of regions (Baker, 1998). Specialist regional services are also provided by a small number of providers, for example, neurosurgery, and cardiac surgery. In the case of neurosurgical services:

The market doesn't really exist in neurosurgery, I mean purchasers could try and buy services from adjoining neurosurgical centres but that in itself would be difficult as they haven't got the capacity to take on other work – and in that sense it is a monopoly in that they don't have anyone else to turn to but us. (Mr R. Consultant Neurosurgeon – Teaching Hospital)

Lastly there is elective surgery, which is more likely to face competition; added to this is the geographical factor. For example, Klein (1995) notes that the higher the number of providers in one region, or city, the greater the competition. This is the case in the capital and is reinforced by a prominent London surgeon:

The internal market has caused a lot of damage to the trust. We have a lot of sterile competition at the moment. I mean here we are in West London with three or four competing trusts cutting each other's throats competing for patients, and the results of this hospital confirm that it has been disastrous for us. Only this month we have had operating lists taken away from us, and we are losing beds because we are over-spent. The whole thing is artificial and should be replaced with a more sensible planned system whereby trusts don't compete against each other with a diminishing amount of money. (Prof W. - Professor of Surgery)

Conversely, providers based in rural areas may not face any competition, given their geographical context (Klein, 1995).

The reality of the situation on the ground revealed that, despite the operation of a contracted service, there was evidence that informal dependencies and past relationships persisted; indeed, official rhetoric was modified accordingly.

'Purchasers became transformed into commissioners: recognition that monogamy rather than polygamy characterised the internal market, with most purchasers and providers locked into permanent relationships in which both partners sought to influence the other.' (ibid.:206).

A pertinent example of the continuation of relationships is provided by Ferlie et al. (1996) For example, they note that the Director of Public Health (DPH) continued to hold 'informal speciality meetings with clinicians from different trusts despite the fact that the advent of trusts and competition meant that such meetings were not necessarily appropriate' (p.178). Thus, the theory needs to be separated from the reality. The theory goes:

'Purchasers will be able to specify in their contract with providers the quality of care they expect for their patients. Along with their formal powers purchasers have a range of informal mechanisms for promoting change. They can for example promote discussion and professional debate and can foster a particular organisational culture. All of these mechanisms at the disposal of purchasers depend on their being well informed about patient needs and clinical and organisational issues in the delivery of services. Supplying this information, along with professional medical advice is the role of the director of public health and his or her team.' (CSAG Report on Cleft Lip and Palate Surgery, 1997:83)

The reality is somewhat different, as Klein (1995) aptly notes:

'The logic of the purchasing role is to analyse the health status of the population being served as the first step towards defining 'needs' for health services. This means in turn, identifying those sections of the population or geographical areas where there is a mismatch between health status and health care provision. The bias, in short, is towards identifying inequity – though, in practice, the public health staff of many purchasers still lack the technical capacity for doing so effectively and comprehensively.' (p.234)

Lee- Potter (1997) concurs with Klein when he writes that 'medical input to the new authorities (i.e. district health authorities) came from directors of public health, who were salaried officers and rarely had any detailed knowledge of specialist hospital medicine' (p.181).

Also, importantly, any advice regarding clinical and organisational issues in the delivery of services must come from the experts; from the colleges, specialist associations and the providers themselves. Indeed, purchasers were turning to the specialist associations for advice when it came to purchasing surgical services. For example, in 1994 The British Association of Paediatric Surgeons (BAPS) produced a guide for purchasers of paediatric surgical services and they note in their introduction:

‘Recent approaches by NHS purchasers to the British Association of Paediatric Surgeons (BAPS) for advice has shown that there is a need for specific guidance. The BAPS Executive Committee has therefore compiled these guidelines.’ (p.1)

Another example is breast cancer services. All health authorities received national guidelines on purchasing for breast cancer services.

The British Breast Group which is part of the British Association of Surgical Oncology in their report recommended that a minimum of 50 new cases of breast cancer per year should be treated in order for a unit to be classed as a breast cancer unit. (Mr K.T. – Consultant Surgeon with a Special Interest in Breast Surgery - DGH)

District Health Authorities and GP Fundholders purchasing decisions were based on professional advice; therefore, it is fair to say that the profession was involved albeit indirectly in service planning. According to a breast surgeon purchasers of breast services would only purchase from certain units:

Purchasers are saying that they will only pay for breast cancer services from breast cancer units, and this is happening in most parts of the country at the moment. This is the health authorities who will only pay for certain types of care from groups of surgeons who they know are specialists. (Mr K.T. – Consultant Surgeon with a Special Interest in Breast Surgery-DGH)

If purchasers needed advice from the Royal Colleges, and specialist associations with regard to clinical and organisational issues in the delivery of specialist services, then they also needed the advice from providers with regard to the type of services they offered.

6.5.5 Micro-Operational Level

Prior to the changes the shape and distribution of services arose from an accumulation of individual clinical decisions with managers seeking to administer these arrangements rather than seeking to challenge them. The reforms brought with them institutional changes, namely the introduction of self-governing trusts, managerial control over consultants contracts and appointments, and increased managerial input on regional distinction award committees, as well as the introduction of clinical directorships.

The reforms were central to the intended cultural shift from a producer-led service to a user-driven one. However, the evidence presented thus far suggests that the old-dynamic has not changed. In practice it was the providers who had the expertise and the information about services:

'In the words of one district health authority manager: in the early days, it was like going blindfold into a supermarket with a trolley and asking the staff to fill it up. There was in short, a problem of information asymmetry.' (Klein, 1995:205)

This offered an opportunity for providers to influence the decisions of purchasers. Thus, between 1991 and 1997 GPs began receiving more and more information from hospitals, either from surgeons or management explicitly stating the specialist interests of surgeons, and the services on offer at the trust, as one GP notes:

Since 1990 it has been made much clearer by hospital trusts what it is, they do and who does it. Before 1990 any decisions on referrals were made entirely on what I knew about the surgeons. Now they are publishing a little list of what they do, so we are guided by them in a way that we weren't before. (Dr P. – GP Fundholder – Cambridgeshire)

Other GPs talked about being invited to lectures and seminars given by surgeons:

We are getting constant feedback from surgeons through seminars and lectures organised and delivered by them. (Dr M. GP-Fundholding Practice – North Yorkshire)

Management also jumped on the band wagon according to another GP:

We are getting feedback from management; they are saying Mr O. is a general surgeon with a special interest in vascular surgery and Mr L. is a general surgeon with a special interest in colorectal surgery. This also happens when new surgeons are appointed to post. (Dr D. – GP-Fundholding Practice – Berkshire)

Management involvement in this process is certainly not surprising given the fact that GPs are a source of income for the trust as one general practitioner notes:

When the reforms were introduced trusts saw GPs as the source of their income – because they made money through referrals. I think it was also in the interests of management to make sure that referrals are made to the appropriate surgeon, as inappropriate referrals could potentially lead to a surgeon getting into an area, they are not best suited to and as a result they get poor results in the league table. (Dr P. – GP-Fundholding Practice – Cambridgeshire)

From a surgeon's perspective management's involvement in publicising surgeon's interests is not surprising either, according to a breast surgeon in P:

If management are able to market something, then it becomes attractive to them. For example, a breast clinic...they love that! For example, I said to them don't give me any more publicity because we're just about managing now, if you publicise it, we will get too many referrals...they did, and we have. (Mr K.T. – Consultant Surgeon with a Special Interest in Breast Surgery - DGH)

However, it would be overly simplistic to draw the conclusion that the relationship between purchasers and providers leaves the former without any voice whatsoever. Whilst it may be true that purchasers decisions on service provision are heavily influenced by the plethora of national guidelines laid down by the powers that be in the profession, and information emanating from the providers, there is evidence that purchasers are trying to effect change particularly with regard to waiting times for elective surgery:

What we tend to do is identify areas where we feel the waiting list is too long, and that might be say for cataract surgery – and so we would be putting pressure on the trust for more cataract surgeons to be appointed.

However, he tempers this by saying:

But of course, you know that whenever you do that you have to take the overview – often you can't have more cataract surgeons without there being a cost somewhere else and it's the risk of this which makes us as purchasers use this influence fairly lightly. I mean how do you decide whether somebody on the left with a cataract should get priority over somebody on the right with a diabetic retinopathy. So, although GPs can exert this pressure on trusts it is used fairly lightly, however, it can't be done without the influence of the surgeons themselves – it's got to be both. (Dr P. – GP Fundholding Practice – Cambridgeshire)

Thus, given that the dynamic appears to be intact, is Ham (1999) correct when he notes that: 'the medical profession continues to be dominant and the challenge of corporate rationalisers, especially politicians and managers, has not seriously threatened this dominance at the micro level' (p.173), or conversely, is the reality on the ground more complex?

Klein (1995) concurs with the latter and points out that any analysis of the 'distribution of power between management and consultants in terms of winners and losers' runs the risk of 'oversimplifying a complex situation', given that both consultants and managers 'have a shared interest in institutional survival' (p.244). Indeed, Klein notes that the relationship between the two may be one of mutual dependence and reciprocity.

Managers are reliant on the support of clinicians without which their strategies and targets are unlikely to reach fruition. Failure to achieve targets may affect their position given that the renewal of their contracts is dependent on realization of these. Conversely, if clinicians obstruct and undermine managers their arguments for additional budgetary resources required for the development of services, may fall on deaf ears. Therefore, the post 1991 dynamics at provider level may encourage new forms of adjustment and adaptation between clinicians and managers, as opposed to creating a disparity of power, with managers holding the trump card. (Klein, 1995). This is reinforced by one consultant:

Most networks are set up by doctors – I am the lead clinician HPB surgery at the (Q) Cancer Centre and we've developed a network with all the other hospitals so all big cases come to us but there's been zero funding associated with that for that it's all been through telephone calls, writing letters, visiting people telling them what we can do, telling people very quickly if there's a problem – that sort of thing. And I think it's an area that the management side could help with a lot more – we're now at the stage where the doctors set up the links then the business managers go in and sort it all out – I mean there's got to be give and take because I don't want it to sound like it's us and them because you've got to work together – I feel very strongly that interested doctors advance more than anything else and I think that doctors should take responsibility for management as well as managers. (Mr. L.A.B. – Consultant Surgeon with a Special interest in HPB Surgery – Teaching Hospital)

This mutual dependence takes many forms, and in practice it could be said that the balance of power was tilted towards the former. For example, the arrival of the so-called health care market and competition in the 1990's, pushed managers into proactively developing strategies around the provision of services with targeted action plans to facilitate delivery. Thus, it could be said that managers adopted a more corporate approach in order to preserve services, and progress them further (Davies & Harrison, 2003).

Conversely, as alluded to in (Section 6.4.4) the corporate culture favoured by management could only succeed if clinicians were a part of it. Thus, it was considered essential that all Trusts appoint a clinician into the medical director post, and clinical directorates were formed 'as a means of linking corporate management to clinical activity' (Marnoch, 1996:51). Indeed, given managements increasing reliance on this clinically led model to operate services (Hunter, 1994) in an efficient and cost-effective manner, it could be said that the role of clinical director increased professional power within Trusts. Indeed, Ferlie et al. (1996) argue that the post 1991 market-based system

'led to significantly higher professional involvement in the management process at both strategic and operational levels within units which for senior management may involve some sharing or loss of control to professionals.' (p.183)

In addition, despite the potential for medical audit to become a means by which management hold clinicians to account (see section 6.4.4), medical professionals adopted a proactive approach in developing their own clinical audit tools and methodologies in order to ensure they controlled the

standards in relation to clinical practice. Indeed, it is clinical managers and not senior health service managers, that are responsible for providers' performance against clinical benchmarks (Ferlie et al. 1996).

Given the operation of a 'quasi-market' in which trusts compete management

'may well become dependent on innovative, clinical product champions for new products and services. The reputation of innovative clinicians becomes a prime intangible asset which will affect the Trusts business performance.' (ibid.:192)

Indeed, clinicians were in a strong position in terms of service development especially if their speciality attracted referrals, as one consultant noted:

In terms of liver cancer and problems with the liver and bile duct system – you see what I do frightens other doctors so they are keen to send it on – at the same time when we had the internal market I was encouraged to build a business up by management because whenever we did a case it brought money in through extra-contractual referrals. (Mr L.A.B. – Consultant Surgeon with a Special Interest in HPB Surgery – Teaching Hospital)

Thus, with extra-contractual referrals in mind management were keen to make additional consultant appointments if the trust was attempting to expand a specialty and draw in work from surrounding areas, for example:

Additional consultant appointments have been based largely on attempts by trusts to expand an area of service and hence draw in work from surrounding areas. (Mr J. Consultant Surgeon with a Special Interest in Upper Gastro-Intestinal Surgery – Teaching Hospital)

Although, Mr J. did go on to note that consultants are the main drivers when it comes to service development and provision, and the appointment of additional consultants to the surgical cadre:

However, I would say that the decision about the development of services is made by surgeons within the hospital. It's not a management decision – I would say it is not often a management decision – but it would be the surgeon saying look we have got a single handed vascular surgeon and he can't carry on on his own – so if we are going to provide a vascular service we must appoint another one – that kind of thing. (Mr J. Consultant Surgeon with a Special Interest in Upper GI Surgery – Teaching Hospital)

Clinical directors were also influencing the process on behalf of their consultant colleagues. One in particular was keen to push forward the specialisation debate as hard as he could.

I am pushing for a specialist upper GI surgeon – and this July we are interviewing prospective vascular surgeons, because we don't have a vascular rota here yet, and this is something that I have been pushing for!.. I am pushing forward sub-specialisation here as hard as I possibly can. You can't have in this day and age a large body of patients treated by just any old bloke – it's just not acceptable any more. (Mr M.P.M. - Consultant Surgeon with an interest in Coloproctology and Clinical Director (Surgery) – Teaching Hospital)

Thus, although clinicians were at odds with a corporatist or business approach to health care, they shared management's values in as far as wanting to maintain and develop the trusts facilities. Clearly the greater the success of their trust, the greater chance they have of developing their interests further with management backing. Indeed, this 'empowered' innovative clinicians to 'carve out a niche for their services' (**Ferlie et al. 1996:178**).

Interview data illustrates that at speciality level professionals are proactive in developing services and adopting strategies for long-term growth in order to attract external sources of funding from the wider surgical community.

Mr U (consultant Otorhinolaryngologist) and Mr R. (consultant Neurosurgeon) provide a pertinent example of two surgeons who have perfected a surgical technique which is not only of interest to themselves but has significance for others too, namely the wider surgical community nationally and internationally:

I am an ENT surgeon, but my area of specialist expertise is skull-base surgery. My neurosurgical colleague and I have managed to build up a very strong skull-based practice here... in fact we are one of two centres in the country specialising in this type of surgery. Our reputation has enabled us to attract external funding for a fellowship scheme for visiting surgeons from this country and Europe. In the long-term my colleague and I would like to see the department recognised as an international centre of excellence... this would allow us to attract higher levels of funding' (Mr U. - Consultant ENT Surgeon with a Special Interest in Skull-based Surgery).

In the short-term the attainment of external repute based on scientific capital, associated with the development of a specific surgical technique or approach brings with it scientific authority and symbolic capital – cachet and recognition (**Bourdieu, 1981**), which in turn is converted into economic capital (**Bourdieu, 1986**); in this case, external funding for a fellowship scheme. In the long-term the development of sophisticated techniques and garnering of capital assets such as these could be used to justify specialist differentiation in the area concerned.

6.6.1 The Internal Market in Health Care, the Surgical Profession and the Pace and Direction of Specialist Differentiation

Re-examining the themes of professional autonomy, and the specific areas identified by Elston (1991), the medical profession has never had large-scale 'economic autonomy' since 1948, so there has been no significant change there. In terms of 'political autonomy' this has been retained at the macro-level, where the government is dependent on the expert advice of the profession on health planning and the organisation of surgical services.

The third area of professional autonomy identified by Elston, is 'clinical or technical autonomy'. This is a crucial area of control, as prior to the 1991 reforms 'patterns of service delivery and the growth of new sub-specialities and treatments were largely shaped' (**Marnoch, 1996:12**) by innovative clinicians at the micro-level, with management merely acting as a rubber-stamp for their decisions (**Davies & Harrison, 2003**). Although the reforms post 1991 were designed to curb the power of consultants especially at provider level with the introduction of managerialism and the so-called market in health care, the professional/provider led dynamic appears to be intact despite the wide ranging reforms.

Ironically the adoption of a new managerialist agenda by a government intent on curtailing clinical freedom (**Klein, 1995**) may have inadvertently paved the way 'for a renaissance of professional power', as 'whatever the outcome of the manoeuvrings between doctors and managers the parameters of the management agenda seem likely to remain medically defined' (**Hunter, 1994:18**), none more so than with regard to the regulation and control of clinical standards and practice.

6.6.2 Collective Professional Autonomy and Specialist Differentiation

The NHS reforms were regarded by many as revolutionary in terms of their reach and their implications for the medical profession (**Hunter, 1994**). For the first time the state was threatening the very autonomy of the profession, a central tenet of Salter's (2004) triangle of intersecting forces. In adapting to this threat, the surgical profession increased its 'collective professional autonomy'. Collective professional autonomy has two central strands running throughout, namely: Developing clinical guidelines and models for national minimum standards of service provision; and explicitly delineating best practice, and in doing so providing exactness and 'visibility' to the standards against which surgeons' clinical skills could be evaluated (**Klein, 1995**).

Although the profession has always had the right to self-regulation (i.e. to set its own standards and control clinical performance), control from the Royal Colleges was often lax in the hospital context, with the effect that poor clinical standards went unnoticed. Collective professional autonomy therefore introduces greater centralisation and control over individual clinicians, as well as giving the profession, enhanced political autonomy as national minimum standards of service provision and strategies are developed for government, purchasers of health care and trust managers.

The question is how has collective professional autonomy effected the pace and direction of specialist differentiation in surgery?

The surgical profession is not a homogenous body; on the contrary it comprises 'many groups with different identities, many values, and many interests' (**Bucher & Strauss, 1961:326**). Indeed, this has led many to argue that the surgical profession is 'more tribalistic than collegiate' However,

'an exception occurs when the profession is under threat or perceives itself to be so. Then a united front is put up as doctors combine against a common foe' (Hunter, 1994:19); the internal market and the new managerialist agenda provided such a threat.

Given that the internal market reforms were the most far-reaching since the inception of the NHS; and given the potential implications of a market in health care, this provided the necessary platform for the profession to call for the introduction of clinical guidelines and for a radical restructuring of surgical services across the country.

Specialisation and sub-specialisation seemed to be the order of the day, as the specialist associations; the Senate and the Royal Colleges were united in calling for greater centralisation of specialist services, with volume and outcome becoming the terms in vogue. However, beneath the surface of the veneer of unity it was highly likely that opposing agendas were operating; Bucher and Straus (1961) noted this with regard to the professions public relations front whereby the profession negotiates with relevant special publics. They note that:

'The outsider coming into contact with the profession tend to encounter the results of the inner group's efforts; he does not necessarily become aware of the inner circle or power struggles behind the united front.' (p.332)

In this case the special publics were the state, and as noted earlier in the chapter whilst specialisation (i.e. sub-specialisation and super-specialisation) were welcomed by the Senate of Surgery; the Royal Colleges and the plethora of speciality associations which represented the surgical specialities; specialist differentiation was a different matter entirely. The specialist associations, for example, the Association of Surgeons of Great Britain and Ireland (ASGBI), representing the speciality of general surgery and its various sub-specialist branches were keen to keep the speciality united and avoid fragmentation. Conversely, many of the sub-specialist branches had other agenda's, indeed the internal market provided the platform which enabled specialist surgery to participate in the setting up of clinical guidelines, as well as service planning which it had not been able to do during planning stages of the NHS in 1947/48, as many of these groupings had yet to be founded.

Given this, the leading lights in many of the sub-specialist branches were keen to set up their own speciality separate from general surgery, for example, vascular, laparoscopic and paediatric

surgery respectively, set out rules and guidelines directly relating to the type and number of procedures which sub-specialists in these areas should carry out.

The leaders or pioneers of these groups are predominantly found in the highly specialised world of the teaching hospital, located in the large urban centre. Therefore, the rules and guidelines regarding the type and number of procedures which sub-specialists in these areas should carry out reflected the volume and output which these centres could generate given the staff levels and population bases they served as one consultant noted:

The guidelines are drawn up by people in teaching hospitals who have a different perspective on things. I remember I was at this breast meeting and this professor from a teaching hospital was laying down the law on how many breast clinics should be run, and how quickly patients should be seen and so on. And somebody stood up and said that I happen to know that your unit is quite well staffed, could you give us some figures, so we can compare them with the average DGH (District General Hospital) and he wouldn't answer. (Mr K.T. – Consultant Surgeon with a Special Interest in Breast Surgery - DGH)

However, the guidelines ruled out DGH's with fewer consultants', smaller population bases and lower volume output. For example, a consultant from a DGH notes:

These guidelines which the associations set impossible goals. For example, when I went along to the Association of Endoscopic Surgeons meeting they were saying that unless you're doing 200 laparoscopic cholecystectomy (gallbladder) a year you shouldn't be doing them; if you're not doing a certain number of advanced laparoscopic cases per year you shouldn't be doing them; now in a place like (G) we'll only get one or two splenectomies per year open. Likewise, when I go along to the upper-GI meeting the goal posts get moved; unless you're looking after a million patients you shouldn't set up an upper-GI unit, and that's the latest thing that's come from the association. (Mr A.E.P. – Consultant Surgeon with a Special Interest in Upper-GI Surgery – DGH)

Thus, the guidelines specifically drew demarcation lines between the specialist and the generalist with regard to certain procedures, another example being paediatric surgery. All specialist paediatric surgery had to be dealt with by specialist paediatric surgeons in specialist centres, leaving minor paediatric surgery to general surgeons in district general hospitals:

Here in (G) we have six general surgeons, one of which has a specialist interest in paediatric surgery. He will do the more general sort of stuff like appendectomies, inguinal hernias and so on. Anything more complex would just have to go to (H)...and that's just the way it is...and the British Association of Paediatric Surgeons have produced guidelines on this. **(Mr B.T.A. – Consultant Surgeon with a Special Interest in Vascular Surgery – DGH)**

In setting specific guidelines and rules the aspiring specialist groups wanted to create a 'closed shop' around their area of specialist knowledge, as one consultant notes:

The specialist lobby has become stronger, and for them to have drawn up rules of specialisation and sub-specialisation and super-specialisation, they will make it more and more of a closed shop and less and less general surgery, thus running a closed shop around their area of knowledge gives them power. (Mr C.A.V. – Consultant Surgeon with a Special Interest in Vascular Surgery - DGH)

Running a closed shop around their area of expertise, enables groups to control their knowledge base through regulating 'the conditions of access to the right to declare oneself a member of the group' (Bourdieu,1986:23). This enables groups to exercise surgical authority and power, a form of social capital which supports the control of the examining and teaching systems (Bourdieu, 1981). In addition, to the power of surgical authority, the specialist groups derive scientific capital (associated with advances in technology and surgical knowledge), and specific cultural capital (not unlike an art, 'it can only be acquired in the long-term, and at first hand' (Bourdieu, 1988:59)). The accumulated types of capital is then converted into political capital, in the form of lobbying power in the surgico-political arena at the macro-national level.

Thus, there is undoubtedly a political logic behind the moves described by the surgeon above; clawing in work from difficult cases from the hands of their generalist colleagues in district general hospitals, lends weight to the argument that difficult cases should be performed by specialists, hence justification for their calls for specialist status.

Given the fact that the government takes onboard these professional guidelines, clearly this is a situation where the micro is effecting the macro and in turn the macro effects the micro. Clearly these guidelines could not be ignored and had to be taken onboard by surgeons and management

alike not only for clinical reasons, but also because of medical litigation which would not only be costly to the consultant but also the trust concerned:

These professional guidelines are impossible to ignore because they are generally taken on board by government and by the management of the trust. So even though you might feel confident in treating a particular condition in the same way one has done for years pretty soon one could find oneself out on a limb and it's always the same in surgery – it's fine if things go well, but if something goes wrong then you could do it 999 times beautifully with no complications, but then if you have one thing that goes wrong – and if you are contravening the latest guidelines – then you will be exposed to litigation and criticised, despite your considerable experience. (Mr B.T.A. – Consultant Surgeon with a Special Interest in Vascular Surgery – DGH)

The guidelines can stop surgeons from practising in certain areas, take breast cancer, for example, GPs no longer refer patients to surgeons who are not recognised breast cancer specialists. Also, surgeons who are not recognised breast specialists may feel vulnerable medico-legally. (Mr K.T. – Consultant Surgeon with a Special Interest in Breast Surgery – DGH)

Trusts also faced a plethora of guidelines from the profession and government on the management of certain conditions and specific areas of practice for example, cancer, head and neck. The guidelines on cancer and head and neck surgery pushed trusts into developing certain areas in specific ways which had to be sustainable at consultant level. Obviously, this had the effect of directing resources towards certain areas of practice as a consultant and trust medical director notes:

We are under particular pressure to appoint specialists in recognised areas laid down by the profession and reflected in Department of Health policies, for example cancer, and head and neck. This is pushing us into boxes of practice that will require being sustainable at consultant level more than two consultants in each of these specialist areas. (Mr S. – Consultant Surgeon with a Special Interest in Coloproctology and Trust Medical Director – DGH)

Thus, the collective professional autonomy, described by Klein (1995), introduces greater centralisation and control over the individual clinician's ability to exercise clinical freedom with regard to the types of procedure which they carry out. In particular district general hospital surgeons found themselves disadvantaged by this, in contrast to consultants in the large teaching centres who found themselves more empowered given the fact that many of them drafted the guidelines.

This inequity between teaching hospitals and district general hospitals has always existed and is not something which came about as a result of the internal market. Indeed, as alluded to in (Chapter five, section 5.5.2) teaching hospitals association with medical schools brought with it status which, combined with their social, and economic capital, enabled them 'to attract better staff and still further resources which enabled them to influence NHS policy more generally' (Pollock, 2004:88).

The ability of teaching hospitals to attract the most talented was fully utilised during the years of the internal market. Indeed, Pollock suggests that it was customary for the large teaching hospitals to head hunt specific clinicians from their neighbours in order to develop particular specialist services, and in doing so, vie for additional patient income. Pollock provides a pertinent example of this practice:

'a research professor in gynaecological cancer was brought over with fifty staff from Bart's with the promise of several million pounds of infrastructure. The professor was alleged to have said that it cost UCLH and UCL more to get him than it cost for Real Madrid to buy David Beckham.' (ibid.:106)

6.7.1 Intra-Professional Specialist Differentiation: Push and Pull Factors

Collective professional autonomy is forcing a trend towards sub-specialisation. For example, in a single clinical speciality such as general surgery the guidelines and protocols set out by the Senate, the Royal Colleges, the specialist associations, the Calman-Hine Report (1995) and Calman Report (1993) are forcing a trend towards sub-specialisation, whereby consultants will

specialise in areas such as breast surgery, or colorectal surgery. This necessitates consultants giving up areas of work where they are deemed not to have carried out a sufficient number of procedures to attract Calman-Hine accreditation.

Thus, collective professional autonomy generally speaking had the potential to be advantageous in terms of capital accumulation for aspiring groups wishing to break away from the parent speciality. In this respect it could be said that it had the potential to increase the pace and direction of intra-professional specialist differentiation. However, paediatric, and maxillofacial surgery were the only areas to successfully separate from general surgery in 1992 and 1994 respectively; whether paediatric and maxillofacial surgery's success can be attributed to collective professional autonomy alone is unlikely as this raises questions regarding vascular surgery's lack of success.

There are financial constraints on sub-specialisation and specialist differentiation; indeed, financial realities meant that such developments had to be balanced against providing a service. Although, in major teaching centres which employ more surgeons, there may be more opportunity for certain areas to withdraw from the general surgical take conversely, in smaller trusts with fewer surgeons and less money this is impossible, and the priority is to:

Maintain an appropriate level of General surgery without crippling the service. (Mr M. Chief Executive Officer – DGH)

Thus, although the ideal for clinicians may be to encourage the development of specialisation, and for some specialist differentiation, conversely, having a totally specialised service is unattainable as one Professor of Surgery notes:

Because there is a limited budget for health care in this country which really shows no sign of expanding there has to be a limit to the type of service that you can provide. Running a totally specialised service in this country so that every patient who comes into hospital is treated by a specialist in that particular area of practice, at the moment is unattainable because we do not have enough surgeons in this country...we are desperately short of surgeons in this country. (Professor S.W.W.– Professor of Surgery)

This is not specific to general surgery; on the contrary areas such as orthopaedics have experienced significant changes over the last two decades (**Frostick & Wallace, 1993**). Total joint replacements, joint arthroscopy, and major spinal surgery have all developed into significant sub-specialist areas resulting in surgeons' reluctance to remain on the general orthopaedic take:

The trust has a problem with specialisation. For example, here the orthopaedic surgeons are asked to do the general orthopaedic take, but they are reluctant. They are saying how can I remain on the general take when I haven't touched anything but knees on an elective basis for the last ten years? This is a very valid point for example, if your granny has a fall and breaks her hip do you want somebody operating on her hip who has had little throughput of anything else but knees for the last ten or so years? The answer is no you don't! So, the pressure is there to appoint more hip surgeons, but obviously this will cost the trust money. (Mr H.W.W. – Consultant Orthopaedic Surgeon with a Special Interest in ACB (Anterior Cruciate Ligament Reconstruction – Teaching Hospital)

In addition, trusts not only faced pressure in terms of balancing service provision and development against available resources, they also faced additional pressure from the profession, namely the Senate of Surgery of Great Britain and Ireland, the Royal Colleges and specialist associations which issued guidelines on training and staffing requirements. The Senate of Surgery of Great Britain and Ireland (1997) and The Royal College of Surgeons of England (1997) recommended larger hospitals of 450,000-500,000. Thus, in general surgery, for example, this would allow:

'fifteen general surgeons to cover the sub-specialities of vascular, breast, endocrine, upper GI, hepato-pancreatico-biliary surgery, coloproctology and general paediatric surgery. This complement would provide at least two consultants per major sub-speciality, enable site specific specialisation to meet the recommendations of the Chief Medical Officers' Expert Advisory Group on the Provision of Cancer Services and allow a four man emergency vascular surgical rota in addition to a general surgical rota comprising the gastro-intestinal surgeons and others.' (The Senate of Surgery of Great Britain and Ireland, 1997:19)

In practice, however, the recommendations proved problematic for trusts serving a population of 200,000 and under, and the Senate of Surgery of Great Britain and Ireland, hoped that these problems could be overcome by amalgamating:

‘adjacent smaller trusts into larger units, the hub-and-spoke delivery of specific surgical services between major speciality centres and smaller units or the rationalisation of speciality services between separate trusts, with stratification of patients according to clinical need.’ (ibid.:21)

Trusts were also faced with the introduction of the Calman training scheme. Although, it was beneficial to clinicians in larger centres, this was not the case for small DGH’s. For example, the Vascular Surgical Society of Great Britain and Ireland guidelines on the provision of vascular surgical services states that:

‘The Calman Training System means that there is a need to train doctors against a background of shorter working hours and in a reduced time. This means that the centres at which they are to learn must have sufficient clinical volume, expertise and facilities to provide adequate experience. There needs to be enough consultant staff with the time to supervise and teach.’ (Darke, 1997:2)

In addition, given the shorter training period of

‘between five and six years in a surgical speciality trainees will acquire expertise in a narrow field with less general experience in that speciality than prior to the introduction of the Calman training scheme in 1996.’ (Royal College of Surgeons, 2000:12).

Although this may be beneficial to aspiring groups pursuing the professional project with the ultimate goal being intra-professional differentiation, it has implications for general emergency cover, as a prominent Professor of surgery notes:

The Breast surgeons will come off the on-take rota, as they won’t be sufficiently well trained with Calman – hyper-specialisation and shorter-training – they may be good at getting rid of a breast lump but won’t have a clue about how to deal with an emergency perforated colon. (Professor S.W.W. – Professor of Surgery)

On the other hand, as we will see below in the discussion of vascular surgery, private practice complicates matters, as it can provide incentives *not* to specialise or sub-differentiate.

6.7.2 Vascular Surgery: Two Steps Forward and Three Steps Back

The effect of push and pull factors is highlighted by the failure of vascular surgery whose journey along the path of the professional project was halted abruptly. This can be attributed to four factors: the demography of the country, a shortage of surgeons across the country, issues relating to recruitment and lastly private practice.

One of the leading lights in the field of vascular surgery and The Vascular Surgical Society of Great Britain and Ireland (VSGBI) explained why the vascular surgeons were back tracking on their original aims of 'pure' speciality status for vascular surgery:

Things have rather slowed down rather than reversed. Basically, from the data on workload a population of around 150,000 will generate an appropriate caseload for one consultant vascular surgeon maintaining expertise and teaching. Thus, an ideal vascular unit would be a minimum of four consultant vascular surgeons catering for a population of 600,000 or more. But the geographical reality in this country is you cannot do that. (Mr X.T. – Consultant Vascular Surgeon and Leading Light in the VSGBI)

Mr XT. goes on to note that:

Although places like London should be amalgamating hospitals in order to produce what I call the 'eclectic' hospital serving 600,000⁵¹ with four teams of everything in it. But I've just been up there, and Bromley, Dartford, Lewisham and Greenwich with a combined

⁵¹ The Vascular Surgical Society of Great Britain and Ireland's figures for the provision of a vascular service were slightly different from those advocated by the Royal College of Surgeons of England. The VSGBI advocated one vascular surgeon per 150,000 head of population, in contrast to the RCS which advocated one per 100,000+ head of population (Darke, 1997).

population of 1.2 million have five pathetic little hospitals all of them with around 400 beds, none of them eclectic. (Mr X.T. – Consultant Vascular Surgeon – VSGBI)

However, although the idea of grouping together trusts in order to provide a service for a much larger population of patients is also a sensible solution to the vagaries of providing a service. The problem of course is combating the vested interests which are at stake. For example:

The reforms have produced pressure for trusts to group together to provide a vascular service for a large population of patients. At present we have two vascular surgeons at the (BR) for a population of 450,000, whereas if you take the recommended figure advocated by our society, then we should have another vascular surgeon. However, financially speaking this may be a problem, so if you had two or three hospitals grouping together and pooling resources, you could bring the population up to well over a million then you might be able to have seven or eight vascular surgeons. This would certainly be cheaper than either the patient being sent off to (OP) as an extra-contractual referral, or the patient being bumped off and the hospital being sued because the patient was treated by someone who was not appropriately qualified. However, in practice grouping hospitals together is difficult as there are vested interests at stake. (Mr G.B. – Consultant Surgeon with a Special Interest in Vascular Surgery - DGH)

This is not to say that the grouping of some hospital trusts has not been successfully achieved, however, in practice these have tend to be large teaching hospitals in London which were offering the same service. For example, St Thomas', Guy's, and King's all merged as one medical school under the recent reforms of medical schools in the capital, thus enabling a grouping together of service provision:

St Thomas', Guy's and Kings all have vascular surgeons who are general surgeons with a special interest in vascular surgery. They will cover each other for vascular emergencies and will each be appointed to all three hospitals for emergency work. They will come off the general take and become 'pure' vascular surgeons. This is likely to happen within the next year. This could also happen within other large cities such as Manchester and Birmingham. (Mr J.T.B. Consultant Surgeon with a Special Interest in Colorectal Surgery)

Thus, without any major rationalisation or grouping together of trusts the reality on the ground was that over half of the hospitals in the UK did not conform to the recommended population base:

The needs of patients in vascular surgery is best served by specialisation. But there are demographic limitations and you cannot put adequate teams for emergencies in every single hospital. It comes down to what I call the 'eclectic' hospital serving a population of 600,000 with a four man vascular rota. But the reality of my data shows that this will never be realised in over half of the hospitals because of demography. For example, you cannot afford to have four vascular surgeons when you only have enough work for one and a half of them. So, if you were going to employ those people cost-effectively, they would have to have another interest, because only half of their time will be spent doing vascular surgery.

(Mr X.T. – Consultant Vascular Surgeon – VSGBI)

However, this problem is not peculiar to vascular surgery, according to another leading light in the field of coloproctology namely, Professor S.W.W. In particular Professor S.W.W. talked at length about specialisation and service provision, and in particular the difficulties of providing a specialist service within the context of the NHS:

There are problems with providing a specialist service within the NHS. Next year I am President of the Association of Colorectal Surgeons, and we are quite clear that there is no way that we can actually break away from general surgery if that means saying I will not take part in the general surgical emergency take. Now there are some hospitals in this country where there are 'pure' colorectal surgeons, for example St Mark's Hospital in London, which is a specialist hospital. There are also 'pure' vascular surgeons many more than colorectal surgeons, for example, at St. Mary's Hospital in London the Professor of Surgery is a vascular surgeon and he does not do the general take. The breast surgeons have broken away, apart from one or two areas and the problem is they are now no longer competent to deal with emergencies. Now the vascular surgeons were moving along this line and they said that they wanted to break away but representatives from the higher echelons of the vascular surgical society speaking at the MMS the other night were backtracking on this idea. (Professor S.W.W. - Professor of Surgery)

When asked why he felt the vascular surgeons had backtracked on their original aims, and indeed why his own specialist association had decided not to break away from the general take, he gave

two reasons for this. Reasons which he felt were driving against further specialisation within general surgery:

Ok you have two things driving against specialisation. One is the health service having to provide it; two, is the realisation that it's not demographically feasible. (Professor S.W.W. – Professor of Surgery)

As alluded to earlier the third factor which halted the ambitions of vascular surgery is the issue of recruitment, which is related to personal career prospects and private practice:

Personal career prospects is another factor which basically changed our philosophy. A lot of young men are now coming through who do not want to do “pure” vascular surgery, they want to do something else as well; so they want breadth to their work. And of the course the factor which always comes into play even though many of us won't admit it, and that is the issue of private practice. Because the majority of vascular conditions will be handled as an emergency, this cuts down the scope for private practice. (Mr X.T. – Consultant Vascular Surgeon – VSGBI)

This clearly shows that, owing to several factors, vascular surgery was not able to operationalise its knowledge or technological expertise. In particular it is interesting to observe Bucher and Strauss' (1961) point regarding the different identities and interests which may be present in 'master segments' (i.e. specialties) played out here within a 'segment' (i.e. a sub-specialty of general surgery and sub-sub-specialty of the field of surgery). Therefore, within the sub-specialty field of vascular surgery, there will be the leaders pursuing the professional project towards 'pure' specialty status and the rank and file members (including new recruits), who may or may not be fully cognisant of the objectives of the leaders. Indeed, Larson (1977) suggests that the professional project is not a 'deliberate' or conscious effort for all members of the group, and for some members, this may have little or no importance. For example, in reality, economic, and symbolic capital (attached to private practice), were more important to rank and file members; this capital could be put at risk if vascular surgery were to differentiate from general surgery. As alluded to in section (6.3), vascular surgery benefitted from the social capital and the combined specific forms of capital, such as economic and symbolic capital, through its membership of the ASGBI.

6.8 Summary

The period 1990 to 1997 was a period during which specialist surgery became firmly entrenched in the surgical parlance of the United Kingdom; a period affording opportunity for aspiring specialist groups to accumulate capital at the micro-hospital level; capital which had the potential to be transferred as lobbying power in the macro-surgico-political arena. For example, inter-professional interdependence between clinicians and management proved conducive in the development of new esoteric techniques, and collective professional autonomy (**Klein, 1995**) with its plethora of guidelines allowed clearer demarcation lines between procedures and areas of expertise.

Despite, conditions being generally favourable for specialist differentiation between 1990 and 1997, paediatric surgery and maxillofacial surgery were the only areas to break away from the corpus of general surgery in 1992 and 1994.

It would be simplistic to attribute paediatric surgery's success primarily to accumulation of capital during this period, and vascular surgery's lack of success to missed opportunities in terms of capital accumulation. Clearly the conditions operating from 1991 onwards; in particular the profession's emphasis on service guidelines provided paediatrics and maxillofacial surgery with the catalyst needed to self-regulate, conversely, the foundation for their success was laid prior to 1991.

According to one informant, paediatrics broke away in 1992. Although there are references to the paediatric fissure in the minutes of the Royal College of Surgeons, details regarding the political process are absent. It is possible that they were discussed in additional documents, but these do not survive in the College archive and it was not possible to trace them. Interviewees, including three paediatric surgeons, were unable to shed further light on this issue. Nonetheless a hypothesis can be formulated: clearly the origins of the split have to be sought further back than 1991, as one year could not have sufficed to bring about such a dramatic change. It will be argued more fully in chapter 7 that paediatrics had long been accumulating perceptions that children deserved to be treated by specialists with an understanding of their 'particular needs' (**Craft, 2003**) This, rather than the reforms of 1991, is likeliest to lie at the root of paediatrics becoming a self-regulating independent speciality.

A similar picture obtains for maxillofacial surgery, which separated in 1994 (www.baoms.org.uk/page.asp?id=48). As with paediatrics, documentation about the politics is not forthcoming, but one can confidently reconstruct the origins of separation as lying well before 1991. Already in the late 1980s, it became compulsory to obtain a dual qualification in dentistry and medicine, so that it became distinct from other areas of general surgery, with the effect that, in due course, separation would cease to be politically contentious. Thus, even allowing for the capital accumulated during the early years of the internal market, the seeds for specialisation were sown prior to 1991.

Vascular surgery not unlike paediatrics and maxillofacial surgery was able to accumulate capital prior to 1990; in particular it was able to develop a distinct knowledge and technical skills base demarcating it from general surgery. However, unlike paediatrics, conditions were not operating in favour of vascular surgery separating from general surgery, both internally and externally. Clearly the case of vascular surgery re-emphasises the underlying theme running throughout the thesis, namely that knowledge and technology delineate areas of expertise, however they do not determine the outcome of the professional project.

Ironically, the professionally driven growth of knowledge and technology and demand for specialist services may impede further differentiation, given the financial injection required to fund it. Specialist differentiation has reached a point at which its progress over the years has peaked; and although 'clinical networks' (**Edwards, 2002**) may be a solution to geography and manpower issues, however the powers that be in the profession within the senate of surgery and the individual specialist associations may wish to hold off further differentiation for as long as possible.

The speciality of general surgery provides a pertinent example here. The chapter has clearly shown that the Association of Surgeons of Great Britain and Ireland (ASGBI) has much 'political capital' both inside and outside of the surgical establishment. Further differentiation within this speciality could possibly threaten this. Therefore, the powers that be within the association may wish to maintain a broad and inclusive church and forestall any attempts at differentiation before they reach the Senate. The example of laparoscopic surgery covered at the beginning of the chapter provides a seminal example of this.

CHAPTER SEVEN

Possible Future Scenarios in the Surgical Field

7.1 Introduction and Aims

At the time of writing (2007) the surgical field comprises nine specialities. In this respect the field has remained unchanged since the creation of the speciality of paediatric surgery in 1992, and maxillofacial surgery in 1994.

The time has now come to consider how the field might change in future years. This thesis has consistently argued that the instances of specialist differentiation in surgery which arose in the past were not inevitable, but only came about thanks to the right combination of variables being in place at the right time. Similarly, we do not regard future developments as inevitable, and accordingly it is not possible to make straightforward predictions about what *will* happen. However, one can predict what *would probably* happen if particular combinations of variables were to arise. It is in this spirit that we shall attempt prediction in what follows.

The surgery of the twenty-first century is radically different to the surgery practised during the nineteenth and indeed the first half of the twentieth centuries. Specialist differentiation has fragmented the once united surgical corpus, and the surgical Colleges, the bastions of the 'old-surgery', have been obliged to congregate around the 'new-surgery.' The 'old-surgery' was general and expansive in nature, almost colonial in its reach, whereas the 'new-surgery' is highly specialised and compartmentalised into unique bodies of knowledge and skill. These in turn have been further compartmentalised through sub-specialisation and super-specialisation, resulting in internal fragmentation. Many in the field question how far this process will go, and indeed whether it is necessary.

Just as the surgery of the twenty-first century is markedly different to the surgery practised during the nineteenth and the first half of the twentieth century respectively, many of the challenges facing surgery in the twenty-first century are also different.

It has been argued throughout this thesis that Surgery is a social field like any other, so that it will interact with, and face challenges from, other social fields and its environment. The outcome of these challenges and interactions will affect the surgical field as a whole. In particular, given the differentials in power and interests, and the struggles and strategies which characterise the field, the interaction will effect the field's individual components, namely the specialities, and the way they interact with the field as a whole and each other. In addition, the field will face directives and

policies from the wider professional field it belongs to (i.e. the medical profession). Thus, the potential for further specialist differentiation in surgery will depend on the outcome of these complex interactions.

7.2 The Surgical Field: Challenges from and Interaction with Other Social Fields

Since the inception of the NHS (5th July 1948), the surgical profession has been obliged to enter into a relationship, and interact, with the state. This relationship is a central tenet of the Triangle of Intersecting Forces. The triangle is maintained in a state of equilibrium by the mutual dependency which bind the fields which make it up, namely the medical profession, the state and civil society (**Salter, 2004**).

This equilibrium was disturbed in the 1980s and early 1990s when the government attempted to invade, what Salter describes as, the 'sacred territory' of clinical autonomy within the NHS. The surgical profession was subsequently faced with new challenges following the election of a labour government in May 1997, intent on pushing through a performance agenda. The White Paper *The New NHS: Modern Dependable* emphasised that future performance would be assessed not only in relation to 'efficiency and cost-effectiveness' (**Ham, 1999:56**), but more importantly in relation to 'health improvement, fair access, effective delivery of appropriate healthcare, patient experience and health outcome' (**DOH, 1997:64-65**).

With the emphasis on standards of delivery, NHS Trusts were one of the central organisations in the structure developed by the Blair government (**Ham, 1999**). Indeed, the government established 'a new statutory duty for Trusts to work in partnership with other NHS organisations e.g. Primary Care Groups and health authorities'. Additionally, Trusts were expected to 'participate in strategy and planning by helping shape the local health improvement programme (HImP)' (**DOH, 1997:45**).

Continuing the emphasis on partnership, the government was keen from the outset to promote the closer involvement of clinicians in drafting service related contracts with commissioners, and in ensuring greater parity between Trusts' financial and clinical priorities (**DOH, 1997**).

In addition, trusts were expected to embrace the concept of 'clinical governance'. Chief-Executives would be held ultimately responsible for ensuring the quality of the services provided by their trust, and the White Paper proposed that each Trust should establish a Sub-Committee of the Board led by a senior member of the consultant body with responsibility for steering the quality agenda.

Additionally, National Service Frameworks would be established for major areas of care and key disease groups in order to ensure consistency of approach and quality in patient care across the NHS (DOH, 1997). There were also proposals for a National Institute of Clinical Excellence (NICE) in order to 'give new coherence and prominence to information about clinical cost-effectiveness' (ibid.:58). This would be achieved through the production and dissemination of guidelines related to clinical care and the use of audits (Baker, 1998).

The White Paper also proposed the creation a Commission for Health Improvement (CHI), in order to ensure excellence throughout the health service. It was intended that these arrangements would, in conjunction with the introduction of clinical governance, ensure that there were more robust measures in place to systematically review and continuously improve on quality standards (DOH, 1997). This was indicative of the government's commitment 'to put quality at the heart of the new NHS' (Ham, 1999:60).

Quality and patient care were catapulted onto the public stage on the 29th of May 1998, following the GMC's ruling

'that two surgeons from the Bristol Royal Infirmary were guilty of continuing to operate on children with heart defects when they knew their death rates were unacceptably high. In addition, a doctor manager was found guilty of failing to stop the operations after he had been alerted to the high mortality.' (Salter, 2004:123)

The government responded by announcing that 'for the first time in the history of the NHS hospital Trusts were to be held legally accountable for the quality of the service they provided'⁵² (DOH, 1998a. cited in Salter, 2004:128). Additionally, the consultation document *A First class service: quality in the new NHS* which followed this announcement stated an expectation of 'a

⁵² 'The requirement was subsequently given statutory force by the Health Act, 1999' (Salter, 2004:128).

management-led system of clinical governance designed to set and monitor clinical standards' (DOH, 1998b. cited in Salter, 2004:128). The government's

'definition of the new managerial concept of clinical governance was a framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.' (DOH, 1998b:33. cited in Salter, 2004:128)

Professional self-regulation, a sacred tenet of the Triangle of Intersecting Forces also became a target for state intervention (Salter, 2004). The consultation document noted that 'if public confidence in doctors so seriously dented by events such as Bristol is to be restored, self-regulation must be modernised' (DOH, 1998b:33. cited in Salter, 2004:128). It was therefore proposed that self-regulation be situated in the public arena i.e. 'within a state-administered apparatus of accountability' in order to ensure that it be 'open to public scrutiny, responsive to changing clinical practice and changing service needs, and publicly accountable for professional standards set nationally and the action to maintain those standards' (DOH, 1998b:para.3.44. cited in Salter, 2004:128).

Thus, it could be argued that Bristol was fortuitous as it opened a window onto the political agenda, which the government utilised with great gusto. Indeed, it is highly likely that the government was planning to clip the wings of doctors by restricting their professional freedom (Salter, 2004) before the Bristol debacle, given that the government's statement in the 1997 White Paper noted that, although it would 'continue to work with the profession, and its regulatory bodies', its aim was to 'strengthen the existing systems of professional self-regulation by ensuring that they are open, responsive and publicly accountable' (DOH, 1997:59).

Be that as it may, the profession was facing a serious challenge to its self-regulatory powers from the state. It also faced mistrust from the general public (civil society). Thus, the relationship between the public (civil society) and the profession, another central tenet of the Triangle of Intersecting Forces had also been destabilised (Salter, 2004). Certainly, the relationship between the surgical field and the state, could be described, as one of open challenge to the symbolic capital of the surgical profession, that is to say, the prestige associated with its expertise. Thus, in challenging the surgical profession, the state garnered symbolic capital (credit and reputation) from the general public (civil society).

Indeed, public feeling over the Bristol issue was so strong that in June 1998 a government inquiry was announced with an extensive brief and resources, to investigate ‘the management of complex paediatric heart surgery at the Bristol Royal Infirmary Trust’ (**Salter, 2004:123**). The policy window was well and truly open, and other events made sure it remained so ⁵³

It could be said that Bristol was a watershed in the relationship between two social fields: between civil society and the medical profession as a whole and in particular surgery. However, despite the fact that Bristol was a defining moment in this relationship, it was also a sign of wider societal changes: the ‘erosion of deference,’ increased media activity, and a society ‘whose members were far better educated than their predecessors’. It was also ‘a society experiencing rapid technological change’ (**Klein, 1995:134**). Indeed, science was pushing forward the boundaries of knowledge, and the medical profession played a central role in this. As surgery became more and more highly specialised, guidelines proliferated, and new procedures abounded, so the public’s expectations became correspondingly greater. This is a pertinent example, of interplay between fields. Indeed, fields are not isolated in space, on the contrary, fields interact and occurrences in one field can have an effect on adjoining fields (**Thomson, 2014**), as is the case here between civil society and the medical profession.

This impacted on the field of private health care, as the owners of private health care facilities (BUPA, NUFFIELD) graded procedures and laid down guidelines regarding the number of procedures surgeons had to carry out, linking this to the fees they could earn, as an orthopaedic surgeon notes:

BUPA insists on a certain number of procedures for hips and knees, and they’re talking about having a premium or reduced fee for people who have done fewer than 20 hips a year or 15 revisions. (Mr E.M. Consultant Orthopaedic Surgeon with a Special Interest in Joint Revision Surgery – Teaching Hospital)

In addition to this the surgical field was faced with the implications of policies introduced by the government through the Department of Health (DOH) during the 1990’s. For example, the New Deal on junior doctors’ hours, which was fully implemented in 1996, and the European Working

⁵³ A plethora of other cases also came to light, most notably the Royal Liverpool Children’s Hospital Trust, Alder Hey with regard to the retention of children’s organs and the GP, Dr Harold Shipman who was found to have killed 215 of his patients (**Salter, 2004**).

Time Directive (EWTD) (1998) which required the implementation of a 48 hour working week for consultants (**Royal College of Surgeons, 2000**).

As well as facing challenges from, and interacting with other social fields, the surgical field also faced challenges from the wider professional field in the shape of policies which had been developed by the profession for the Department of Health (DOH). The policies concerned, such as, the Calman training scheme (1993), and the Calman-Hine Report (1995) on the provision and organisation of cancer services, had the potential to effect the surgical field, especially the individual specialities.

In addition to facing challenges from, and interacting with, other social fields, the surgical field, like other social fields, has to interact with its environment. For example, the surgical field interacts with the environment which the NHS occupies. Thus, it has to contend with the logistics of providing a service given particular demographic factors.

7.3 The 'Triangle of Intersecting Forces': A State of Equilibrium

Despite the state's incursion into the hallowed turf of professional self-regulation through its newly created regulatory agencies NICE (The National Institute of Clinical Excellence), and CHI (The Commission for Health Improvement) the state had overlooked the fact that without the profession's help its policies could not be operationalised.

As soon as NICE was set up in 1999 it was obvious 'that to fulfil its mandate regarding national standards it would require the cooperation of the medical and surgical Royal Colleges' and specialist societies', as 'they control the essential knowledge resources' (**Salter, 2004:155**).

The foundation of CHI promised swift political results for the state through its proposed monitoring and evaluation remit. However, in practice non-medical agencies such as these were unlikely to succeed in infiltrating the hallowed territory of clinical practice without the help of clinicians, especially as the reality of a clinical governance agenda led by managers at the clinical coal-face, was at best unrealistic (**Salter, 2004**). For example, Thorne (2001) argues that 'although

government discourse places a statutory duty on CEO's, managers recognised their lack of expertise and ability to gain access to the clinical domain' (p.200).

Thus, despite the destabilisation of the Triangle of Forces, equilibrium returned, resulting in the surgical profession retaining its right to self-regulation as well as gaining a significant bargaining position. The profession adapted itself to the political context, adopting a patient centred and transparent approach. Salter describes this as a 'patient centred political discourse' (2004:206).

The new approach built on the existing quality agenda with its emphasis on audit, clinical guidelines and continuing medical education (CME),⁵⁴ but placed a greater emphasis on transparency and accountability.

During the 1990's the Royal College of Surgeons of England 'led the field of surgical audit through the Clinical Effectiveness Unit established in 1990' (Royal College of Surgeons 1999:2). In addition, it was represented together with the other surgical Royal Colleges and medical Royal Colleges on the NCEPOD (National Confidential Enquiry into Perioperative Deaths) steering group (Royal College of Surgeons, 1999). Some specialist societies were also advanced in terms of audit and their development of systems (Salter, 2004). For example, The Society of Cardiothoracic Surgeons had a long history of audit dating back to when the United Kingdom Cardiac surgical register was established in 1977 (Keogh, et al, 1998).

The Royal College of Surgeons of England had also been responsible for continuing medical education (CME). In view of the GMC's (General Medical Council) policy proposal on revalidation in 2000 following the events surrounding Bristol, the College adopted a proactive stance on continuing professional development (CPD) (Salter, 2004). Whereas the previous CME approach

'was viewed by the medical profession in terms of updating their knowledge, the changing political climate and the need to be more accountable meant that clinicians would now have to demonstrate that they were developing professionally and that their activities were educationally and cost effective and improved their practice.' (du Boulay, 2000:393)

⁵⁴ This was developed by the Royal College and specialist associations during the years of the internal market, when collective professional autonomy became the norm.

As alluded to above, if the profession's control of the 'essential knowledge resources' (**Salter, 2004:155**) and adaptation to the changing political climate enabled them to retain control of professional regulation; a significant bargaining tool, and a dependency from which the profession could aspire to gain 'new forms of access and influence over the health policy community', given the fact that the state is 'obliged to negotiate with the self-regulatory apparatus of the profession in order to recruit the surgical expertise necessary to obtain quick political results' (**ibid.:206-207**).

It is not surprising therefore, that there was competition between the Royal Colleges and specialist societies for control of this new political realm (**Salter, 2004**). For example, in aftermath of Bristol the Royal Colleges and specialist associations 'produced a disparate array of idiosyncratic proposals reflecting the traditional separation between them' (**ibid.:204**).

Cardiothoracic surgery provides a good example of this. Inevitably the negative media coverage surrounding Bristol was directed towards the speciality of cardiothoracic surgery. The Society of Cardiothoracic Surgeons, however, were confident that given their particular history and expertise in auditing adult cardiac surgical procedures, their society possessed the necessary database and knowledge to support standard-setting procedures which, they believed, 'should go some way to restoring public confidence' (**Keogh et al., 1998:1760**) in the wake of Bristol.

The society also added a paediatric surgical database to their endeavours, as well as 'democratically assuming responsibility for quality control of individual surgical practices – a new role for any specialist society within the United Kingdom' (**ibid.**). In addition, in 2003 'the Society announced that it would publish star-ratings for its members based on death rates on the operating table: a very specific and public form of professional accountability' (**Salter, 2004:204**).

7.4 Prospects for Specialist Differentiation in the Future

As alluded to earlier, specialist differentiation has resulted in nine defined surgical specialities. Each one of these areas has experienced sub-specialisation, and predictions abound as to how far this process will go. For example, the death knell of general surgery has been sounding for many years:

'In the dining rooms of teaching hospitals and in the bars at conferences specialist surgeons may be heard forecasting the imminent demise of the general surgeon and his replacement by specialised multi-disciplinary teams who will concentrate on one system, or even one part of one system.' (Irving, 1986:741)

Yet despite these forecasts, general surgery remains intact, albeit highly sub-specialised. Given the renewed emphasis on quality and outcome, sub-specialisation is certainly here to stay. Yet specialist differentiation is an entirely different ball game.

The government's plans for the NHS, together with the post Bristol fall out, has reinforced the state's dependence on the profession, and in turn opened up new arenas of influence, where the potential for the accumulation of political 'capital' is high. To quote a Royal College of Surgeons workforce document:

'The opportunity now exists for the surgical profession to engage more effectively as partners with the government, NHS planners and managers in helping to implement the visions for the future embodied in the NHS Plan.' (2001:7)

However, although there is potential specific forms of capital out there for aspiring groups intent on pursuing the professional project, this thesis has argued throughout that capital in its numerous forms does not suffice alone to ensure specialist differentiation: this only occurs when a set of variables interact at the right time, and even then the variables will be different from group to group, reflecting each group's unique developmental history. It also needs to be reiterated that not all groups aspire to differentiate, and even when the leaders of a group do, they need to have the support of the rank and file membership. This was one factor amongst many which prevented vascular surgery from separating from general surgery, as highlighted in Chapter six. This latter point leads nicely onto the future prospects for specialist differentiation in the specialty of general surgery.

7.4.1 General Surgery

Though specialist differentiation has made the largest inroads into its vast surgical territory, General surgery is still the largest speciality. The composition of general surgery in 2006 is the same as it was a decade ago. It is highly sub-specialised, as indicated in **Table 7.1**:

Approximate number of subspecialists	
Coloproctology	538
Vascular	449
Endocrine	140
Breast	443
Upper gastrointestinal/hepatobiliary	518
Military	125
Transplant	800

Source: Royal College of Surgeons, 2005 Developing a Modern Surgical Workforce

All general surgeons are trained in the generality of surgery and receive training in the sub-speciality of their choice in the last two years. Surgery in general provides a common training stem servicing the sub-specialities of vascular surgery, breast surgery, endocrine surgery, colorectal surgery and upper gastrointestinal surgery (**Royal College of Surgeons, 2001**).

However, in an era when there is an emphasis on the quality agenda (most notably clinical governance, outcome and Calman-Hine), together with rising patient expectation and litigation, as well as the effects of changes in the surgical training structure as a result of Calman, the emphasis on sub-specialisation is likely to become more pronounced, and the term 'general' a legacy from a bygone era (**Royal College of Surgeons, 2000**).

For example, in larger hospitals in the UK there is a separate vascular rota for both elective and emergency vascular conditions. According to a practising vascular surgeon based there, (Q) provides a good example of this:

Somewhere like (Q) you've got seven pure vascular surgeons not involved in general surgical emergencies and only doing vascular surgery both on an emergency basis and electively – and there are lots of other big cities usually associated with teaching hospitals – medical schools where that is the case. Thus, in large centres of population you've got increasing numbers of pure vascular surgeons. (Mr Z. Consultant Vascular Surgeon – Teaching Hospital)

In areas of the country where DGH's (District General Hospitals) served populations which were not sufficiently large to support an independent vascular unit, managed clinical networks are enabling some DGH's to provide such a service:

Wakefield, Dewsbury and Pontefract merged to provide a twenty-four-hour vascular service seven days a week. This is covered by pure vascular surgeons and general surgeons with a sub-specialist interest in vascular surgery. (Mr Z. Consultant Vascular Surgeon)

Indeed, the specialist association for general surgery, namely The Association of Surgeons of Great Britain and Ireland (ASGBI) forecasts that, in areas where vascular surgeons still participate in the general surgical take, 'the contribution of vascular surgeons to the general surgical rota will diminish in the future' (**Royal College of Surgeons, 2005:42**). They also note that given the specific nature of breast and transplant surgery, more and more surgeons specialising in these areas find that they are less and less able to undertake the full range of emergency surgery. Consequently, their place on the rota will have to be filled by other surgeons, and it is likely that 'emergency general surgery may be provided by upper and lower gastrointestinal surgeons only' (**ibid.**).

In light of this, the prospects for vascular surgery in terms of specialist differentiation look fairly promising, though several factors will determine the outcome: Firstly, whether or not differentiation is on the policy agenda of the vascular surgical body; secondly, whether the vascular surgical body in general would be for or against this; thirdly, whether a 'pure' vascular service would be feasible throughout the country; fourthly, there would be the expense incurred in setting up another

speciality; last but certainly not least, would the ASGBI want vascular surgery to break away from its ranks.

According to one vascular surgeon although there has been talk of splitting vascular surgery off in the past there are no such plans at this time:

There's been talk of it, but no plans for it – no concrete decisions. (Mr Z. Consultant Vascular Surgeon)

However, he does go on to note that one of the things which might influence how things develop is vascular radiology, esp. interventional radiology:

There is a huge recruitment problem in vascular radiology, particularly interventional radiology, for a variety of reasons. Because of that, one suggestion has been to implement a model which operates in other countries, that is: to have a single vascular specialist. (Mr Z. – Consultant Vascular Surgeon)

In practice this could potentially solve the problem which is still present in some parts of the country i.e. the ratio between the number of consultants appointed and the population base. For example, in a city like York, which is thirty miles from Leeds and even further from Hull, with its nearest geographical relative being, Harrogate, it is difficult to operate a clinical network. However, it would be also impractical to appoint four vascular surgeons, as there may only be enough elective work during the day for two:

If vascular surgeons were given a basic training in interventional radiology where the straightforward aspects of interventional radiology and skills are learned, this would mean that the vascular surgeon will do all of the surgery required but could also do a fairly high proportion of radiology work – the straightforward diagnostic angiogram, the straightforward angioplasty. This would mean that you could appoint four vascular surgeons to do the out of hours cover for surgery and simple interventional radiology, and even though there may not be enough elective work during the day to warrant a four-man team, you could also find them some straightforward radiological procedures to support this. (Mr Z. – Consultant Vascular Surgeon)

The consultant notes however, that this is a long way from happening:

There are discussions between the Vascular Surgical Society and the British Society of Interventional Radiology, but they are a long way from either reaching an agreement let alone putting it into practice – but this is something which might change in the future. (Mr Z. – Consultant Vascular Surgeon)

Thus, it would appear that vascular surgery is some way off from making any moves towards breaking away from general surgery. Even if the tentative proposals with radiology reach fruition, there will need to be a favourable consensus within the ranks of the vascular surgical society. It will be necessary to address issues relating to the expense of setting up a new speciality with a separate examination structure and achieve political consensus within the ASGBI before it even reaches the Senate of Surgery.

The prospects for specialist differentiation in other areas of general surgery will ultimately depend on a number of factors. Calman-Hine in particular has forced a trend towards greater sub-specialisation. This has caused consultants to give up areas of work where they are deemed not to have carried out sufficient procedures to attract Calman-Hine accreditation. This has effected areas such as coloproctology, and in larger conurbations a pure colorectal service is provided. However, the removal of vascular, breast and transplant surgery from the emergency on-call rota in general surgery means that other areas have to take their place; as noted earlier, coloproctology is one such area. This in itself will require extra consultants in this area, so it is highly unlikely that coloproctology would break away from general surgery, given the potential repercussions for emergency general surgery. However, the potential for 'clinical networks' (Edwards, 2002), together with the fact that cancer services is one of the governments National Service Framework priorities, could give coloproctology some political capital with the government, and economic capital, especially in terms of resources.

Laparoscopic surgery is still an area which evokes strong feelings, because it is a technique and not an organ based speciality. It is also interesting that, despite its popularity with trainees, it fails to get a mention in the in the latest service framework document to come from the Royal College of Surgeons and the Speciality Associations: *Developing a Modern Surgical Workforce 2005*. Although consultants will continue to be appointed with laparoscopic interests, either as their primary sub-speciality interest or as a secondary sub-speciality interest, it is highly unlikely that laparoscopic surgery will break away from general surgery given the resource implications for

general surgery in terms of replacing the consultant numbers on the general take. Nonetheless, given its cost-effectiveness, laparoscopic surgery does have the potential to remain a player with government.

7.4.2 Trauma and Orthopaedics

Trauma and orthopaedics is the second largest speciality and, like general surgery, highly sub-specialised. Most surgeons are general trauma and orthopaedic surgeons, but many have a sub-speciality interest. The increasing trend towards sub-specialisation can be seen by examining the number of consultants associated with each sub-speciality set out in **Table 7.2**

Approximate number of subspecialists		
	England	Wales
Joint replacement and revision	227	14
Acute trauma	206	12
Knee	201	12
General orthopaedic	134	8
Shoulder and upper limb	109	6
Children's orthopaedic	99	6
Hip surgery	90	5
Spinal	90	5
Hand	83	5
Sports	60	4
Foot and ankle	49	3
Trauma reconstructive	47	3
Other (including oncology, limb reconstruction)	34	2

Source: Royal College of Surgeons, 2005 Developing a Modern Surgical Workforce

Not unlike general surgery, trauma and orthopaedics needs to be able to provide a general emergency front-line service. This is becoming increasingly problematic at a time when surgeons are becoming more sub-specialised, for this results in their speciality losing core general emergency skills. However, despite this paradox, NCEPOD reports and in particular The Royal College of Surgeons document *The Provision of Emergency Surgical Services: An Organisational Framework (1997)* pushed the British Orthopaedic Association (BOA) into setting up a 'consultant led-trauma service' (**Royal College of Surgeons, 1997:3**). This placed a big strain on elective orthopaedics, as 'there is a growing trend towards the conduct of trauma surgery by consultants in daylight hours following recent NCEPOD⁵⁵ reports' (**Royal College of Surgeons, 2001:38**). The strain on elective orthopaedics has led many to question whether or not trauma should separate off from orthopaedics, and some to pray for the day when it will:

I pray for a time when trauma will separate. Yes, I think that trauma used to be done badly by the orthopaedic surgeons who were basically at home, while the senior registrars did the on call, and over the last 10 or 12 years people have developed an interest in trauma – and I'm sure as you know there are pure trauma surgeons – Oxford is a good example. (Mr E.M. – Consultant Orthopaedic Surgeon with a Special Interest in Joint Revision Surgery)

Conversely, there are those who cannot see trauma separating off from orthopaedics, for varying reasons:

I don't see it being hived off from orthopaedics because there aren't many people who just want to do trauma – for two reasons: because a) you're on call; and b) there's no private practice and we come back to that subject time and time again. It's not seen as...well it's always out of hours, it has an unpredictable workload, and surgeons don't like things that are unpredictable like that. (Mr H.C. – Consultant Orthopaedic Surgeon with a Special Interest in Arthroscopic Joint Replacement)

Even though it is unlikely that trauma will separate, there is a potential solution to the problem of trauma interfering with elective orthopaedics which is currently being developed in (R): separating elective work and trauma work on two different sites.

⁵⁵ The Royal College of Surgeons document cites: NCEPOD: Then and Now: The 2000 Report of the National Confidential Enquiry into Perioperative Deaths. London.

Well we're taking the old elective work from off the two sites to one of the smaller hospitals in town and developing an elective centre and the trauma, spines, hands and kids are all going to come here – that will focus the trauma expertise on a site that's got all of the other services, neuro, plastics, vascular surgery and cardiothoracic and it will allow the elective work to go ahead in a planned way without interference from acute admissions. (Mr E.M. – Consultant Orthopaedic Surgeon with a Special Interest in Joint Revision Surgery)

Another area which could potentially separate in the future is spinal surgery. Orthopaedic surgeons have traditionally concerned themselves with the lumbar region of the spine, while neurosurgeons have dealt with the neck. However, as sub-specialisation has progressed, complex spinal work has increasingly been carried out by pure orthopaedic spinal surgeons and not by general orthopaedic surgeons in district general hospitals. However, according to many neurosurgeons, there is a trend developing whereby they are under pressure to take on a lot of the more complex degenerative spinal cases, and one neurosurgeon in particular feels this stems from the rise in litigation against orthopaedic surgeons:

Orthopaedic surgeons have traditionally been a big target for lawyers – society wants to get back at doctors for what they perceive they do, and it's unsustainable really – but I think it's a big influence on some people that when they get sued for something they say 'I'm never going to do that again – I'm not going to deal with those cases. But if you withdraw from those cases there is no one else to take it up, and that's why there has been increasing pressure on Neurosurgery to take more of this spinal work, and whereas we have the skills to take on some of it, we haven't got the skills to take on all of it. (Mr J.L.C. – Consultant Neurosurgeon – Teaching Hospital)

He goes on to opine that spinal surgery will break away from trauma and orthopaedic surgery and become part of neurosurgery:

I think that spinal will go... all these things are gradual processes, but I think it will go – at the moment spinal surgery is done by a few interested orthopods, the complex spinal work is done by a few interested neurosurgeons. The neurosurgeons, as you highlighted earlier, tend to look at the neck and a little bit of the thorax, and the orthopaedic surgeons tend to be more lumbar and to some extent thorax, but there are places where neurosurgeons have skilled themselves up to do pedicle screws in the lumbar spine, and they'll do some of that work, so there's a lot of overlap. But basically in both camps there are particular interested

parties who are doing the complex work – but there’s a lot of simple degenerative work at the moment – more than the system has the capacity for, so your general jobbing neurosurgeon still has to be able to do that sort of work, and I think little by little he’ll do less and less of it, until it comes to the point where you don’t have a general neurosurgeon that does spinal work, you either have spinal surgeons and eventually they’ll be jointly trained, so you’ll have spinal surgeons and you’ll have other surgeons who do neurosurgery. (Mr J.L.C. – Consultant Neurosurgeon-Teaching Hospital)

This viewpoint is also shared by a Professor of Orthopaedic Surgery:

There aren’t vast numbers of specialist spinal orthopaedic surgeons, and I see the day neurosurgeons will do it all probably – there will be a few highly specialist orthopaedic surgeons who will probably do scoliosis – but I see the day where neurosurgeons rather like when plastic surgeons took hands – they will muscle in – maybe it’s just a reflection of the expansion of neurosurgery. (Professor H.U. – Professor of Orthopaedic Surgery)

Whether or not this will come to pass remains to be seen. The British Orthopaedic Association may not wish to relinquish spinal surgery. Another possibility is that spinal surgery will not separate from orthopaedics, but there be joint collaboration between the specialities of orthopaedics and neurosurgery with dual accreditation. This would mean that those highly specialist orthopaedic surgeons who wished to do scoliosis surgery could still do so, and even go as far as the neck if they so wished, this being traditionally the territory of the neurosurgeon. Likewise, the neurosurgeon could take on even more of the complex degenerative work, considered to be the traditional territory of the orthopaedic spinal surgeon. This would still enable a minor lumbar spinal service to be carried out by general orthopaedic surgeons in DGH’s.

7.4.3 Cardiothoracic Surgery

The major sub-specialities of cardiothoracics are thoracic surgery, adult cardiac surgery, paediatric cardiac surgery, cardiothoracic transplantation, and cardiothoracic surgery. The figures in **Table 7.3** set out the consultant numbers in each of the sub-specialist areas.

Approximate number of sub-specialists		
	England	Wales
Thoracic	38	
Paediatric Cardiac	16	
Cardiothoracic	179	10

Source: Royal College of Surgeons, 2001 The Surgical Workforce in The New NHS

Cardiothoracic surgery is a speciality which used to be given heroic status by the media and the general public. This changed in 1998, when, following the GMC inquiry into paediatric cardiac surgery at the Bristol Royal Infirmary, cardiothoracic surgery became the villain. Increased public scrutiny, and the need to be publicly accountable and transparent, together with the government's emphasis on the National Service Framework (NSF) for coronary artery revascularisation and the cancer plan, have impacted upon the speciality.

The government's National Service Framework (NSF) initiative has directed increased resources towards cardiac surgery, which has had positive and negative effects on the speciality of cardiothoracic surgery. The increased resources have significantly increased surgical activity for coronary heart disease, and the Royal College of Surgeons's (2001) projections suggest that there will be an 'eighty per cent increase in activity by 2008, with a rise in annual procedures from 22,000 to 41,000' (p.45). However, on the downside, this has had an adverse effect on thoracic surgery, according to a cardiothoracic surgeon:

The National Service Framework has increased the pressure on us to perform greater numbers of coronary artery bypass grafts, and because of this we find ourselves performing less thoracic cases...this raises issues relating to the quality of thoracic work performed by cardiothoracic surgeons. (Mr T.D.P. Consultant Cardiothoracic Surgeon)

Audit and clinical governance has increased for all consultants, and cardiac surgeons are becoming increasingly super-specialised in their own little niches, For example, a cardiac surgeon notes:

We work well together across the broad spectrum. If you take adults, probably 70 per cent of each of the 6 pure adult surgeons' work will be Coronary Artery Bypass Grafting, and then we'll each have our own little niches which we've shown an interest in or got by abrogation – my niche is repeat valve surgery because my predecessors put in a lot of pig valves which have fallen apart in people who were too young – so they've outlived the valve and come back, so I've got one of the biggest world practices in repeat valve surgery and that's by abrogation. It's a labour of love, because it's a really hard all day operation – whereas (P) across the way does Mitral Valve Repairs, which is delightful – we all sort of started doing them but he somehow managed to corner the market, and so now he gets virtually all of those to do. (Mr T.D.P. – Consultant Cardiothoracic Surgeon)

It is unlikely that this super-specialisation is down to audit and clinical governance alone, though these contribute to its diffusion. This model works in (Q) as the cardiac and thoracic services are separated, but in hospitals where the service is not separated, Cardiac surgeons are hard pushed to carry out their additional thoracic duties which involve 'prompt surgery for lung cancer' (Partridge, 2002:376).

Although the National Service Framework, together with audit and clinical governance, has exacerbated thoracic surgery's problems, it is highly likely that they had been developing for some time. For example, the speciality of cardiothoracic surgery is in many respects a tale of two cities: adult cardiac surgery is lucrative in terms of private practice, and as a result is attractive to trainees, given the potential to accumulate economic and symbolic capital, whereas thoracic surgery does not attract as much private practice and is therefore not as attractive to trainees. In addition to this 'thoracic posts carry arduous on-call commitments' (Goldstraw, 2002:12).

The problems facing thoracic surgery has led to calls for 'specialist thoracic surgeons' as Partridge (2002) notes:

'The need for specialist thoracic surgeons is emphasised by the fact that surgery for lung cancer represents less than half of the workload of the 38 purely thoracic surgeons in the UK. Surgical management of pneumothoraces, empyema, mediastinal masses, and benign and malignant conditions of the oesophagus; lung biopsies; lung volume reduction surgery: all need expertise that justifies a specialist approach. Different skills are needed in thoracic as opposed to cardiac surgery.' (p.377)

Partridge is certainly not a lone voice in calling for specialist thoracic surgeons, but whether this will mean a complete separation from the speciality of cardiothoracic surgery is a different matter. For example, a 'pure' thoracic surgeon from (Q) does see a time when there will be a specialist examination for thoracic surgery, but within the speciality of cardiothoracic surgery:

I think that a specialist examination is on the cards – I mean, I have been an examiner for the speciality fellowship and I think that there will be a case for examining people in paediatric cardiac surgery, there will be a case for examining people in adult thoracic surgery as well as adult cardiac surgery, plus or minus transplantation – but in terms of training if you want to do cardiac you've got to do a year's thoracic, and if you want to do thoracic you've got to do a year's cardiac – the examination will probably have a basic general cardiothoracic theme plus a specialised theme as well – so I think it will change.
(Mr V.V.P. – Consultant Thoracic Surgeon – Teaching Hospital)

However, having a specialist examination does not in and of itself equate with having specialist thoracic surgeons. On the contrary, thoracic service provision is dependent on 'enhancing the number and quality of training opportunities to entice the young into the speciality' (**Partridge, 2002:307**), in addition to securing government funding to fund new consultant posts in the area (**Goldstraw, 2002**). Cardiothoracic surgery is taking advantage of a policy window which has opened up and could make this possible.

The Calman-Hine guidelines on cancer services, together with NCEPOD and other reports,⁵⁶ has stimulated interest in the provision of cancer services overall, linking volume to outcome. For example:

I think the thing that's stimulated thoracic surgery has been the development of cancer units, cancer centres, and the Calman-Hine recommendations – that if you're doing 2 oesophagectomies you shouldn't be doing it – you should be sending them to the major centres – so there's a lot of evidence now that volume equals good results – so if you're not doing the volume you shouldn't be doing it at all – hence the patterns of referrals have changed a lot because of the cancer units and cancer centres, and also the availability of intensive care, and NCEPOD has had a big influence, as well on looking at cause of death,

⁵⁶ Partridge (2002: 307) cites the following articles: Fry WA, Menck HR, Winchester DP. The National Cancer Data Base Report on Lung Cancer. *Cancer* 1996; 77: 1947-55; Dambuis RA, Schutte PR, Resection Rates and Post-Operative Mortality in 7,899 Patients with Lung Cancer. *Eur Respiratory Journal* 1996; 9: 7-10.

and they announced that if you haven't got an HDU or an ITU bed available, then you shouldn't be doing that sort of surgery." (Mr V.V.P. – Consultant Thoracic Surgeon – Teaching Hospital)

The guidelines have also highlighted the importance of dealing with certain cancers. Given the government's commitment to establishing 'National Service Frameworks for disease groups,' and its acknowledgement that 'the new approach to developing cancer services in the Calman-Hine Report point the direction for this' (DOH, 1997:57), thoracics has received more government interest and political capital, in the process:

Breast cancer is very topical, but lung cancer isn't as topical, but then again, it's killing more women than breast cancer – so now the government have to get interested in it and it's becoming more topical. (Mr V.V.P. – Consultant Thoracic Surgeon)

The White Paper *The New NHS: Modern Dependable* also gave a commitment to involving the profession in developing 'evidence-based National Service Frameworks' (DOH, 1997:57). Cardiothoracic surgery's expertise in audit together with the fact that it was proactive following the Bristol revelations has contributed to earning it the ear of the government:

The government talks to the speciality association more than the Colleges, particularly over the Bristol affair Paediatric surgery, Cardiac surgery, Dr Foster and league tables of hospitals – so when it comes to things like that it has been the society that have been dealing with it not the Colleges. (Mr V.V.P. – Consultant Thoracic Surgeon)

The speciality has taken full advantage of this political capital with regard to the future planning of thoracic services, as Mr V.V.P. notes:

The societies have done more than the Colleges in terms of giving advice on how specialities should be set up. For instance, the Society of Cardiothoracic Surgeons and The European Association of Cardiothoracic Surgeons have developed guidelines and protocol etc, and we did one on how a Thoracic unit should be set up. So, they've done more in terms of planning how many surgeons you should have per million of population,

what the services should actually include, and that's been more useful in planning your speciality. (Mr V.V.P. – Consultant Thoracic Surgeon)

The guidelines regarding the provision of thoracic surgical services in the future recommend the foundation of pure general thoracic surgical units in centres which include a university medical school (Klepetko, Aberg & Lerut, 2001). Examples of such units already exist in some hospitals, such as the (Q). Suggestions have also been put forward which would involve collaboration between upper-gastrointestinal surgery, a sub-speciality interest of general surgery and thoracic surgery. This would go some way towards settling a long-standing dispute over turf:

There's a big dispute regarding oesophageal surgery and general surgery because we do a lot of oesophageal surgery as well, but times have changed a lot, in that a lot of the upper GI tract surgeons are doing oesophageal surgery and doing chest surgery as well, but are not trained to do chest surgery, so we grumble at the fact that they're not trained to do it. I was at a recent meeting of the Association of Upper GI Tract Surgeons, and we basically agreed that anyone who wants to do oesophageal surgery should train for a while in thoracic – and the fact that our trainees are not getting general surgical exposure – we want our guys to train in general surgery as well so hopefully there will be a good crossover between the two specialities – so thoracic surgeons at the moment – some don't do any oesophageal work, a lot do – so we still do quite a bit of upper GI tract or oesophageal surgery as well as thoracic surgery. (Mr V.V.P. – Consultant Thoracic Surgeon)

This would not only settle the long-standing dispute, but also benefit thoracic surgery inasmuch as it would result in sharing out the workload, allowing thoracic surgeons to focus on the chest and in particular malignancies in this area. It would also boost consultant numbers performing thoracic work. In addition to boosting consultant numbers, its cross-over with general surgery, would also enable thoracic surgery to accumulate symbolic and economic capital, and attract new recruits to the area. This model was advocated by Goldstraw (2002), when he argued for greater support for thoracic surgeons from what he termed 'Thoraco-General Surgeons' (p14).

7.4.4 Paediatric Surgery

Paediatric surgery is a 'young' speciality not only in terms of the age of those it treats, but also in terms of the relatively short period of time since its formation in 1992. It is a broad speciality, covering a number of organ systems, as reflected in the range of its sub-specialities. These include: 'urology, hepatobiliary surgery (HPB); thoracic surgery; upper and lower gastrointestinal surgery; transplantation surgery and oncology' (**Ong, 2003:2**). Paediatric surgery can also be divided into specialist paediatric surgery and non-specialist paediatric surgery.

Specialist paediatric surgery consists of four clinical categories: Neonatal surgery; 'the surgical management of infants and children with conditions requiring special expertise';⁵⁷ the 'surgical management of infants and children with relatively straight-forward surgical conditions who have an associated disorder which in itself requires management in a specialist centre' (**BAPS, 1994:2**); and paediatric urology.⁵⁸ Specialist Paediatric surgery is carried out by paediatric surgeons, who perform 11% of all operations done on children (see **Table 7.4**).

Non-specialist paediatric surgery consists of the surgical treatment of relatively common disorders which do not usually require a major or complex operation or peri-operative care⁵⁹ (**BAPS, 1994**). Non-specialist paediatric surgery is normally carried out by general surgeons working in district general hospitals (DGH's), who perform 15% of operations done on children (see **Table 7.4**).

The remaining operations are performed mainly by surgeons from other specialities who have an interest in paediatric conditions (**Mayor, 2000**). The 'surgical specialities which are not encompassed within the definition of paediatric surgery include: ear, nose and throat surgery; eye surgery; orthopaedic surgery; plastic surgery; neurosurgery and cardiac surgery' (**BAPS, 1994:2**) (see **Table 7.4**).

⁵⁷ 'These include benign and malignant tumours, hepatobiliary disorders, major or potentially complex gastrointestinal abnormalities, the reconstruction of congenital abnormalities, major trauma, abnormalities of the chest (excluding the great vessels), endocrine disorders, and abnormalities of the soft tissues of the body' (**BAPS, 1994:2**).

⁵⁸ 'The surgical management of congenital and acquired anomalies of the genito-urinary system in children' (**ibid.:3**).

⁵⁹ Elective procedures: 'herniotomy for congenital inguinal hernia and congenital inguinal hernia and congenital hydrocele, circumcision and repair of umbilical hernia. Emergency procedures: appendicectomy, correction of torsion of the testes, and less complex trauma' (**BAPS, 1994:3**).

However, despite the fact that only 11% of the surgery carried out on children is performed by paediatric surgeons, 'paediatric' is a broad and all-encompassing term and the sentiments expounded in the Platt Report of 1959, namely that 'children are different, and need to be looked after by people who understand their particular needs, and should have services designed specifically for them' (**Craft, 2003:891**) have been reiterated over the years. Indeed, paediatric surgery's growth as a surgical speciality was heavily influenced by this and subsequent reports (e.g. The Court Report, 1976).

Just as the growth of paediatric surgery as a pure speciality was influenced by the plethora of reports since 1958, the future of the speciality is likely to be influenced by the recommendations emanating from The Paediatric Forum of The Royal College of Surgeons of England (2000b), in conjunction with the post-Bristol Kennedy Report (2001), together with the government's emphasis on quality and clinical standards and the introduction of clinical governance, and the National Service Framework for Children.⁶⁰

Given this, paediatric surgery is the speciality which is likely to accumulate the most capital resulting in the potential for 'colonisation' across the other specialities, resulting in specialist differentiation if the right variables are in place and operationalised at the right time. The specific form of capital the specialty is most likely to accumulate, is scientific capital, linked to the uniqueness of the child and the extensive knowledge base, skills and experience required to treat them.

Whether there is a conscious effort by the speciality of paediatric surgery to extend its territory is not clear. However, the paediatric forum, which has representatives from not only paediatric surgery but from across the broad spectrum of surgical specialities which undertake paediatric surgery, has been proactive in producing a report which includes guidelines for the training and workload of surgeons carrying out paediatric surgery.

Mayor (2000) notes that the report was developed in view of 'changes in the training of surgeons in England, following the recommendations of the Calman Report (1993), which advocated a move from an apprenticeship approach to a more structured programme' (**p.1423**). It was also

⁶⁰ Craft notes that the 'aim of the national service framework is to improve the lives and health of children and young people' (**Craft, 2003:891**).

developed in response to the report of the National Confidential Inquiry into Perioperative Deaths (NCEPOD) (1989), which concluded

‘that the majority of surgeons in all regions operate on children, and whilst much surgery and anaesthesia is given by clinicians with a regular paediatric practice, this is not always so. Amongst the key recommendations were that ‘surgeons and anaesthetists should not undertake occasional practice in paediatric surgery.’ (NCEPOD, 1989. cited in The Report of the Paediatric Forum of the Royal College of Surgeons of England, 2000:11)

The report also took into account a further report of the National Confidential Inquiry into Perioperative Deaths (1999), which noted that there have been ‘significant shifts in the patterns of practice since 1989, with evidence of paediatric sub-specialisation apparent across a number of specialities.’ Nevertheless, it also noted ‘that some consultants still persist in performing small numbers of operations on infants and very occasional practice is still a feature of emergency surgery for children’ (NCEPOD, 1999. cited in The Report of the Paediatric Forum of The Royal College of Surgeons of England, 2000:11).

The main thrust of the report is that

‘important changes in education, training and professional attitudes to sub-specialisation are required to ensure that children receive surgical care which meets the standards of safety and quality to which they are entitled.’ (The Report of the Paediatric Forum of The Royal College of Surgeons of England, 2000:5)

In line with this, the report adds that:

‘Occasional practice is unacceptable except in the treatment of life-threatening emergencies or minor problems. The surgery of childhood should be concentrated in the hands of appropriately trained designated surgeons with a paediatric sub-speciality commitment and a workload of sufficient volume and competence.’ (ibid.:5)

In addition, the report proposed an even higher regular workload for cardiac surgery in children:

‘Cardiac surgery in children should be undertaken by surgeons with a major sub-speciality interest reflected in a minimum of two operating sessions per week for patients with congenital heart disease. There is no scope for occasional practice in cardiac surgery.’ (ibid.:45)

The report of the Paediatric Forum goes on to note that: ‘intercollegiate examinations should be designed to ensure that all surgeons with clinical responsibility for children have been appropriately assessed in the paediatric component of their specialty’ (ibid.:5). In particular, certain specialties are singled out for not having an adequate paediatric component in their intercollegiate examinations (general surgery, cardiothoracic surgery, neurosurgery, oral and maxillofacial surgery and plastic surgery) **(The Report of the Paediatric Forum of The Royal College of Surgeons of England, 2000)**

The Kennedy Report (2001) goes even further with regard to paediatric cardiac surgery. It recommends that:

‘those surgeons who undertake paediatric cardiac surgery, although not stipulating the number of operating sessions sufficient to maintain competence, it may be that four sessions a week should be a minimum requirement.’ (p.461)

Furthermore, it stipulated that, in the case of open-heart surgery on young children (including neonates and infants), units providing such a service would require ‘two surgeons trained in paediatric surgery who must undertake between forty and fifty operations per year’ (ibid.).

Further recommendations in the Kennedy Report specifically about children are that recognition is necessary that ‘the healthcare needs of children are different from those of adults’ and ‘specialist care must be concentrated in a limited number of centres where the staff have the necessary skills and experience’ (ibid.:457).

The specialities have been proactive in their response to the recommendations of the Paediatric Forum (2000) and the Kennedy Report (2001). For example, neurosurgery produced a service document entitled: *Safe Paediatric Neurosurgery* (2001) which fully takes account of all of the recommendations. However, the document it is at pains to stress that, although neurosurgery as

a speciality is fully committed to the development of paediatric neurosurgery, this development will be 'as an area of sub-speciality expertise interest within neurosurgery' (p.1). Nonetheless, there are those within the speciality of neurosurgery who foresee a time when paediatric neurosurgery will separate off, for example:

One of the big sub-specialisations in neurosurgery is paediatrics – paediatrics is almost separated entirely from all the rest to the point where you can't do ordinary neuro-paediatric operations – they are different from ordinary neuro-operations, it's more the aftercare and the looking after the children, and the interaction with paediatric services. So, it's not a skills problem, it's everything else, but it's driven a wedge to the extent that you can't do paediatric surgery – you can't operate on people less than 13 years of age even if you wanted to. So, I think that in time paediatric neurosurgery will separate off. (Mr J.L.C. – Consultant Neurosurgeon)

This view is not peculiar to neurosurgery, as reflected in a statement by an orthopaedic surgeon:

Paediatric Orthopaedics will become part of the speciality of Paediatrics. If you look at paediatric orthopaedic surgeons, they are different to normal orthopaedic surgeons. I think that's what they'd love – the paediatric orthopaedic surgeons to come away from orthopaedics and work with committed paediatric surgeons. (Mr L.P.S. – Consultant Orthopaedic Surgeon – Teaching Hospital)

Thus, as alluded to earlier, there is a potential for paediatric surgery to colonise, resulting in an enlarged speciality. However, whether the complete separation of paediatric neurosurgery, paediatric orthopaedic surgery and other specialities is totally practical is another matter. For example, the percentage paediatric component of the various specialities as expressed in Table 7.4 suggests that only six per cent of plastic surgeons perform paediatric surgery. Although this figure is likely to have risen in the eight years which have elapsed since the data was collected, it is unlikely to have gone up so considerably that a plastic surgeon could justify being a 'pure' paediatric plastic surgeon. By contrast, separation may be justified in other specialities such as otorhinolaryngology. Thus, it is possible that 'dual' accreditation will be developed, whereby the surgeon will face examinations across two specialities, for example, otorhinolaryngology and paediatric otorhinolaryngology.

Surgery in children aged 0-14 years, 1997-8, according to surgical speciality (%)

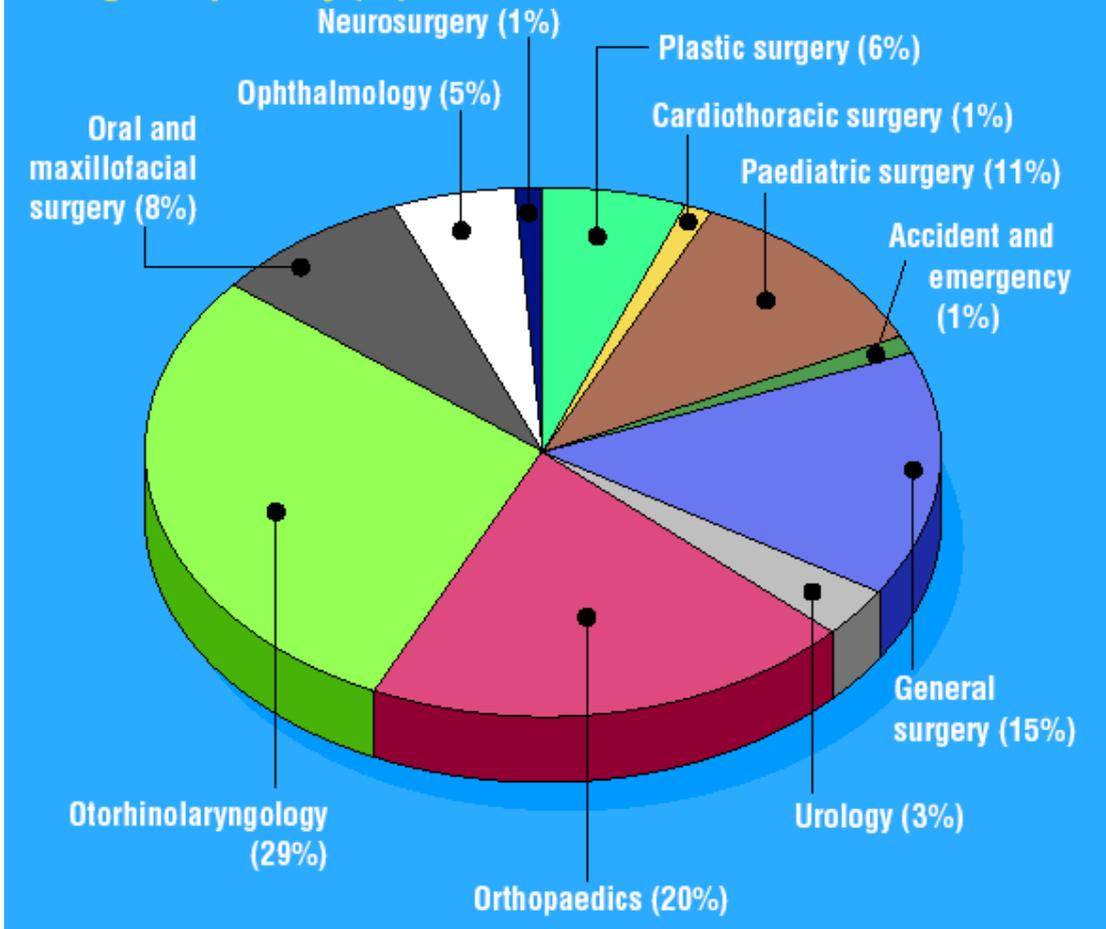


Table 7.4 Percentage of Paediatric Surgery Carried out across the specialities (Mayor, 2000:1423)

7.5 Summary

Whatever the future may hold for the specialities and sub-specialities of the surgical profession, one thing is certain, and that is that the creation of further specialities is not inevitable. Further differentiation will be dependent on the right variables or combination of variables being operationalised at the right time.

CONCLUSION

This thesis has investigated the phenomenon of intra-professional specialist differentiation in the surgical profession of the United Kingdom. It has sought to challenge technologically deterministic rationale prevalent in the sociology of the professions in the 1950's and 1960's and indeed in contemporaneous peer reviewed articles and rhetorical narrative obtained during interviews with surgical professionals. The rationale attributes a primacy and objectivity to scientific knowledge and technical complexity, resulting in inevitable specialisation and sub-specialisation within the body of surgery. Indeed, Parson's, often regarded as the 'father' of studies of the professions' (**Brante, 1988: 120**), propounds an evolutionary approach to understanding societal complexity and specialist differentiation; knowledge and technology are viewed as key variables in propelling the economy forward and not as convertible capital assets in a political arena. In challenging this rationale, this thesis contributes to a greater understanding and appreciation of intra-professional differentiation within the surgical profession, in addition to addressing gaps in the sociology of the professions and medical sociology literature.

It is worth reiterating here, the nature of the gaps documented in the introductory chapter. At the time of writing, the most recent works in the sociology of the professions, most notably Abbott (1988) suggests that there is some inevitability to specialist differentiation, yet at the same time he acknowledges that a successful outcome is not always achieved when differentiation is attempted. Hugman (1991) discusses the success of sub-groups within the caring professions in demarcating and restricting areas of practice however, neither of these works focussed on the processual elements underlying the success of some groups and the failure of other groups, to differentiate. More recent works in the sociology of the professions, particularly Freidson (2001) '*Professionalism: the third logic*', explores specialisation as a concept and investigates the relational properties with other specialisations. However, not unlike earlier works, Freidson takes specialisation as a given.

If the sociology of the professions literature can be criticised for failing to focus on the reasons for the success of some groups and failure of other groups, to differentiate, the medical sociology literature is also open to criticism, as it does not question the specialist division of labour. Indeed, there is an implicit taken for grantedness in the way the specialist division of labour is used as a medium for studying other things. For example, Pringle (1998) used specialist differentiation as a means to discuss equality of access for female surgeons and Cassell (1998) also focused on gender and surgery. As alluded to in the introductory chapter, exceptions to the tendency not to study the specialist division of labour in its own right do exist. Starr (1982) referred to structural factors which impact on specialisation in the medical profession at large, while others concentrate on specific medical and surgical specialties. For example, Halpern (1988) studied the development

of American Paediatrics and Casper (1998), the growth and development of Foetal surgery in several hospitals in the United States. Both studies stressed the social nature of specialist divisions of labour and the importance of external context specific variables in shaping the specialties development. In addition, the studies did not discount knowledge and technology as variables however, they recognised that these variables alone, lacked the power to impose their own imperatives on the organisation of work.

More recent studies, especially Leeming (2001) '*Professionalisation theory, medical specialists and the concept of "national patterns of specialisation"*', provides a synopsis of two independent studies of medical genetics in the UK and Canada, as a means to examine the factors determining specialisation in relation to the specific organisational structures of the respective countries. Not unlike earlier studies noted above, knowledge and technology are cited as significant variables in driving specialisation, as is 'the development of a mutual awareness among local practitioners that they are involved in a common enterprise and the emergence of closely defined obdurate structures and standards of practice.' However, Leeming goes on to note that the specialisation process is not that straight forward. Indeed, he suggests that there needs to be further studies of the stability of embryonic or potential specialties, 'and relatedly, the ability of specialty groups to preserve and maintain obdurate institutional structures over time' (p.16).

At the outset the core ambition of this thesis was to challenge technological determinism and in doing so, achieve a robust understanding and appreciation of intra-professional specialist differentiation within the UK surgical profession. This thesis has achieved what it set out to do. In doing so, it transcends the sociology of the professions and medical sociology literature, and studies referred to above. It highlights the fact that specialist differentiation is not an inevitable and straight forward process; indeed, the plight of the orthopaedists, clearly demonstrates that the growth and stability of potential specialties, is very much context dependent. In addition, it emphasises that the development, growth, maturation, and experiences of potential specialties is not generic; on the contrary, it is specific and very much dependent on the power dynamics within the UK surgical profession, relations between the profession and the state, inter-professional relationships, and other context specific external drivers.

A working theoretical framework which emphasised action within structure was adopted in order to realise this core ambition. The central aim was to build on the Chicago School legacy of Elliot Freidson (1970) and Everett C. Hughes (1958), specifically their emphasis on autonomy and self-direction in understanding the notion of profession; to discover how autonomy and self-direction

were developed in the case of the mature profession, and how they were developed in the case of aspiring professional groups within the structural boundaries of the mature surgical profession.

The concepts of autonomy and self-direction are very much interlinked. For Freidson (1970), autonomy is not inevitable, on the contrary it is a right bestowed by the state, by virtue of securing the support of a powerful societal elite. This privilege enables an occupational group to 'control its own work'; to set its own direction and internal standards; indeed 'only the profession has the recognised right to declare... 'outside' evaluation as illegitimate and intolerable' (p.72). Indeed, Larson's (1977) summation of Freidson's work on the construction of a professional ideology, suggests that professional autonomy enables the profession to construct its own form of social reality based on expertise, which effectively allows them to judge their own competence. The medical profession views its clinical autonomy as sacrosanct, however this autonomy is only 'technical and not absolute' (p.xii) and as documented in Chapter Six, can be challenged by the state, in this case the Thatcher government.

In examining the processual elements by which autonomy and self-direction is successful or unsuccessful, the thesis utilised an eclectic theoretical framework: Larson's (1977) concept of '*Professional Project*,' Bucher and Strauss's (1961) '*Process*' model, and key concepts: "*Social field*", "*Capital*", "*Habitus*" and "*Power*", from the seminal works of Bourdieu: (*The Specificity of The Scientific Field* 1981; *Distinction: A Social Critique of The Judgement of Taste* 1984; *The Forms of Capital* 1986; *Homo Academicus* 1988; *The Logic of Practice* 1990; *The Peculiar History of Scientific Reason* 1991 and *The Social Structures of the Economy* 2005).

Larson's (1977) concept of '*professional project*' builds on Freidson and Hughes work; the concept's utility lies in its ability to elicit the stages or benchmarks through which aspirant groups pass and the justificatory arguments they draw on in their quest for professional status: a 'market monopoly' (p.104) for their services, and the 'special privilege of freedom from the control of outsiders' (Freidson, 1970:137&Hughes, 1958). As discussed in Chapter One, the professional project is a collaborative enterprise to achieve a particular aim, hence Larson's emphasis on the 'collective'; the project is the collective outcome of the actions and efforts of the group. However, Larson does point out that the project is not a 'deliberate' or conscious effort for all members of the group, and indeed it could be argued that even the pioneers in the field may arrive at a point in the project, not by conscious effort and intention; the case of obstetrics and gynaecology highlighted in Chapter Five provides a pertinent example. Bonney was an accomplished gynaecological surgeon, whose quest was to see all fellow gynaecologists follow the same path,

to be fully trained abdominal surgeons and Fellows of the Surgical Royal College. There was no conscious effort on his part to realise a long-term goal such as specialist differentiation for obstetrics and gynaecology, or the foundation of a professional college. On the contrary, when the suggestion to found a college was publicly proclaimed, Bonney objected as he was concerned it would have retrogressive consequences (**Fletcher-Shaw, 1954**).

The ultimate aim of the professional project is: 'market control, work autonomy and status prerogatives on the basis of specialised training and scarce expertise' (**Larson, 1977:199**). Specialised training and expertise are not mutually exclusive, on the contrary they are interconnected; the underlying cognitive element being, knowledge and technology. Knowledge and technology are the essential foundation blocks of the medical and surgical professions, and the 'cognitive basis' enabling the group(s) to differentiate the 'commodity' (**p.15**) they are providing. Indeed, 'a cognitive base, as the necessary premise of training, is necessary to every specific professional project'. It is on this foundation that negotiations around 'cognitive exclusiveness' ensue (**ibid.:208**).

Thus, Knowledge and technology are a means to an end and not an end in themselves. They are a means by which groups are established, grow, and mature, and seek to differentiate. They are a vehicle in the professional project, but alone cannot explain why some groups are successful in their quest for establishing 'autonomy of technique' (**ibid.:38**) and why some are not so successful.

It is during the negotiating stage that the group engages in a process whereby they have to prove that they, and they alone, have the requisite knowledge, skill and clinical acumen required to perform a specified activity(s), and that it would have adverse consequences if such activities were performed by those without the education, knowledge, and training (**Macdonald, 1995**); indeed, the education system is the institutional mechanism that ensures closure towards 'outsiders' (**Allsop & Saks, 2002**), that is to say, members of the public. However, it also ensures that members of the profession not in possession of the requisite knowledge, skill set, and necessary qualifications, are not able to perform certain procedures. For example, a general surgeon would not be permitted to carry out a laparoscopic prostatectomy. The central element in the negotiation of cognitive exclusiveness and exclusion, as noted above, is autonomy of technique.

The cases of urological, vascular, and laparoscopic surgery discussed in Chapter Three, demonstrate that despite similarities in the justification for autonomy of technique and specialty status, other variables must be operating, as urology successfully demonstrated autonomy of

technique and was granted specialty status, while the other two have yet to successfully demonstrate this.

Thus, despite the significance of knowledge and technology as a basis for the professionalisation of medicine and surgery, and the professionalisation of aspiring groups within the mature profession, given the need to have this officially sanctioned (by the state in the case of the mature profession, and the surgical establishment in the case of aspiring professional groups) results in a politicization of knowledge and technology.

In the case of the state and the mature profession, given the 'considerable penetration of the state by civil society' (**Macdonald, 1995:78**) during the sixteenth century, the official founding of the medical profession by Act of Parliament in the early 1500's was not seen as a threat or resisted. However, in the case of aspiring groups within the mature profession the equation is different. Intra-professional differentiation within the profession, whether historical or contemporary, not only challenges the status quo, but has the potential to upset the profession's equilibrium. The corollary is that the control and application of knowledge and technology become highly contested, with 'power' – not knowledge and technology – being the common denominator.

Indeed, the mature surgical profession from the 1800's to 2007 is characterised by specialties which Bucher and Strauss (1961) term 'major segments' (specialities) and 'segments (groups) akin to social movements pursuing different objectives in different manners and more or less delicately held together under a common name at a particular period in history' (**p.326**). Although, this thesis has shown that the development of major segments (specialities) and segments (groups /sub-specialities) has not followed a discernible pattern, the surgical profession of the twenty-first century, not unlike that of the nineteenth and twentieth century is riven by conflicts of interest and power struggles. However, unlike the profession of the nineteenth century, the contemporary profession comprises a plethora of fully differentiated specialties, with their own postgraduate examinations; sub-specialty groups with a powerful interest in advancing the status of their areas, and all operating within an enlarged surgico-political structure.

The complexities of the surgico-political structure and the plethora of interests which resides within these structures precludes any simplistic answers as to where power inheres. Although, as propounded in chapter six, it is likely that power will inhere in more than one structure, in other words specialist differentiation and the creation of further specialties may be decided within the specialty associations, before they are agreed by the Senate of Surgery. Indeed, Bucher and

Strauss argue that power struggles at the level of association are significant for two reasons: firstly, control of the associations enables the most powerful group(s) 'to wield sanctions so as to bring about compliance of the general membership with rules and regulations which they have succeeded in enacting'; secondly, it enables the powerful group(s) to 'negotiate with relevant special publics' (**ibid.:332**), and with professional colleagues via the various internal committees within the professional structure. The ability to negotiate on behalf of the association, enables the group(s) to drive their agenda(s), as associations by their very nature will represent one group(s) interests, or a coalition of groups.

The Association of Surgeons of Great Britain and Ireland provides a working example. The ASGBI is the specialty association which represents general surgery and its sub-specialist areas across the UK. The specialty of general surgery is the largest specialty and therefore the association holds an influential position within the Senate and with government.

The ASGBI faces a similar problem to that faced by the Royal College of Surgeons in the second half of the twentieth century namely, how to prevent the further fragmentation of general surgery. Chapter Six, documents at first hand the conservation strategies employed by the most powerful group(s) within the association, to keep the aspirant group(s) within its walls. For example, Laparoscopic surgery is a test case, as it is a technique based sub-specialty which crosses the organ geography of upper gastro-intestinal surgery, as well as lower gastro-intestinal surgery and vascular surgery. Although, it is difficult to ascertain exactly with which group power inheres, one could assume that an alliance of organ related sub-specialties will ensure this group is stopped in its tracks.

Clearly, there will always be winners and losers in any internecine battle, with the more powerful groups(s) possessing the ability to determine knowledge boundaries and what counts as knowledge, as well as employing conservation strategies when threatened. Bourdieu's works on capital and power in social fields (see above) enables an appreciation as to how this is possible.

As a macro-organisational structure, the surgical profession is the outcome of 'social processes – often quite prosaic – which ultimately produce patterns of decisive advantages and disadvantages' (**Dennis & Martin, 2005:208**). Indeed, Bourdieu (1986) notes that the structure of the social field, that is to say the

'distribution of different types and sub-types of capital at a given moment in time represents the immanent structure of the social world, i.e., the set of constraints, inscribed in the very reality of that world, which govern its functioning in a durable way, determining the chances of success for practices.' (p.15)

Therefore, there will be significant differentials in power, between groups in terms of the amount and type of capital resources in their possession. (**Bourdieu, 1981**). Thus, agents and or groups 'who begin with particular forms of capital are advantaged at the outset because the field depends on, as well as produces more of, that capital' (**Thomson, 2014:67**).

Although, Bourdieu (1986) suggests that capital can present itself in three forms namely, economic, cultural, and social. It is worth noting that as a concept, capital is not only multi-faceted, but also malleable enough to be adapted to fit a particular area of study. For example, Bourdieu (1988) applies eight specific types of capital (social capital; educational capital; the capital of academic power; capital of scientific power; the capital of scientific prestige; the capital of intellectual renown; the capital of political or economic power and the capital of political dispositions) in his seminal study of the French university field. In the case of the surgical profession the specific types of capital pertinent to this study, are social capital; the capital of surgical authority; economic capital; political capital; symbolic capital; scientific capital; and specific cultural capital.

Although, at this juncture I do not wish to review these individually (see chapter one section (1.3)), it is worth to note that social capital:

'the aggregate of the actual or potential resources which linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition – or in other words, to membership in a group.' (1986:21)

is fundamental to understanding how the capital possessed by individuals within a group(s) is multiplied through membership of the group, as individual members accumulate the combined capital of the group in all its specific forms (**Bourdieu, 1986**). Given this, social capital is of pivotal importance to this thesis. For example, it allows us to appreciate the potential for inter-group alliances, as was the case in 1947 when the political infrastructure within the walls of the Royal College was far more complex than it had been thirty years earlier, that is to say, it could no longer

be reduced to a single common denominator between a powerful group and a weak group. It also allows us to understand the logic behind intergroup alliances, based on the combined value and convertibility of specific forms of capital. For example, during the second surgical epoch (1948-1990) the large teaching hospitals in London combined and operated as large groups. This enabled the group to convert their accumulated specific forms of capital into political capital and lobbying power at the macro level.

However, one of the most significant examples of social capital in action was during the first surgical epoch (1800-1947). The nineteenth century provides the greatest contrast between the dominant group (surgical elite) and the new groups in terms of possession of this form of capital. Bourdieu notes that social capital is 'associated with social obligations (connections), which is convertible, in certain conditions, into economic capital' (**ibid.:16**). In this context, social capital was also convertible into the capital of surgical authority, a particular kind of social capital, which not unlike scientific authority, 'gives power over the constitutive mechanisms of the field' (**Bourdieu, 1981:262**). Thus, the wealthy surgical elite not only possessed social capital, but also the capital of surgical power and authority, which enabled control of the hospital appointments, and examining and teaching systems of the field. Control of the appointments system supported private practice and financial rewards for bedside teaching. Social capital was thus converted into economic capital and given that the field was dependent on social capital, it produced more of this form of capital, as surgical apprentices were chosen from the same social class, as only they could afford the high teaching fees. This structural disparity would have a decisive effect on the pace of intra-professional differentiation during the first surgical epoch.

Parallels can be drawn here with the university field. Bourdieu (1988) points out, that the

'homogeneity of the professorial body was based on a harmony among habitus which, being produced by identical conditions of selection and training, engender objectively harmonious practices, and especially selection procedures.' (p.152).

Not unlike the university field, the perpetuation and stability of the surgical field was dependent on consistency of selection and on all agents internalising, what Bourdieu describes as, the laws and trajectories of the field. Thus, although structures enable strategies of domination, they would not be possible without the new recruit's willingness to accept the rules of the game based on the dispositions of the habitus.

The latter point is very important as Bourdieu's work stresses agency within structure. Indeed, his concepts of Habitus, Capital and Field, and their interrelationship, are pivotal in any understanding of how equilibrium in the field is maintained. Bourdieu (1984) summarises this interrelationship as: [(Habitus) (Capital)] + Field = Practice (p.101). In other words, the agents habitus is influenced by his/her position in the field, in relation to the capital possessed, and the types of capital are dependent on the field they operate in (Maton, 2014). Fields are thus, social spaces in which interaction between agents occur. However, the interaction is not merely a relationship between two agents, but is 'a three-way relation, between the two agents and the social space within which they are located' (Bourdieu, 2005:148). Thus, given the social emphasis there is potential for adjacent fields to influence the field in question. For example, according to Bourdieu the dominant groups with temporal power in the French university field, namely Medicine and Law were the

'most directly controlled by the government, the least autonomous from it and at the same time the most entrusted with training agents to put into practice the techniques and recipes of a body of knowledge.' (1988:62-63)

This thesis documented the interactions of the surgical field with other social fields; how habitus and dispositions of the habitus, and power differentials changed over time as new groups developed and accumulated specific forms of capital, and new political structures evolved and developed in order to accommodate these changes.

Thus, it has demonstrated that as fields interact and adapt to their environment, their shape, rules and regulations, and the significance of specific forms of capital may also change according to the logic of the field. For example, during the first surgical epoch, social capital in the form of class was important, as the field depended on this form of capital. However, during the second surgical epoch (1948-1990) the structure of the surgical field was markedly different. Obstetrics and gynaecology had their own Royal College and ophthalmology and otorhinolaryngology remained within the walls of the Royal College, with full representation on the College Council and their own fellowship examinations. Technical and scientific expertise and specialisation began to challenge the conservative culture of the generalist tradition, within the Royal College. Thus, the old knowledge of the 'generalists' was being challenged by the new knowledge of scientific values. The interaction of the surgical field with the state (another social field) in the planning and running of the new National Health Service provided fertile ground for the profession and groups, such as orthopaedics, neurosurgery, and urological surgery to garner more specific forms of capital,

particularly scientific capital, which was growing in value and importance, in addition to other forms: political capital, economic capital, symbolic capital and specific cultural capital.

Although success in the professional project cannot be attributed to the accumulation of one specific form of capital alone, possession of capital(s) was a key factor in enabling differentiation and self-regulation when the right conditions arose for exchange of these assets in the surgico-political arena.

Orthopaedics provides a pivotal example, of an area that began accumulating specific forms of capital, certainly from the 1920's and 1930's, and to a certain extent during the Great War. However, the conditions prior to the foundation of the NHS, and indeed up to the 1970's and 1980's, were not right to enable differentiation from general surgery. Conversely, this is not to say that the specific types of capital accumulated prior to 1948 were not invaluable to their cause, on the contrary, the types of capital accumulated were invaluable. As alluded to in Chapter Four, section (4.7), the specific forms of capital accumulated were: justification for control of a condition based on expertise, enabled the accumulation of scientific capital around knowledge and technique; symbolic capital in relation to the expertise of orthopaedists in the treatment of fractures; specific cultural capital, as mastery of the techniques associated with the treatment of fractures would require long-periods of training by experts, in the technique. In addition, the recommendation that the knowledge and technique around the treatment of fractures should be an integral part in the medical school curriculum, enabled the accumulation of the capital of surgical authority; a form of social capital which supports the control of the examining and teaching systems (**Bourdieu, 1981**).

Between 1948 and 1970 orthopaedics accumulated even greater levels of specific capital, in particular, scientific capital, and as the specialist movement within and outside the walls of the Royal College gathered momentum, orthopaedics was perfectly placed to operationalise its accumulated specific capital and differentiate from general surgery. The Edinburgh College was the first to introduce specialty examinations, followed by the English College in 1988.

The surgico-political structure during the third surgical epoch (1990-1997), was enlarged and adapted to meet the new challenges relating to specialist surgery. The surgical field was made up of a central policy making body namely, the Senate of Surgery of Great Britain and Ireland and eleven sub-committees namely, the Joint Committee for Intercollegiate Examinations (JCIE), the Joint Committee for Higher Surgical Training (JCHST), and the nine surgical Specialty Advisory

Committees (SAC's). If one were to peel back these structures, one would see a number of sub-fields, each with its own 'internal logic, rules, and regularities' (Thomson, 2014:70). For example, the four surgical Royal College's, all independent institutions with their own histories and each with their political infrastructure, although still independent, became institutions within a larger surgical structure. In addition, not unlike the surgical Royal Colleges, the specialist associations representing the nine surgical specialities, also have their own histories, executives, rules, and regulations and comprise a number of sub-fields (sub-sub-fields of the surgical field).

All of the sub-fields and sub-sub-fields of the surgical field will have their own interests, and consequently power struggles will ensue. Whether groups succeed or not in these struggles will be dependent on the amount of accumulated capital they possess as a group. Bourdieu's concept of capital enables an appreciation and understanding as to why there are some groups in the so-called 'hot areas' (referred to by Bucher & Strauss (1961)), where conflicts of interest and power struggles ensue, that are successful in halting the ambitions of other groups or sub-groups. As highlighted in Chapter Six Section (6.3), The Association of Surgeons of Great Britain and Ireland (ASGBI) provides a pertinent example of this.

The theoretical triangle, of *Professional Project; Process Model; and Capital and Power in Social Fields*, although eclectic, enable a granular understanding of the processes and power struggles within the profession of surgery; behind the veneer of what we take for granted and do not question. Larson's *Professional Project* provides an invaluable theoretical scaffolding, as it clearly benchmarks the steps aspirant professional groups are required to pass through to be granted professional status. Bucher and Strauss' *Process Model* carries on where Larson's model finishes, as it focuses on the conflicts of interest and power struggles around knowledge as it becomes contested. The model is invaluable as it identifies the so-called 'hot areas' where conflicts of interest and power struggles ensue. Bourdieu's concepts of *Capital, Habitus, Social Fields, and Power* elucidate why some groups are successful in pursuing the professional project and others are not. For example, although scientific capital, associated with the development of technical foci and advances in surgical knowledge, is a necessary pre-requisite for establishing a cognitive base, and in negotiating cognitive exclusiveness, whether this capital is able to be operationalised, is another issue entirely; this will be dependent on the other combined specific capital assets of the group and the contextual juncture.

It was stated at the outset that this study would not provide a generic template for explaining intra-professional differentiation across all professions given the uniqueness of professions in terms of

structural characteristics, history, and development. However, this does not preclude the formulation of general conclusions which may be applicable to other professions. In order to achieve this, it is necessary 'to remain at a level of abstraction that prevents confusing the unique with the general' (**Freidson, 1970: xvii**).

Since professions are socially organised and structured fields of human enterprise, as well as 'vehicles for special knowledge belief and skill' (**ibid.**), there will be differentials in power, 'struggles and strategies' (**Bourdieu, 1981:257**) within them, and the structures of the field will take on specific forms peculiar to each profession. Conversely, despite the uniqueness of structure in which power inheres, power remains the same. That is to say, power is the ability of one group(s) to make rules and apply them to other groups, whether that is determining what counts as knowledge or enacting laws (**Dennis & Martin, 2005**). This ability is a consequence of the differentials in the possession of capital or resources between dominant and subordinate groups. This pivotal factor militates against viewing intra-professional differentiation across any profession as an inevitable structural response to a functional need of 'complex urbanised societies' (**Heinz & Laumann, 1982**).

In addition to providing general conclusions which can be utilised and applied in future studies of intra-professional differentiation across other professions, this thesis has elucidated the structures underlying the surgical division of labour in terms of their development. In doing so it has revealed intra-professional organisational power dynamics, thrown light onto the realities of organisational life in healthcare systems, and contributed to a greater understanding and awareness of inter-professional and inter-organisational dynamics and power dependence relationships.⁶¹

Thus, the study not only has a contribution to make to medical sociology, but as a piece of medical sociology it may be of interest to a wider audience. Medical sociology can be helpful in 'providing knowledge to policy makers and managers' (**Hunter, 1990:219**). For example, through an analysis of the power dependence relationship between the state and the profession the study has explicated the dynamic between the profession and the NHS in terms of the organisation of surgery. In particular, the contemporary material in chapter six reveals how professionally driven agendas impact on the organisation of surgical services at the micro-clinical level, as procedures become more and more politicized and services become more and more centralized; the

⁶¹ Hunter, (1990) argued that medical sociology can contribute a greater awareness of 'interprofessional and interorganisational dynamics and power dependence relationships' (**p.219**).

consequence being that District General Hospitals (DGH's) are unable to provide certain services to the local populace.

The relationship between management and the profession at the micro hospital level has been expounded in previous studies for example, Ferlie et al. (1996). This study adds to this literature, and in doing so provides a fresh insight into the clinician manager relationship and in particular how professionally driven agendas impact on this relationship.

Furthermore, in utilising the theoretical framework applied throughout the thesis together with interview material, chapter seven expounds variables which may or may not effect the profession and service development in the future. It provides invaluable perspectives from surgeons working at the clinical coalface. Such perspectives are invaluable to policy makers, particularly at the level of the profession. Indeed, during the course of the fieldwork it became fairly obvious that at the level of the Royal Colleges there was much interest shown in the responses gleaned from the research at the hospital level.

This thesis's argument against the inevitability of intra-professional specialist differentiation may also be of interest to participants in the growing debate in the medical literature regarding the necessity of further specialisation and fragmentation in medicine and surgery (e.g. Taylor (1997), Loeffler (2000) and Turnberg (2000)).

Appendix One



Mark Wilkinson MA

St. John's College, Cambridge CB2 1TP.

Tel: (0) [redacted] E-mail: [redacted]

28.09.03

[redacted]
[redacted]
[redacted]
[redacted]
[redacted]
[redacted]

Dear Mr [redacted]

I am a Ph.D., student researching specialisation in surgery; the factors effecting the pace and direction which it takes, and its effect on patient care and the organisation and delivery of acute services.

I realise that your time will be limited, however, I would be extremely grateful if we could meet up for a short time to discuss issues in relation to sub-specialisation within the speciality of Neurosurgery, as well as the organisation and provision of Neurosurgical services within the NHS.

I look forward to hearing from you in due course. Could you please send any correspondence to my home address: [redacted]

With best wishes

Yours sincerely

Mark Wilkinson

Appendix Two

The Surgico-Political Structure and Composition of the Surgical Field 2019

As alluded to in chapter seven, at the time of writing (2007) the surgical field comprised nine specialities. In this respect the field had remained unchanged since the creation of the speciality of paediatric surgery in 1992, and maxillofacial surgery in 1994. However, in 2012 vascular surgery separated from general surgery therefore, the surgical field as of 2019 comprises ten specialities. As suggested in chapter seven, in 2007 the prospects for vascular surgery in terms of specialist differentiation looked fairly promising, although a number of factors would determine the outcome. Firstly, whether or not differentiation is on the policy agenda of the vascular surgical body; secondly, whether the vascular surgical body in general would be for or against this; thirdly, whether a 'pure' vascular service would be feasible throughout the country; fourthly, there would be the expense incurred in setting up another speciality; last but certainly not least, would the ASGBI want vascular surgery to break away from its ranks.

It is difficult to ascertain the significance of the above factors in relation to the 2012 outcome however, The Vascular Society for Great Britain and Ireland - '*Vascular Surgery United Kingdom Workforce Survey 2018*' suggests that 'pure' specialty status was granted 'in recognition of the increasing demand and highly-specialised nature of modern vascular care' (p.7). Indeed, the workforce document notes that the general surgical consultant workforce had experienced a 39% growth over the past decade and the projected patient demand growth for general surgery (including vascular surgery) is 67% by 2029.

In addition, to the creation of the tenth surgical specialty, the Senate of Surgery of Great Britain and Ireland changed its title to The Surgical Forum of Great Britain and Ireland. Despite the change in title, the membership and aims remain unchanged. The SFGBI, is comprised of the Presidents and Vice Presidents of the four Royal Colleges and the Presidents of the 10-SAC-defined and GMC recognised surgical specialties. It's aim: to be 'a truly representative voice of surgery across the entirety of Great Britain and Ireland' (MacFie, 2014:1).

The diagram overleaf is a representation of the current surgico-political structure and composition of the surgical field in 2019. The Surgical Forum of Great Britain and Ireland sits at the apex of the structure and is responsible for ensuring the highest standards in surgical care across Great Britain and Ireland. The Surgical Forum is responsible for Higher Surgical Training (HST) and this is coordinated through the Forum and its various committees namely, the Joint Committee for Intercollegiate Examinations (JCIE) and the Joint Committee for Higher Surgical Training (JCHST). Higher Surgical Training examinations are run at operational level by the specialties. For example, each of the ten surgical specialties has its own Intercollegiate Board and 'the board

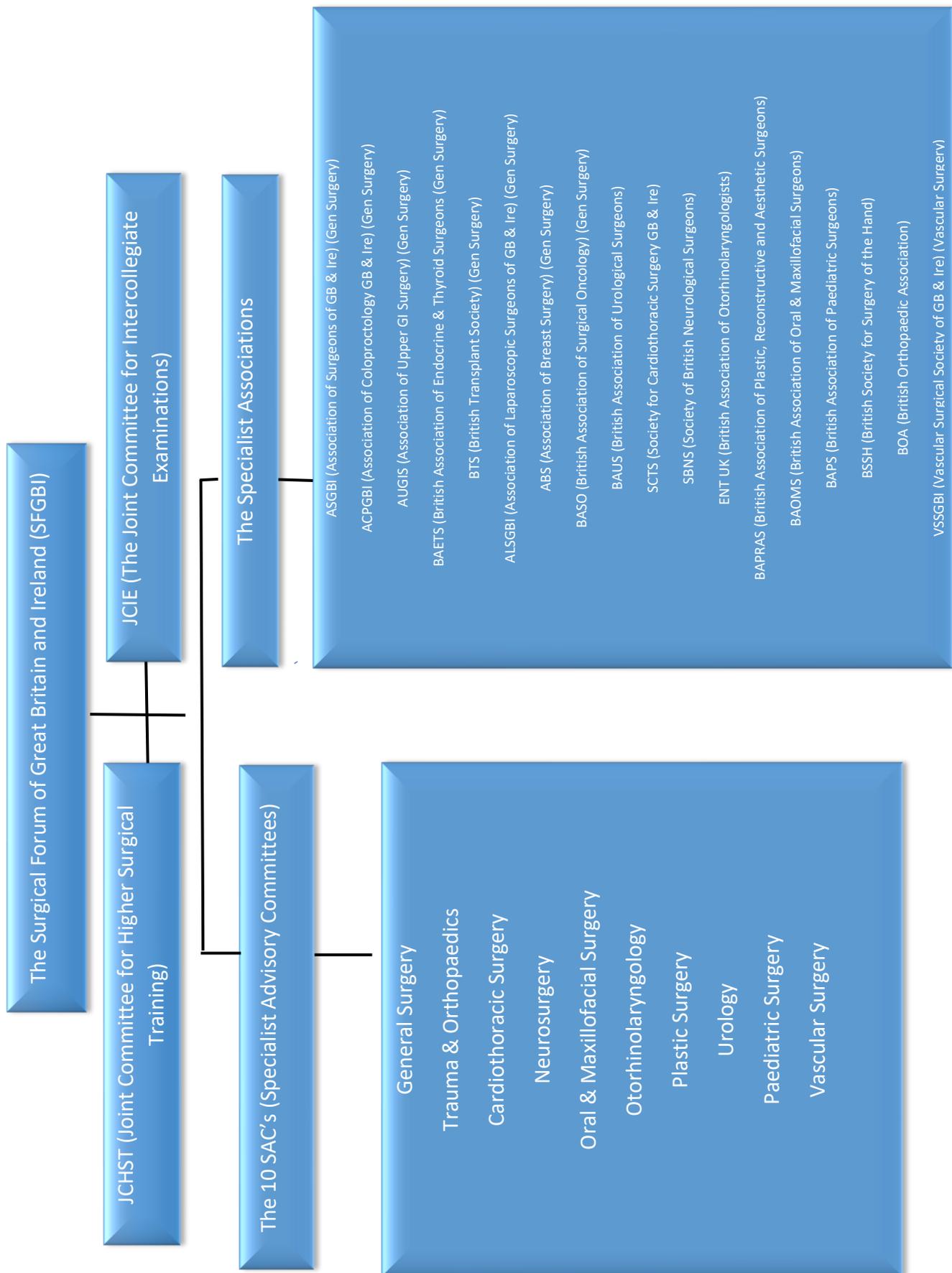
and board chairman form a sub-committee' (**Galasko, 1997:6**) of the Surgical Forum namely, the (JCIE). The Joint Committee on Higher Surgical Training (JCHST) is responsible for advising the Surgical Forum on all matters in relation to higher surgical training. It is supported operationally by the ten specialist advisory committees (SAC's) (**JCHST, 2005**).

Thus, although the diagrammatic representation appears one-dimensional, in practice the Joint Committee for Intercollegiate Examinations (JCIE) and the Joint Committee for Higher Surgical Training (JCHST) feed into the Surgical Forum of Great Britain and Ireland (SFGBI) and vice versa.

The plethora of specialist associations is also represented in the diagrammatic representation. The specialist associations represent either a specialty, or sub-specialty of the parent specialty. For example, The Association of Surgeons of Great Britain and Ireland is the specialty association for general surgery and under its umbrella it houses the following sub-specialty associations: The Association of Coloproctology of Great Britain and Ireland, Association of Breast Surgery, Association of Upper GI Surgery, Association of Laparoscopic Surgeons of Great Britain and Ireland, British Association of Endocrine and Thyroid Surgeons, British Association of Surgical Oncology and the British Transplant Society.

However, there is specialty associations with affiliations to two parent specialties. For example, the British Society for Surgery of The Hand (BSSH) was officially formed in 1968 by enthusiastic surgeons from the disciplines of orthopaedics and plastic surgery. In 1991 the society pioneered the concept of what they describe as, an 'interface specialty', which entailed establishing:

'in cooperation with the Specialty Advisory Committees (SAC) in Orthopaedic and Plastic Surgery known initially as the Standing Liaison Group in Hand Surgery and later as the Interface Committee, with the purpose of establishing advanced training posts in hand surgery for trainees in either specialty.' (www.bssh.ac.uk/about/our_history.aspx)



The information contained in this diagram is taken from Galasko (1997); JCHST (2005) and the respective specialty associations.

Bibliography

Abbreviations

ASGBI = Association of Surgeons of Great Britain and Ireland

BMJ = British Medical Journal

BAPS = British Association of Paediatric Surgeons

BSSH = British Society for Surgery of the Hand

CSAG = Clinical Standards Advisory Group

DOH = Department of Health

JBJS = Journal of Bone and Joint Surgery

JAMA = Journal of the American Medical Association

JCHST = Joint Committee for Higher Surgical Training

RCS = Royal College of Surgeons

SBNS = Society of British Neurological Surgeons

- ❖ Abbott, A. (1988) *The system of professions: an essay on the division of expert labor*. Chicago: University of Chicago Press.
- ❖ Allsop, J. Saks, M. (2002) 'Introduction: the regulation of health professions', in Allsop, J and Saks, M. (eds.), *Regulating the health professions*. London: Sage Publications, 1-16.
- ❖ Arksey, H and Knight, P. (1999) *Interviewing for social scientists: an introductory resource with examples*. London: Sage Publications.
- ❖ ASGBI (2004) *Annual Report*. London.
- ❖ ASGBI 'Strategic aims', www.asgbi.org.uk/about-us/strategic-aims [accessed 17th November 2019]
- ❖ Atkinson, P. (1995) *Medical talk and medical work*. London: Sage Publications.
- ❖ Atkinson, P., Batchelor, C., Parsons, E. (1997) 'The rhetoric of prediction and chance in the research to clone a disease gene', in M. A. Elston (ed.), *The sociology of medical science and technology*. London: Blackwell, 101-125.
- ❖ Atkinson, P. (2017) *Thinking Ethnographically*. London: Sage Publications.
- ❖ Baker, M. (1998) *Making sense of the new NHS White Paper*. Oxford: Radcliffe Medical Press.
- ❖ Bernhard, J. D. (1995) 'The Swedish pimple. Or, thoughts on specialisation', *Journal of the American Academy of Dermatology*, 32/3, 505-509.
- ❖ BMJ (1967) 'Total replacement of the knee' vol.2 (issue 5551), 525.

- ❖ BMJ (1980) 'Second-best prostatectomy', vol. 280 (issue 6214), 590.
- ❖ Bourdieu, P. (1981, repr. of 1975) 'The specificity of the scientific field', in C. C. Lemert (ed.), *French sociology: rupture and renewal*. New York; Guildford: Columbia University Press.
- ❖ Bourdieu, P. (1984, repr. of 1979) *Distinction: a social critique of the judgement of taste*. Cambridge, MA: Harvard University Press.
- ❖ Bourdieu, P. (1986, repr. of 1983) 'The forms of capital', in J. Richardson., *Handbook of theory and research for the sociology of education, (1986)*, Westport, CT: Greenwood, 241-58.
- ❖ Bourdieu, P. (1988, repr. of 1984) *Homo Academicus*. Stanford, CA: Stanford University Press.
- ❖ Bourdieu, P. (1990, repr. of 1980) *The logic of practice*. Stanford, CA: Stanford University Press.
- ❖ Bourdieu, P. (1991) 'The peculiar history of scientific reason', *Sociological Forum* 6/1, 3-25.
- ❖ Bourdieu, P. (2005), *The structures of the economy*. Cambridge: Polity Press.
- ❖ Brante, T. (1988) 'Sociological approaches to the professions', in *Acta Sociologica* 31, 2:119-142.
- ❖ Bristow, W. R. (1927) 'The influence of war surgery on the treatment of fractures in Great Britain', *JAMA* (December 23rd), vol.89, 1920-1924.
- ❖ Bristow, W. R. (1937) 'Orthopaedic surgery – retrospect and forecast', *The Lancet* 230 (issue 5958), 1061-1064.
- ❖ British Association of Oral and Maxillofacial Surgeons (www.baoms.org.uk)
- ❖ British Association of Paediatric Surgeons (1994) *A guide for purchasers and providers of paediatric surgical services*. Edinburgh: RCS.
- ❖ BSSH *Our history*, www.bssh.ac.uk/about/our_history.aspx [accessed 17th November 2019]
- ❖ Bucher, R. Strauss, A. L. (1961) 'Professions in process', *American Journal of Sociology* 66, 325-334.
- ❖ Bynum, W. F. (1994) *Science and the practice of medicine in the nineteenth century*. Cambridge: Cambridge University Press.
- ❖ Calman, K. C. (1998) *The potential for health: how to improve the nation's health*. Oxford: Oxford University Press.
- ❖ Capener, N. (1958) '[Editorials and Annotations:] Forty years on', *JBJS* 40-B/4, 615-617.
- ❖ Casper, M. J. (1966 rev. ed. 1998) *The making of the unborn patient: a social anatomy of fetal surgery*. New Brunswick, New Jersey: Rutgers University Press.

- ❖ Cassell, J. (1998) *The Woman in the surgeon's body*. Cambridge, MA: Harvard University Press.
- ❖ Charmaz, K. (2001) 'Qualitative interviewing and grounded theory analysis', in J. F. Gubrium and J.A. Holstein (eds.), *Handbook of interview research context & method*. Thousand Oaks, California: Sage Publications, 675-694
- ❖ Charmaz, (2014, repr. of 2012) *Constructing grounded theory*. London: Sage Publications.
- ❖ Charnley, J. (1964) '[Correspondence:] Specialist qualifications', *BMJ*, vol.1, 1249.
- ❖ Cheatle, G. L. (1925) 'The present state of the teaching and practice of surgery', *BMJ*, (November 21st), vol.2, 958-960.
- ❖ Colomy, P., Rhoades. G. (1994) 'Toward a micro corrective of structural differentiation theory' *Sociological Perspectives* 37/4, 547-583.
- ❖ Cooter, R. (1993) *Surgery and society in peace and war: orthopaedics and the organisation of modern medicine, 1880-1948*. London: The Macmillan Press.
- ❖ Craft, A. W. (2003) 'The national service framework for children: Cinderella is ready for the ball', *BMJ* 326 (26th April), 891-892.
- ❖ Cropper, S. (2001) 'Changing institutional frameworks: formalisation as a means of institutionalising collaborative activity among health care providers' in L. Ashburner (ed.), *Organisational behaviour and organisational studies in health care*. Basingstoke: Palgrave, 82-106.
- ❖ CSAG (1997) *Cleft lip and/or palate*. London: The Stationery Office.
- ❖ Darke, S. G. (1997) *The provision of vascular services*. London: Vascular Surgery Society of Great Britain and Ireland.
- ❖ Darzi, A., Mackay, S. (2002) 'Recent advances in minimal access surgery', *BMJ* 324, 31-34.
- ❖ Davies, H. T. O., Harrison, S. (2003) 'Trends in doctor-manager relationships', *BMJ* 326, 646-649.
- ❖ Dennis, A., Martin, P. J. (2005) 'Symbolic interactionism and the concept of power', *The British Journal of Sociology* 56/2, 191-213.
- ❖ Department of Health (1997) *The new NHS: modern dependable*. London: Department of Health.
- ❖ Du Boulay, C. (2000) 'From CME to CPD: getting better at getting better?', *BMJ* 320, 393-394.
- ❖ Edwards, N. (2002) '[Editorial:] Clinical networks: advantages include flexibility, strength, speed, and focus on clinical issues', *BMJ* 324, 63.
- ❖ Elston, M. A. (1991) 'The politics of professional power: medicine in a changing health service', in J. Gabe, M. Calnan, and M. Bury (eds.) *The sociology of the health service*. London: Routledge, 58-88.

- ❖ English, T. A. H. (1989) 'Comments and News: The Joint Meeting of Surgical Colleges 1982-1988. A Personal View', *Annals of The Royal College of Surgeons of England* 71 (suppl)/ 2, 30-31.
- ❖ Feldman, M. S. Bell, J. Berger, M. T. (2003) *Gaining access: a practical and theoretical guide for qualitative researchers*. Walnut Creek, CA: AltaMira Press
- ❖ Ferlie, E., Ashburner, L., Fitzgerald, L., Pettigrew, A. (1996) *The new public management in action*. Oxford: Oxford University Press.
- ❖ Fletcher-Shaw, W. (1954) *Twenty-Five years: the story of the Royal College of Obstetricians and Gynaecologists*. Manchester: J. & A. Churchill.
- ❖ Flyvbjerg, B. (1998) *Rationality and power: democracy in practice*. Chicago: The University of Chicago Press.
- ❖ Forsythe, M. (1998) 'Regions: dead and buried or hope for resurrection?', in G. Macpherson (ed.), *Our NHS: A celebration of 50 years*, London: BMJ Publishing Group, 60-65.
- ❖ Foucault, M. (1972) *The archaeology of knowledge*. London: Tavistock.
- ❖ Fox, N. J. (1992) *The social meaning of surgery*. Buckingham: Open University Press.
- ❖ Freidson, E. (1970) *Profession of medicine: a study of the sociology of applied knowledge*. Chicago: The University of Chicago Press.
- ❖ Freidson, E. (1988) *Professional powers: a study of the institutionalisation of formal knowledge*. Chicago: The University of Chicago Press.
- ❖ Freidson, E. (2001) *Professionalism: the third logic*. Cambridge: Polity Press.
- ❖ Frostick, S. P. & Wallace, W. A. (1993) 'Mainstream specialisms and the NHS market: the case of surgery' in I. Tilley (ed.), *Managing the Internal Market*. London: Chapman, 237-250.
- ❖ Fujimura, J. H. (1988) 'The molecular biological bandwagon in cancer research: where social worlds meet', *Social Problems* 35, 261-83.
- ❖ Fujimura, J. H., Chou, D., Y. (1994) 'Dissent in science: styles of scientific practice and the controversy over the cause of AIDS', *Social Science and Medicine* 38, 1017-1036.
- ❖ Galasko, C. S. B. (1997) *Basic surgical training and the hospital recognition committee*. London: The Royal College of Surgeons.
- ❖ Glaser, B. G., Strauss, A. L. (2008 repr. of 1995) *The Discovery of grounded theory: strategies for qualitative research*. New Brunswick, USA: Aldine Transaction Publishers.
- ❖ Godber, G. E. (1961) 'Trends in specialisation and their effect on the practice of medicine', *BMJ* (Sept 30th), vol.2, 843-847.
- ❖ Goffman, E. (1961) *Asylums: essays on the social situation of mental patients and other inmates*. New York: Anchor Books.

- ❖ Goldstraw, P. (2002) 'The expansion of consultant provision for thoracic surgery in the UK', www.ctsnet.org/file/ThoracicExpansion200.ppt.
- ❖ Goldthwait, J. E. (1933) 'The backgrounds and foregrounds of orthopaedics', *JBJS* 15/2 (old series 31/2), 279-301.
- ❖ Green, J. Thorogood, N. (2004) *Qualitative methods for health research*. London: Sage Publications.
- ❖ Halpern, S. A. (1988) *American pediatrics: the social dynamics of professionalism 1880-1980*. Berkeley: University of California Press.
- ❖ Ham, C. (1997) *Management and competition in the NHS*. Oxford: Radcliffe Medical Press.
- ❖ Ham, C. (1999) *Health policy in Britain*. London: Palgrave Macmillan Publishers.
- ❖ Ham, C. Smith, J. Temple, J. (1998) *Hubs, spokes & policy cycles*. London: King's Fund.
- ❖ Harrison, S., Schulz, R. I. (1989) 'Clinical autonomy in the United Kingdom and the United States: contrasts and convergence', in G. Freddi, and J. W. Bjorkmann (eds.), *Controlling medical professionals: the comparative politics of health governance*. London: Sage.
- ❖ Heinz, J. P., Laumann, E. O. (1982, rev. ed. 1994) *Chicago lawyers: the social structure of the bar*. Illinois: Northwestern University Press.
- ❖ Howell, J. D. (1995) *Technology in the hospital: transforming patient care in the early twentieth century*. Baltimore: Johns Hopkins University Press.
- ❖ Hughes, E. C. (1958) *Men and their work*. New York: The Free Press.
- ❖ Hugman, R. (1991) *Power in caring professions*. London: Macmillan.
- ❖ Hunter, D. J. (1990) 'Organising and managing health care: a challenge for medical sociology' in S. Cunningham-Burley and N. McKegney (eds.), *Readings in medical sociology*. London: Routledge, 213-236.
- ❖ Hunter, D. J. (1994) 'From tribalism to corporatism: the managerial challenge to medical dominance', in J. Gabe, D. Kelleher and G. Williams (eds.), *Challenging medicine*. London: Routledge, 1-22.
- ❖ Hunter, S. and McLaren, P. (1993) 'Specialist medical training and the Calman report', *BMJ* 306 (15th May), 1281-1282.
- ❖ Irving, M. (1986) 'The general surgeon', *BMJ* 292, 741-2.
- ❖ Jackson, B. T. (1992) 'Coloproctology – a speciality in transition', *Annals of The Royal College of Surgeons of England* 74/2 (March 1992), 63-6.
- ❖ Jary, D. & Jary, J. (1991) *Collins Dictionary of Sociology*. Glasgow: Harper-Collins.
- ❖ JBJS (1946) '[News notes:] Orthopaedics in medical education and in regional hospital services', vol. 28, 194-195.

- ❖ JBJS (1948) '[Proceedings and reports of councils and associations:] Appointment of Mr George Perkins as Professor of Surgery in the University of London, St Thomas's Hospital Medical School', vol. 30, 206.
- ❖ JCHST (2005) *The Pink Book*, www.jchst.org, last accessed Nov. 2007.
- ❖ Jones, R. (1918) 'An address on the orthopaedic outlook in military surgery', *BMJ* (Jan 12th, 1918), vol.1, 41-45.
- ❖ Jordan, G. L. Jr. (1991) 'The future of general surgery', *The American Journal of Surgery* 161 (Feb. 1991), 194-201.
- ❖ Kennedy, I. (2001) *Learning from Bristol: the report of the public enquiry into children's heart surgery at the Bristol royal infirmary 1984-1995* (command paper CM 5207), www.bristol-inquiry.org.uk/final_report/index.htm, last accessed Jan. 2008.
- ❖ Keogh, B. E., Dussek, J., Watson, D., Magee, P., Wheatley, D (1998) 'Public confidence and cardiac surgical outcome', *BMJ* 316 (June 13th), 1759-1760.
- ❖ Kilminster, R. (1991) 'Structuration theory as a world-view', in C. G. A. Bryant and D. Jary (eds.), *Giddens' theory of structuration: a critical appreciation*. London: Routledge, 74-115.
- ❖ King, N. Horrocks, C. (2010) *Interviews in qualitative research*. London: Sage Publications.
- ❖ Kirk, R. M. (1989) '[Editorial:] Council discussion topic – surgical examinations', *Annals of The Royal College of Surgeons of England* 71 (suppl) 2, 29-30.
- ❖ Klein, R. M. (1990) 'The state and the profession: the politics of the double bed', *BMJ* 301, 700-702.
- ❖ Klein, R. M. (1995) *The new politics of the NHS*. London: Longman.
- ❖ Klepetko, W., Aberg, T. H. J., Lerut, A., E., M., R. (2001) 'Structure of general thoracic surgery in Europe', *European Journal of Cardio-Thoracic Surgery* 20, 663-668.
- ❖ Lancet (1926) 'Accidents and hospitals' (October 23rd), vol. 208 (issue 5382), 864.
- ❖ Lancet (1945) 'Clinical specialism' (August 18th), vol. 246 (issue 6364), 209-211.
- ❖ Lancet (1946) 'Qualifications of the specialist surgeon' (June 29th), vol. 247 (issue 6409), 978-979.
- ❖ Lancet (1999) 'Laparoscopic versus open repair of groin hernia: a randomised comparison', vol. 354, 185-190.
- ❖ Larson, M. S. (1977) *The rise of professionalism: a sociological analysis*. California: The University of California Press.
- ❖ Lawrence, C. (1994) *Medicine in the making of modern Britain 1700-1920*. London: Routledge Publications.
- ❖ Leeming, W. (2001) 'Professionalisation theory, medical specialists and the concept of "national patterns of specialization"', in *Social Science Information*, 40 (3). 455-485.

- ❖ Lee-Potter, J. (1997) *A damn bad business: the NHS deformed*. London: The Cassell Group.
- ❖ Lempert, L.B. (2007) 'Asking questions of the data: memo writing in the grounded theory tradition', in Bryant, A. and Charmaz, K. (eds.), *The Sage handbook of grounded theory*. London: Sage Publications, 245-264
- ❖ Le Vay, D. (1990) *The history of orthopaedics: an account of the study and practice of orthopaedics from the earliest times to the modern era*. New Jersey, USA: Parthenon.
- ❖ Loeffler, I. J. P. (2000) 'Are generalists still needed in a specialised world? : the renaissance of general surgery', *BMJ*, 320, 436-438.
- ❖ Macdonald, K. M. (1995) *The sociology of the professions*. London: Sage Publications.
- ❖ MacFie, J. (2014) *The future of District General Hospitals*. London: The Surgical Forum of Great Britain and Ireland
- ❖ Marnoch, G. (1996) *Doctors and management in the National Health Service*. Buckingham: Open University Press.
- ❖ Maton, K. (2014, repr. of 2012) 'Habitus' in M. Grenfell (ed.), *Pierre Bourdieu key concepts*. New York: Routledge, 48-64
- ❖ Mayor, S. (2000) 'Paediatric surgery should be performed by specialist surgeons', *BMJ* 320 (27th May), 1423.
- ❖ Moore, F. D. (1995) *A miracle and a privilege: recounting a half century of surgical advance*. Washington: The Joseph Henry Press.
- ❖ Morgan, O. G. (1963), '[Correspondence:] F.R.C.S. in Ophthalmology', *BMJ* (Sept. 21st), vol.2, 743.
- ❖ Newdick, C. (1995) *Who should we treat? Law, patients and resources in the NHS*. Oxford: Oxford University Press.
- ❖ Newton-Smith, W.H. (1981) *The rationality of science*. New York: Routledge.
- ❖ Ong, E. (2003) 'So you want to be a paediatric surgeon', *BMJ* 327 (issue 7408), 25.
- ❖ Palmer, C. (2002) 'Clinical governance: breathing new life into clinical audit', *Advances in Psychiatric Treatment* 8, 470-476.
- ❖ Parsons, T. (1954, rev. ed. of 1949) *Essays in sociological theory*. New York: The Free Press.
- ❖ Parsons, T. (2012, repr. of 1951) *The social system*. New Orleans, Louisiana: Quid Pro Books.
- ❖ Partridge, M. R. (2002) 'Thoracic surgery in a crisis', *BMJ* 324, 376-377.
- ❖ Platt, H. (1982) 'The foundation of the Association of Surgeons of Great Britain and Ireland', *British Journal of Surgery*, 69, 561-563.
- ❖ Pollock, A. M. (2004), *NHS, plc. The privatisation of our healthcare*. London: Verso

- ❖ Porter, R. (1996) 'Hospitals and surgery', in R. Porter (ed.), *The Cambridge illustrated history of medicine*. Cambridge: Cambridge University Press, 202-245.
- ❖ Pringle, R. (1998) *Sex and medicine: gender, power and authority in the medical profession*. Cambridge: Cambridge University Press.
- ❖ Rivett, G. (1998) *From cradle to grave: fifty years of the NHS*. London: King's Fund Publishing.
- ❖ Roland, M. and Coulter, A. (eds.) (1992) *Hospital referrals*. Oxford: Oxford University Press.
- ❖ Royal College of Ophthalmologists (www.rcophthac.uk)
- ❖ Royal College of Surgeons of Edinburgh (1994) *The Royal College of Surgeons*. Edinburgh: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (1985) Minutes of Council, 10th Oct 1985. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (1997) *The provision of emergency surgical services: an organisational framework*. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (1999) *Research report*. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (2000) *Children's surgery – a first class service*. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (2000) *The provision of elective surgical services*. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (2001) *The surgical workforce in the new NHS*. London: Royal College of Surgeons.
- ❖ Royal College of Surgeons of England (2005) *Developing a modern surgical workforce*. London: Royal College of Surgeons.
- ❖ Rutkow, I. M. (1993) *Surgery: an illustrated history*. St. Louis: Mosby-Year Book.
- ❖ Saks, M. (1995) *Professions and the public interest: medical power, altruism and alternative medicine*. London: Routledge.
- ❖ Salter, B. (2004) *The new politics of medicine*. Basingstoke: Palgrave Macmillan.
- ❖ SBNS (2001) *Safe Paediatric Neurosurgery*. London: Society of British Neurological Surgeons.
- ❖ Scott, W. R. (1995 rev. ed. 2001) *Institutions and organizations*, London: Sage Publications.
- ❖ Senate of Surgery of Great Britain & Ireland (1997) *Consultant surgical practice and training in the UK*. London: The Royal College of Surgeons of England.
- ❖ Silverman, D. (1981) 'The child as a social object: Down's syndrome children in a paediatric cardiology clinic', in *Sociology of Health & Illness*, 3, 254-274.

- ❖ Spencer, H. R. (1929) 'A College of obstetrics and gynaecology', *BMJ* (March 16th), vol.1, 523.
- ❖ Starr, P. (1982) *The social transformation of American medicine*. New York: Basic Books.
- ❖ Stevens, R. (1971 rev. ed. 1998) *American medicine and the public interest: a history of specialisation*. California: University of California Press.
- ❖ Stevens, R. (1966 rev. ed. 2003) *Medical practice in modern England: the impact of specialisation and state medicine*. New Brunswick, New Jersey: Transaction Publishers.
- ❖ Taylor, I. (1997) 'Super specialisation in cancer surgery: how beneficial?', *Surgery* 15, 5.
- ❖ Thomson, P. (2014, repr. of 2012) 'Field' in M. Grenfell (ed.), *Pierre Bourdieu key concepts*. New York: Routledge, 65-80.
- ❖ Thorne, M. L. (2001) 'Clinical governance: is NICE the right word?', in L. Ashburner (ed.), *Organisational behaviour and organisational studies in health care*. Basingstoke: Palgrave, 184-203.
- ❖ Tinker, A. Coomber, V. (2004) *University research ethics committees: their role, remit and conduct*. London: Kings College/Nuffield Foundation.
- ❖ Turnberg, L. (2000) 'Survival of the general physician', *BMJ*, 320, 438-440.
- ❖ Turner, B. S. (1995) *Medical power and social knowledge*. London: Sage Publications.
- ❖ Vascular Society of Great Britain and Ireland (2018) *Vascular surgery United Kingdom workforce survey 2018*. Vascular Society.org.uk
- ❖ Vecchio, R., MacFayden, B. V., Palazzo, F. (2000) 'History of laparoscopic surgery', *Panminerva Medica* 42/1 (March), 87-90.
- ❖ Warren, C. A. B. (2001) 'Qualitative interviewing', in J. F. Gubrium and J.A. Holstein (eds.), *Handbook of interview research context & method*. Thousand Oaks, California: Sage Publications, 83-101.
- ❖ Watkin, D. (1998) 'Can there be too many surgical specialties?', *Annals of the Royal College of Surgeons* (Supplement) 80, 105-108.
- ❖ Waugh, W. (1990) *John Charnley: The man and the hip*. London: Springer.
- ❖ Wickham, J. E. A. (1987) 'The new surgery', *BMJ* 295, 1581-1582.
- ❖ Wroblewski, B. M. (2002) 'Professor Sir John Charnley 1911-1982', *Rheumatology*, 41,