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**Business Success and the Architectural Practice of Sir George Gilbert Scott, c1845-**

**1878: a Study in Hard Work, Sound Management and Networks of Trust**

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### ***Abstract***

*The study which follows explores the management of Sir George Gilbert Scott's architectural practice, which was responsible for the very large output of over 1,000 works across the Victorian period. The Scott practice has been seen by some as a predecessor of the modern, large-scale architectural office. Employing insights from Max Weber's 'Protestant Ethic', the paper examines Scott's motivation as an architect, the nature of his leadership and the detailed structuring and management of his office and of architectural projects. This is followed by a short case study relating to Scott's rebuilding of Glasgow University from 1865-1870. Finally, there are some reflections on the paper's implications for further historical studies of businessmen and businesses from different periods through the lens of Weber's 'Protestant Ethic'.*

**Keywords:** architecture; functional management; business networks; Protestant Ethic

## Introduction

There has been little study of architecture as a business, from a historical point of view. The profession receives no mention in the *Oxford Handbook of Business History*, one obvious reason being the fact that architectural practices do not in general retain business records, being more concerned to preserve designs and drawings. <sup>1</sup> This fact, in itself, relates to the interesting tension between the aesthetic and business objectives of architects, a phenomenon which has been explored in the two historical studies of architecture as a business that are known to exist, one by Mintzberg *et al*, <sup>2</sup> the other by McKinstry and Wallace. <sup>3</sup> These studies have reinforced the view of Gutman that architecture as a career ‘is not chosen for its financial rewards’ and that many architects ‘conceive of themselves primarily as artists’. <sup>4</sup>

The present study examines the architectural practice of Sir George Gilbert Scott (1811-1878), restorer of most major English cathedrals and builder of a myriad of churches and other buildings in the UK and abroad. Scott’s architectural practice was Britain’s largest. It is widely accepted that over 1,000 works of architecture, mostly in the Gothic style, were undertaken by his firm between the years 1835-1878. <sup>5</sup> In terms of architectural reputation, in his own day Scott received every accolade the profession was able to give, was knighted and on his death in 1878, was buried in Westminster Abbey.

His death, according to *The Builder*, <sup>6</sup> brought to a close ‘the most successful architectural career of modern times’. During his lifetime, while in most quarters revered, he was not without critics who questioned the amount of work taken on by his practice and its uneven quality, suggesting that he was more commercially than aesthetically motivated. <sup>7</sup> During the first two thirds of the 20th century, he suffered the fate of Victorian architects generally, his works being subjected to ridicule and falling from favour as the Modern movement in

architecture gradually gained currency across Britain during the first half of the 20th century, as Stamp has powerfully shown.<sup>8</sup> However, the revaluation of the Victorians in general and Victorian architecture in particular, taken together with the recent restoration of Scott's St Pancras Station (now Midland Grand) Hotel and Albert Memorial, both in central London, has revealed these structures in all their original glory. This has reinstated his reputation as an architect, corroborating the view of Sir John Betjeman, who opined in 1972 that 'When at the top of his form, Scott was as good as the best of his Gothic contemporaries'.<sup>9</sup>

The value of a study of Scott's practice is that, as well as having the potential to illuminate his motivation as an architect, it is able to shed light on Victorian business and management attitudes and practices more generally. Child<sup>10</sup> has stated of this period that 'the dominant British entrepreneurial philosophy was founded upon the concepts of 'self-help and laissez-faire economics'. This can scarcely be doubted, but a study of Scott's practice can show how this philosophy was worked out in terms of the detailed management, organisation and business structures utilized in a particular field of professional activity, architecture, and what other factors might have been involved. Wilson and Thomson's work on management practices and structures<sup>11</sup> is concerned with such matters, but, reflecting the predominance of big business in the business history literature, on the whole relates its findings to larger organisations. This of necessity excludes professional practices and smaller businesses, a deficiency the present study is intended to address. Even although Scott's business was the largest of its kind in Britain, it was still a small business, as it only directly employed some 30-35 individuals at its height.

The paper continues with a review of Weber's Protestant Work Ethic, the theoretical focus chosen to illuminate the work and career of Sir George Gilbert Scott. The section which

follows provides an overview of his practice and achievements. An analysis of the management functions within his business and of his business networks is then given. A study of how these functions and networks operated in relation to his rebuilding of Glasgow University follows in the next section, which is succeeded by a concluding discussion examining the implications of the Scott case for future studies involving Weber's Protestant Work Ethic.

### **Weber's Protestant Ethic**

Weber's thesis states that developments in Protestant belief and practice, stemming from the Reformation, dynamised capitalism, shaping it in subsequent ages. He initially focussed on the Calvinistic merchants of the countries where the Reformation had most influence, such as Germany or Britain, explaining how the notion of predestination led them to a sense of calling to their earthly occupations, which had, prior to the Reformation, been seen as inferior to the activities of the faithful, in holy orders, in sacred duties such as worship and prayer. This in turn resulted in an intensification of the commitment of Calvinistic businessmen to hard work, driven by a sense of the preciousness of time, which, according to Weber's Reformed Protestant examples, should never be wasted. This led to business success, seen as confirmation of their calling and salvation. Their success had the further benefits of providing employment within the community through reinvestment in the firm and enabling charitable giving. Correspondingly, personal expenditure was seen as selfish, sinful and undisciplined.

Weber never expected complete uniformity of theological interpretation, practical action or depth of ascetic behaviour in or across all the Protestant groupings he examined in his book, especially later ones, such as the Methodists, which only emerged in the 18c, stating that 'similar ethical maxims may be correlated with very different dogmatic foundations'.<sup>12</sup>

Weber saw his Ethic as continuing to operate among Protestants up to and including his own day, not just among Calvinists, but among Methodists and other groupings of more Arminian persuasion, who were driven to pursue business wholeheartedly from a sense of Christian duty or divine guidance, rather than predestination.<sup>13</sup> For example, Weber saw the PE in operation among Protestant groupings such as Baptists or Mennonites in the early 20th century in the United States.

However, Weber believed that religion was in terminal decline in his own day and that the business practices and commitment to success that had once characterised Protestant entrepreneurs had been emulated by late capitalism as a set of learned work behaviours in society at large, but motivated by the pursuit of profit rather than the worship of God.<sup>14</sup>

#### *The PE: reception and literature*

The controversial nature of the PE was reaffirmed in a recent book, *The Protestant Ethic Turns 100: Essays on the Centenary of the Weber Thesis*. Its editors observe that Weber's 'detractors have repeatedly and incessantly questioned Weber's sociology, theology, economics, and history'. Nevertheless, they believe that 'the debate on the merits of the "Weber thesis" is by no means over, nor should it be', which is borne out by the vast number of publications it continues to generate.<sup>15</sup>

The PE used to attract more support among economic historians, see for example Hills,<sup>16</sup> Landes<sup>17</sup> and later,<sup>18</sup> Joyce for its role in the making of industrial Britain.<sup>19</sup> Over recent decades, however, business history has shown little interest in Weber. For instance, Davenport-Hines' *Capital, Entrepreneurs and Profits*<sup>20</sup> omits to mention Weber relative to business enterprises of the later 19th and 20th centuries. Likewise, in Amatori and Jones

(eds), <sup>21</sup> Jones, Lazonick and Chandler make no reference to Weber for similar periods. Niall Ferguson <sup>22</sup> is one of very few who takes any notice of Weber today.

Seldom noticed, to date, in the multitude of Weber studies, are his own remarks at the end of the PE, where he looks forward to further research on how Protestantism influenced capitalism as well as research on how Protestant asceticism would in turn be influenced by capitalism, which he believed, was bringing about religion's decay. <sup>23</sup> This, in its own right justifies more studies of Weber's insights, based on the later phases of capitalism.

A small number of such case studies have recently begun to emerge, which examine the experiences of individual Protestant Christian entrepreneurs across a range of time spans and types of firm, as opposed to the generalizations about the uptake of PE-derived business practices across whole countries such as those by Landes or Ferguson. These newer studies explore the mental and spiritual struggles faced in different ages. Kadane's *The Watchful Clothier* <sup>24</sup> analyses the personal diaries of the deeply pious 18c Leeds wool dyer, Joseph Ryder, who for 37 years kept a record of his daily existence and detailed his spiritual difficulties in striking a balance between the call of ever increasing production, the profits of which might lead to avarice, and of rest, which might lead to sloth, showing how Christian views on work and wealth were responding to industrial change in society and to altering theological perspectives such as the advent of Unitarianism. Further to this study, a recent paper by McKinstry and Ding <sup>25</sup> utilised the broad insights of the PE for an understanding of the motivation and business practices of the leading individuals in a family of pious, reformed, evangelical Christians, the Cowans of Penicuik, who ran an international papermaking business in Scotland from the late-18th century throughout the 19th century and



beyond. Weber's statements on the links between Protestant faith and commitment to business still held good for this firm.

As well as exploring the experiences of later Christian entrepreneurs, as encouraged by Weber,<sup>26</sup> these studies improve on Weber's methodology and that of writers such as Marshall,<sup>27</sup> who judged the development of the PE largely on the basis of the teachings or writings of clergymen rather than evidence from those involved in business.

The present paper will now take the opportunity to apply the insights of Weber's PE to George Gilbert Scott's architectural practice. Just a quarter-century after Scott's death in 1878, Max Weber was to state that his own age was generally 'alien to God' and 'without prophets',<sup>28</sup> but he also saw in his own time, in places such as the USA, vestiges of the religious and related business cultures of countries where the PE had been in evidence centuries earlier.<sup>29</sup> The Scott study will show that, up until his death in 1878, when Max Weber was in his fourteenth year, faith still governed and drove the development of his business. Scott's *Personal and Professional Recollections*,<sup>30</sup> a candid autobiography of 604 pages, remains as a key source for the study which follows.

As discussed earlier, Weber's two pivotal concepts in the PE were the notion of the 'calling' and its implications for the intensification of work. George Gilbert Scott's sense of calling may be related at the outset to the highly religious, largely Christian Britain in which he lived. More particularly, its culture, politics and everyday life were permeated by the notion of 'providentialism', as Brown has recently demonstrated in *Providence and Empire*.<sup>31</sup> This notion, stemming from Britain's post-Reformation religious roots, consisted of a widely held belief that God was intervening in human affairs, through individuals, in the British nation

and Empire, to bring about the conversion and civilisation of millions at home and abroad, a view held by Queen Victoria, most of her cabinet and many members of the public. We shall see below that Scott shared this belief in God's ability to intervene directly in his personal affairs in order to bring about the divine will, at three pivotal points in his life. These points were, first, during his early years of architectural practice, when he faced apparently insurmountable barriers to succeeding, second, when he read the epoch-making works of AWN Pugin and came to believe that the Gothic style was the true Christian, British and ethical style of architecture, and third, when he was awarded the huge commission to design the Foreign Office in London.<sup>32</sup> His total commitment to work was his faith-based response to promptings such as these, mirroring, in principle, the callings of Weber's Puritans and their expression in the businesses of their day.

### **The Scott Practice: An Overview**

Descended from two generations of evangelically-inclined Church of England clergymen, Scott trained in London under the architect James Edmeston from 1827-31 and then worked with Grissell and Peto, builders in the same city. His skills were further enhanced under the architects Henry Roberts and Sampson Kempthorne. Scott took up architectural practice on his own in 1835, establishing a business which first designed workhouses under the Poor Law. Scott employed one clerk, while W B Moffatt, a young architect, was later employed to produce working drawings. Scott and Moffatt operated in partnership from 1838 to 1845. The firm designed some 45 workhouses, out of a total of 323 built in England.<sup>33</sup> Some small houses and parsonages were also built at this period.

Significantly, Scott designed the Gothic Martyrs Memorial, erected at Oxford (1841-43), a commission which came through the influence of friends of his late father, who had been

perpetual curate of Gawcott, Buckinghamshire. This led to the restoration of St Mary Magdalene Church, Oxford in 1841-1842. A number of churches were designed by the firm in the Gothic style around this time, the later ones under the influence of A.W.N. Pugin, whose thought transformed Scott's understanding of Gothic architecture. Pugin emphasized the style's constructional honesty and, reflecting the Romanticism of the times, its Christian and national roots, his writings appearing to Scott like a 'burning light'.<sup>34</sup> The most important of these churches was St Giles, Camberwell (1844), a large London example which raised Scott's reputation with *The Ecclesiologist*, the journal of the Cambridge Camden Society, which, as well as following Pugin, was influenced by the teachings of the Oxford Movement regarding liturgical improvements in the Church of England, whose services were considered to have deteriorated in dignity and worshipfulness for a church with strong sacramental values. Following Pugin, the Society demanded that newly built churches should have a distinct nave and chancel, with steps up to the altar and other historically accurate details, designed to raise consciousness of the Church's historic continuity and thus to improve the environment in which services were conducted. The *Ecclesiologist* became a champion of Scott's church designs, which followed these principles, although it was occasionally critical.<sup>35</sup> It should be noted that Scott provided ecclesiologically 'correct' churches for both evangelical and 'high' Anglican congregations, which, in spite of their liturgical and theological differences, considered his designs very suitable for worship. In general, his designs avoided the more radical approach of innovators in the Gothic style, such as Butterfield, with their 'endless striping of red and black bricks', or Street with his simplified forms. Scott's designs were more archaeological in inspiration and thus more acceptable to 'the multitude',<sup>36</sup> a matter assisted by Scott's 'broad church' acceptance of Christians of many shades of belief. He and his wife made friends of various Christian

denominational persuasions. In this way the Scotts typified the Victorian period's progressive attitude, which had resulted, *inter alia*, in Catholic emancipation.

By the mid-1840s, there were eleven staff working in the office. John Drayton Wyatt joined in 1841 as an assistant draughtsman, his great aptitude leading eventually to his promotion as Scott's chief draughtsman, which he remained until 1868. John Burlison, skilled in building practice and estimating, joined about 1842, becoming Scott's 'head man' until his death in 1868. In 1844, the Scotts ceased living above the office at Spring Gardens, just off Trafalgar Square in central London, moving a few miles away to St John's Wood.

The year 1845 saw the departure of Moffatt, who drank heavily, whose manner gave offence to clients and whose speculation in shares caused him to maximize his withdrawals of capital from the business. Scott had won the highly prestigious competition to design the large St Nicolas Church in Hamburg, Germany a job which was to continue until the 1860s. In the 1840's, Scott was working flat out and finances were tight, but it was then that his reputation as a leading designer and restorer of churches was established.

By the 1850s, many commissions were being given to Scott outright without competition. By the early 1860s, he was 'at work in thirty-seven out of forty-two English counties...and restoring churches in thirty-four of them'.<sup>37</sup> In due course, the other counties would follow, with important works in Wales and Scotland. Including Scott, the number employed at Spring Gardens in 1858 was 27.<sup>38</sup> Major successes from the 1860s included the huge commission for the Foreign Office, London, after much delay and controversy, and concerning which Scott was deeply irritated at the criticism he received for designing it in the classical style, which as a Gothic specialist he regarded as less 'moral', as it was not a Christian style. His

critics accused him of only being interested in the money. There followed the competition win for the Albert Memorial, London, which was erected from 1864-1871, and for St Pancras Hotel and Station, London, built between 1866 and 1876. By the mid-1860s, Scott was able to 'lift his nose a little off the grindstone' as more and more new work came to him, and prosperity followed.<sup>39</sup> This new work included two outright commissions in Scotland for the Albert Institute, Dundee (1865-1869) and the much larger Glasgow University (1865-1878).

The year 1872 ushered in the final phase of Scott's practice. His wife died that year and health problems made him slow down and rely more on his two sons George Gilbert junior and John Oldrid. A constant flow of church work, the continuation of the large projects commenced in the 1860s and several large new commissions, for the Bute Hall at Glasgow University and the very large St Mary's Cathedral in Edinburgh, ensured that the practice remained prosperous up to and beyond Scott's death in 1878, if not as large as it had been in the 1860's. *The Builder* records that eighteen staff from the office appeared at his funeral. If Scott and his two architect sons are added in, the final number employed was 21.<sup>40</sup>

### **The Management of Business Functions and the Role of Networks in the Scott Practice**

No matter how appealing an architectural firm's designs may be, it must carry out the following functions, conjointly, in a way which balances internal needs and resources and the demands of external environments, in order to keep the business successful<sup>41</sup> a) the marketing of the firm's services to customers as a basis for sufficient business; b) the control of the firm's strategic direction; c) the management of its finances to keep it clear of insolvency and meet external and internal financial needs; d) the integration of new technology into its designs to accord with client expectations; e) operational management to meet client completion and related timings, f) the firm's acquisition and management of

adequate human resources to achieve objectives. These will be examined one by one. It will be seen that, integral to some of the key business functions in the Scott practice, there were networks of contacts utilized by Scott which both benefited the business and the contacts themselves. This section will conclude with a reflection on how these activities and links may be interpreted through the lens of Weber's PE.

### *Marketing the Firm's Services*

In the 1850s, there was a growing demand for architects. It was estimated that nine-tenths of the buildings of Britain were being designed and built, often badly or expensively, by unqualified persons. This did not mean that Scott's creating a practice out of nothing had been easy. The standard phases in the progress of an architectural work are the design phase, the tendering phase where contractors are chosen, and the construction phase. Before the design phase can begin, architects need to find out who requires designs. Invitations to submit designs for new work could either be received informally, through personal contact, or a competition could be held, either limited to a number of participants or, for larger buildings, open to all. Scott had himself at the start of his business written a circular to 'every influential friend of my father's I could think of...begging their patronage'. This resulted in some small works and appointments to design four workhouses in the neighbourhood of Gawcott, where Scott had grown up as a son of the local vicar. In the early days, Scott and Moffatt 'went every week to Peele's coffee house to see the country papers, and to find advertisements of pending competitions'. For weeks I almost lived on horseback', Scott wrote of his experience in the 1830s and 1840s, <sup>42</sup> as he canvassed for workhouse jobs. His gradual success in conditions of grave difficulty he attributed to 'a gracious Providence...without which I really do not know what course I could have taken'. <sup>43</sup> Marketing the firm's services, especially at the start of the business, was thus 'pulled' by a sense of Providence leading Scott into

architecture and 'pushed' by his incredible work rate and commitment to using every possible minute to maximum effect.

In due course, Moffatt and Scott looked after different geographical areas. Matters were complicated by the architectural competitions for workhouses, where constant canvassing was called for, at which Moffatt, Scott's partner, was particularly successful, whereas Scott's appeal rested on his disarmingly well-mannered, candid and knowledgeable presence, and his 'aura of modesty and simplicity'. Scott and Moffatt built up their business, at the expense of 'broken rest, and ... odd hours',<sup>44</sup> which was only possible as a result of youthful energy and Scott's emerging sense of God's will.

A major network which sustained the Scott practice was the very large number of clergy personally known to Scott through his personal and family membership of the Church of England, which brought him important and long-lasting restoration commissions as well as new church work. Also, as already noted, his work tended to be well reviewed in *the Ecclesiologist*, a journal supported by the Oxbridge elite which held senior positions in the Church of England and whose members were keen students of church design, referred to as ecclesiology. As well as being regular readers of the 'ecclesiological' journals and in some cases supporters of the Oxford Movement, an influential, more ritualistic interpretation of Anglicanism, these clergymen were frequently lifelong acquaintances and friends, recommending Scott's services to each other. Networks such as these operated as far afield as Scotland, where the Scottish Episcopal Church, strongly associated with the Church of England, was growing, and here Scott was revered.

He was selected outright in 1852 to build the substantial St Paul's Episcopal Church, Dundee, by Alexander Penrose Forbes, the local bishop, with whom he had extensive 'communings' <sup>45</sup> and in 1858, St James the Less Episcopal Church in Leith, Edinburgh through Charles Hughes Terrot, bishop of the diocese. <sup>46</sup> Both men were Oxbridge-educated and deeply interested in church layout and design <sup>47</sup> Forbes was a friend of E B Pusey, one of the leaders of the Oxford Movement. The ultimate award to Scott of the very large commission for St Mary's Cathedral, Edinburgh in 1872, after a controversial architectural competition, was probably influenced by the fact that the more orthodox Bishop Terrot supported Scott through thick and thin. <sup>48</sup>

### *Strategy*

Scott probably never used the term 'strategy' in connection with his practice, but his implicit intentions for it may be worked out from his actions. During the early days with Moffat, specialisms in workhouses, church design and restoration soon emerged. In due course, Scott and Moffatt looked after different geographical territories, creating an 'umbrella strategy' where there was a general direction to the business, but it was being pursued by two individuals, each exercising personal discretion in his own geographical area. <sup>49</sup> After Moffatt left in 1845, the workhouse element fell away, leaving Scott to develop predominantly as a church architect. At around the same time, Scott became an apologist for the Gothic style, under Pugin's influence. Scott later made it clear that he felt that his espousal of Pugin's views came about through Providence. <sup>50</sup> The business's strategic direction was thus informed by a sense of revelation that Scott should pursue Pugin's Christian interpretation of Gothic architecture in order to renew his native land physically and spiritually and was rooted in his personal Christian faith, which was historically associated with Gothic, especially in Britain. Scott thus saw his part in the spread of Gothic buildings in Britain and abroad as a divinely



ordained evangelism in stone, part of God's plan for the United Kingdom in the conversion and civilisation of its vast Empire. <sup>51</sup>

Appropriately, the flow of work passing through the practice from 1845 consisted mostly of new churches and some church restorations, including the competition win for the cathedral-size Nikolaikirche in Hamburg. The balance of work moved over to restorations from the early 1850s onwards. By this point, as already noted, clients were seeking Scott out rather than Scott having to seek work. Again, Scott interpreted this rich supply of work as coming from the hand of Divine Providence. <sup>52</sup> Indeed, he hoped that Gothic architecture would help to reverse society's moral decline and dedication to 'Mammon', through its truthfulness and Christian associations. <sup>53</sup> This sense of mission explains why the growth in work was catered for by increasing the staff in the practice rather than turning commissions down, leading to a 'growth strategy'. <sup>54</sup>

The huge successes which followed, such as winning the Albert Memorial competition in 1864 in London and the St Pancras Station and Hotel competition in 1865, or that for St Mary's Cathedral in Edinburgh 1872, are an extension of the same general strategic direction, but brought about by Scott's increasing fame as a 'Public Figure'. <sup>55</sup> From 1849, he had been appointed official architect to Westminster Abbey. He became an associate of the Royal Academy in 1855 and a full Academician in 1863. His lectures to the Royal Academy, where he became Professor of Architecture, were much publicized. He received the Institute of British Architects' Royal Gold Medal in 1859 and was president from 1873 to 1876. He published many works on historical architecture.

Scott was not unique in pursuing a strategy based on total commitment to the Gothic style. The first leader of the Victorian Gothic revival was A W N Pugin, but although receiving much patronage from the (then) small but growing Catholic Church in the wake of Catholic Emancipation in 1829, he was permanently over-worked as a result of his desire to design and draw everything personally, which, combined with genetically inherited illness, brought about his early death in 1852. Rosemary Hill, his most recent biographer, has interpreted him as being driven more by Romanticism than religion, intoxicated by the art and design of the mediaeval period. His writings on the superiority of Gothic architecture, seen as 'sarcastic' by a few, proved hugely influential.<sup>56</sup> Butterfield and Street were also committed and successful Gothic practitioners, but with less impactful personalities than Scott and with smaller if still very substantial practices.

#### *Management of Finances*

The non-availability of financial records for most of the life of Scott's business only enables this aspect of the firm's management to be treated in a general way. Architects by agreement with clients receive fees for their work by means of progress payments, from the point they carry out initial designs and then over the life of the project. In Victorian times, the standard fee for an architect was five per cent of the value of the works erected. At the beginning of his practice, in spite of finding a good supply of work, Scott was forced to enlist his mother's help with his initial outlays. He was also able to draw on a fund which had been made available to the family by his late grandfather, the author of a celebrated Bible Commentary. An early lesson in cost management was learned when Scott and Moffatt's design won the competition for Reading gaol. The contract to the builder was awarded on a 'schedule of prices' basis, stipulating rates for each trade, rather than an agreed total price for the work, resulting in a total cost for the gaol which was far greater than anticipated. While this was

entirely the client's fault, Scott felt that his firm had been blamed, and that this method of pricing was to be avoided in the future, causing him to favour fixed-price contracting.

The dissolution of Scott's partnership with Moffatt in 1845 was ascribed by Scott to 'some extravagance' on the part of Moffatt, whose failings of character have already been referred to. Scott also felt 'easy-going and bad management' on his own part had also contributed to the firm running up an overdraft at the bank, although this may have involved unjustified self-criticism by Scott concerning a period of his life where he was seldom out of the saddle. Scott was concerned that, after so many years of hard work, he had 'put by next to nothing'. Encouraged by Mrs Scott, the two partners severed their relationship, by dividing work in progress between them and allocating the proceeds of some jobs to the elimination of the overdraft. Again, important lessons were learned for the future.

As a result of the necessity to start again, Scott was 'for some years in straitened circumstances' but noted that his financial affairs 'gradually mended till at length we became very prosperous'.<sup>57</sup> This can be readily understood in terms of the growing working capital requirements of an expanding and increasingly successful architectural practice. Scott was not interested in personal expenditure, and although an architect, never designed his own house, renting property up until the last three years of his life, at which point he bought a terraced house in South Kensington. The lessons of the past and a tidy mind combined to ensure that income was retained within the business until such times as the cash balance was large enough to take out extra personal drawings. It should also be noted at this point that Scott charged no fees for the design of several overseas cathedrals and did not charge where he was either restoring or designing churches with funds coming from the Incorporated Church Building Society, the body set up to ensure church provision across England.<sup>58</sup> This 'Pro

Deo' work must at certain times have involved real sacrifice, as in the case of St John's Cathedral, Newfoundland in the 1840's, when Scott's practice was less liquid than he would have liked. <sup>59</sup> In addition to the increasing flow of fees coming into the firm, Scott was able to charge a premium of 300 guineas for trainee architects, <sup>60</sup> in return for which they received personal tuition from Scott himself and the *kudos* of having trained in a top firm.

Among the practice's few surviving account books are two cash ledgers revealing fee income received for the complete years 1877 and 1878. Some 40 instalments of fees for architectural jobs were received in 1877, totalling £ 8,289 (£810,000 at today's values). For 1878, the figures are 50 instalments and £10,464 (£1,000,000 at today's values) respectively, which represent a high level of income for what was by then a period of recession. The entries in these books were made by John Oldrid Scott, showing that the control of cash flow was a matter for partners, not to be left to general members of the office staff, unlike the other remaining book, which lists details of clients, clerks of works for each job, key dates, project contractors, contract amounts and accepted estimates, and where numerous hands are visible.

In terms of his charitable giving, Scott wrote cheques to the poor throughout his life. One of the beneficiaries was 'a Roman Catholic architect who had great misfortunes and [near the time of Scott's death] was lying ill'. Scott's butler was 'disposed to blame the man' but Scott felt it was wrong 'to speak harshly of poor people'. Scott had also 'constantly relieved' another person of 'humbler position', furnishing biblical evidence to his butler that it was a Christian duty to do so. Mrs Scott was also extremely charitable, and Scott loaned money to members of his family, never repaid, some of whom were clergymen.

The settled pattern of Scott's business finances shows the imprint of a man who broadly conforms with Weber's Protestant Work Ethic: restraint in personal expenditure, making sustained reinvestment in the business in order to grow it and enabling charitable giving out of personal resources. This approach inevitably led to sound finances. In the last analysis, Scott's overriding objective was to provide for his wife and children 'what they needed for their material well-being', a matter to be discussed later. <sup>61</sup>

### *The Management of Technology*

Scott's approach to technology was an appropriate one for the industrial age in which he lived, which embraced it. His views are explained in his 1857 book, *Remarks on Secular and Domestic Architecture, Present and Future*, his treatise on Gothic architecture. Gothic, according to Scott, is 'free, comprehensive and practical, ready to adapt itself to every change in the habits of society, to embrace every new material or system of construction, and to adopt...every invention and improvement'. <sup>62</sup> Scott's commitment to technology is thus consistent with Weber's statement on the first page of his book that increasing technological discovery and exploitation, understood as unlocking God's secrets for the blessing of man, was also a feature of the Ethic, displayed in Protestant industrial companies and their highly trained technicians. <sup>63</sup> In practice, this meant that structural iron was freely used in Scott's larger buildings, for example at St Pancras, the Albert Memorial or Glasgow University. Where engineering consultants were required, they were used, as at Salisbury Cathedral, or the Albert Memorial. <sup>64</sup>

### *Staff Management and Operational Management*

It is important at this stage to mention Scott's selection and development of staff. He attracted the cream of young, aspiring architects as pupils, all thrilled to join his office. They received

his personal tuition, which involved the scrutiny by Scott of their designs and drawings, his gracious yet modest personality and interest in them as individuals making a permanent impression. <sup>65</sup> *The Building News* <sup>66</sup> speaks of ‘the very large number’ of architects training in his office, listing some 24 who went on to achieve great success. Cole speaks of some seventy or eighty who passed through. Also very important was Scott’s ability to attract and retain his long-serving senior men, namely, John Burlison (employed 1841-1868), Richard Coad (1847-1864), John Drayton Wyatt (1841-1867) or John Bignell (1860’s-1870’s), whose competence and management skill caused him to trust them implicitly and without whom Scott’s system of delegation and control could not have functioned as efficiently as it did. <sup>67</sup>

It is clear from the evidence that Scott had a strong interest in management. It was he who organized the work in the early days of partnership with Moffatt. When it was dissolved, as was noted earlier, Scott had regretted his own ‘easy-going and bad management’ <sup>68</sup> but had learned from it. This was not just a matter of practical efficiency, but may be interpreted as relating to Weber’s ‘monitoring of action by the conscience’. <sup>69</sup> The firm’s operational practices were geared to ensure that promises as to price, quality and timely completion were met.

In the early 1860’s, Harry Hems, a carver, described the system which prevailed in Scott’s office as ‘simply marvellous’, as ‘details and everything else were always ready to the minute’. <sup>70</sup> As late as the evening before his death, Scott ‘discussed with a confidential assistant some contemplated changes and re-arrangements in the office’. <sup>71</sup>

Table 1 about here

**Table 1** shows the staffing in the Scott office for the 33 years over which Scott ran the practice alone, with approximations where detail is lacking. By the early 1860s, individual roles were carefully defined and were often dual in nature, especially in relation to senior staff, some of whom were also in charge of individual jobs within the practice, as was Edgar for the Foreign Office, or J M Bignell at Glasgow University.<sup>72</sup> These staff were in communication with the client and with the clerks of works (recommended by Scott but paid directly by the client) who were responsible for the execution of jobs on sites. The chief draftsman (Wyatt) and the surveyor (Burlison) were also, according to Jackson, senior to all other staff. It is clear that the various roles were carefully thought through, in the manner of a modern job description.

The senior men were each in charge of a ‘room’ at Spring Gardens, a former Georgian house of three floors, with Scott, at least, having his own office. This allowed close supervision, but the office was also a friendly place which allowed frank discussion not only of architecture, but of religion.<sup>73</sup> It seems to have had some of the qualities of an *atelier*, where Scott’s ‘wonderful power of making rapid expressive sketches’ was much in evidence, as he guided students and assistants in developing and correcting his designs.<sup>74</sup> Each work was thus a joint labour, over which Scott had the ultimate say. Architecture was seen as an ‘art’ rather than a profession in the office, as evidenced by the existence of a weekend sketching club.<sup>75</sup> Long hours were worked, especially when deadlines were involved. It is clear that the principal activity in the office was making drawings. These were required at three key stages in the progress of an architectural work, producing designs, then contract drawings (which formed part of the legal contract between client and contractors) and then the production of detailed working drawings.

Design quality was ensured by Scott himself. <sup>76</sup> A pupil, Ralph Neville, stated that Scott made a point of seeing everything produced in the office. <sup>77</sup> It is also the case that Scott approved every cost estimate going out to clients. <sup>78</sup> All drawings cascaded their way downstairs from the second and third floors at Spring Gardens, for approval by Scott. They were then despatched to their destinations by the writing clerks or office boys, or, if they were contract drawings, used first by Burlison for the production of estimates or bills of quantities, the latter to enable tenderers for construction contracts to cost their offers to Scott's clients. Scott's pupil, TG Jackson accurately summarised Scott's achievement as 'conducting architectural work on the lines of a great professional-not to say commercial-business'. <sup>79</sup> This is precisely what Scott achieved, most likely the first architect in Britain to do so. While the huge total of over 1,000 jobs was undertaken over a period of 43 years, in practice this meant that an average of just over 20 new designs per year required his personal attention, which Scott's system made manageable. It is clear that it was at the design stage where his most obvious and important involvements in commissions lay.

### *Networks*

Study of Scott's business functions shows that, integral to these were networks of contacts built up across his career. As was seen above, Scott's networks of clergymen were a great help in marketing and expanding his business. There was a network of clerks of works used extensively across many jobs. Once an architect had designed a building for a client, the tendering and construction processes then followed. It could take several years or more to erect a building and it required daily attention to ensure that it was built in accordance with the architect's plans. The job of daily supervision of the project on site was given to a clerk of works paid directly by the client but selected by Scott. The role of the clerk of works was 'representing Mr Scott on the ground'. <sup>80</sup> Some could be unscrupulous, such as the individual



Scott 'had the misfortune to fall in with' at the large St George's Church, Doncaster, where he acted in a 'despicable and untrustworthy' manner. <sup>81</sup> Clerks of works could operate in collusion with contractors in order to defraud clients. It was also desirable to know reliable and trustworthy clerks of works in order to use them again and again so that they understood the architect's designs, standards and practices, producing buildings exactly as designed. Some 48 of those regularly used are listed by Cole. <sup>82</sup>

Also of note are Scott's favoured building contractors, which he used a number of times as circumstances permitted, which ensured consistent quality across buildings and growing experience of the architect's methods. John Thompson of Peterborough was frequently employed (for example at St George's, Doncaster, Kelham Hall, Hereford and Ripon Cathedrals, Westminster Abbey and Glasgow University). Others included Beanland of Bradford, (Chichester Cathedral, unsuccessful tender for Glasgow University); Dove Brothers, London (St Clement's, Barnsbury, Spalding Church, alterations, Claydon Church, alterations, St Paul's, Southgate, St Mary Abbott, Kensington). <sup>83</sup> Of special note is Scott's use of English contractors in his largest Scottish commissions in order to ensure familiarity with the practice's procedures and standards.

Another group of significance in understanding the operation of the Scott practice is the cluster of craft firms and individual craftsmen who were recommended to clients by Scott. Among these was Farmer and Brindley, carvers, who were frequently used in church work. In fact, Scott set Farmer up in business, ensuring him a flow of work which sustained his firm. His first recorded work was in Scott's Woolland Church, Dorset of 1858, but the firm also worked later for the distinguished architect Alfred Waterhouse at the Science Museum in London. There were also clusters of stained glass, tile and metalworking specialists. In

patronising a group of craft workers who were prepared to build up expertise in Gothic, Scott was of course following Pugin, who had done the same with artists such as Hardman or Minton.<sup>84</sup> It is clear, also, that this group of firms saw themselves primarily as Christian artists first and businessmen, second.<sup>85</sup>

Although not a craft firm and not entirely autonomous, mention must also be made of Scott's surveyors, who, during the 1850's/1860's, were John Burlison and John Lee. Burlison was the backbone of the Scott office until 1868, responsible for surveys and estimates of the total cost of new commissions, latterly supported by Lee. In addition, these men were responsible for the production of schedules of quantities for the guidance of builders in submitting tenders to clients for architectural work. In this capacity, they were prohibited by the Institute of British Architects, of which Scott was a leading member and at one time, President, from issuing quantities of materials from within the practice to prospective tenderers who were about to provide quotations to Scott's clients, lest the architect be held responsible for losses caused by miscalculation.<sup>86</sup> As a result, Burlison and Lee operated in a private capacity as quantity surveyors ('measurers') and with a separate postal address close to the Scott office, which appeared on their letterheads.<sup>87</sup> They were paid separately for doing this work and incurring the personal risks involved, with the advantage to Scott that they did so while still remaining full members of the staff for all other purposes, ensuring smooth coordination of the surveying work.

#### *Summary: Importance of The Ethic and of Networks*

It can be seen from the above that the main elements of the Protestant Work Ethic outlined earlier in this paper undergirded the functions within Scott's business, from his sense of divine leading, linked to his work-drive and his ascetic approach to wealth, which let him

spend in what he considered worthwhile ways. However, other aspects, such as a theologically informed view of technology, were also important. Which of the above were the most crucial? While all of the above features of the PE were necessary for continued success, the factors that were most crucial appear, to have been the profound sense of divine direction that convinced him, at the beginning, to persevere in the face of great difficulty at the start of his practice. This also involved the huge sacrifice in energy and hours he made to build the business from nothing. The need for personal asceticism to permit (re)investment followed on from there then being in existence a new business requiring capital. Then, systems of operational management could be installed and updated to enable the business's promises and obligations to customers to be kept, exemplifying what Weber referred to as 'methodicalness'.

There has been discussion, earlier, of the various external networks which supported and were patronized by Scott's business. These deserve a fuller and separate study, but some observations will now be made. The networks of clergymen of all levels of seniority who provided a steady flow of church work, the backbone of the practice, were alluded to above in connection with sales and marketing. The team of clerks of works, building contractors, specialist craft suppliers and surveyors who followed in Scott's wake, aiming at reliability, consistency and quality in all they did, were enumerated in connection with operational management. This network was available for advice and for work on architectural commissions, as contractors.

It is in fact, in Weber's 1906 essay on the 'Protestant Sects and the Spirit of Capitalism', which Weber repeatedly referred to as 'supplementing the Protestant Ethic and the Spirit of Capitalism', that a basis for understanding the relationship between Scott and his networks of business contacts may be found and related to the PE. On his trip to the United States in late-

November, 1904, Weber saw the PE in action among Baptists, Methodists and other like groupings in a fashion he believed mirrored the economic life of these sects as it had once been in Europe. He found, for example, that, after it was known that a businessman was baptised, he could rely on ‘the patronage of the whole region’. He also found that members of denominations such as these, on moving to another part of the United States, once their affiliation was known, could expect ready credit ‘everywhere’. If a member of a Protestant sect ‘got into economic straits’, they could expect help from co-religionists ‘in every way’<sup>88</sup> and that through contacts such as these, business networks developed, based on trust, which related to the known religious values of the individuals concerned. This closely mirrors the networks discussed above in relation to Scott. These networks were entirely to be expected in a still largely Christian UK, as individual belief translated into social and business relationships. If the startup and buildup of Scott’s business depended on a sense of Providence, producing a work-drive, which, working with an ascetic approach to finance, propelled the business upwards, its external dynamic was deeply dependent also on Scott’s Christian networks.

### **The Glasgow University Commission as a Case-Study**

Scott was chosen outright for this commission, as for so many works, on 15 October 1864.<sup>89</sup> In his acceptance letter to the university, his Christian piety was expressed in his mention of ‘the high sense of duty’ he felt in relation to the work with which he had been entrusted. He attended and took instructions before submitting designs.<sup>90</sup> Pressure from the university for the final plans was met with Scott’s explanation, surprisingly candid to the modern reader, that the internal arrangements are ‘insufficiently perfected’ and the elevations are ‘imperfect’ but currently being worked on by himself, a matter about which he was feeling ‘a little diffident’ as fundraising depended on having the plans.<sup>91</sup> One letter from Richard Coad

explains frankly to the client, anxious for drawings, that Scott is withholding a coloured view of the university as it is 'distasteful' to him and is having it altered.<sup>92</sup> Some critics described Scott as doing 'a large portion of his work by proxy'.<sup>93</sup> Based on the above, it is clear that Scott, although delegating much, remained in overall personal control of design.

How successful was the network of individual professionals and contractors recommended by Scott to the University? Burlison and Lee, the surveyors, performed very competently and frequently brought up cost reports to Glasgow on expenditure to date, for the Building Committee.<sup>94</sup> Scott's Clerk of Works, William Conradi, who had worked before for him at the Foreign Office as well as on Scott churches at Edensor and Derby<sup>95</sup> came to be regarded as a success in this role, much praised by the client at the end of what proved a complicated and difficult project for his hard work,<sup>96</sup> technical knowledge and kindness in his control of contractors.

The selection process for, and subsequent performance of, the main building contractor at Glasgow are also revealing regarding the network utilised by Scott. A range of individual and combined tenders had been received for the project, one from John Thompson of Peterborough, one of two English tenders submitted, the other being from Beanland of Bradford, both firms having been used by Scott before. A Scottish combined tender from a firm not trusted locally was excluded. Thompson had only requested details of the contract on 5 September 1866, no doubt alerted by Scott.<sup>97</sup> Burlison, on attending the selection meeting, reflected Scott's own view that it was advisable to have the same contractor for mason work, brickwork and joinery, as these moved together in erecting a building and combining them avoided a major cause of disputes in projects, thus spelling out the importance of trust among all parties to a job.<sup>98</sup> The combined offer from Thompson of Peterborough for the above

trades also covered ironmongery and once the best offers from trusted local contractors for the finishing trades were added, his amended offer became the cheapest option for the university. Although this episode reveals that greater discretion was given to architects in the recommendation of contractors then than now, there was no question of impropriety. Both Scott and Burlison were renowned for their abhorrence of moral turpitude. <sup>99</sup>

Scott wrote very favourable references for Thompson, giving his opinion that he was probably ‘the best mason in England’ and that the head of Thompson’s joinery division, Mr Ruddle, could not be surpassed in terms of his knowledge of his trade. <sup>100</sup> Scott had earlier expressed the view to the Glasgow building committee that there could be difficulties with Scottish contractors interpreting bills of quantities prepared in England and it is clear that for this reason and also for purposes of understanding the workings of the Scott office, that he preferred to work with English contractors. It was also true that the English contractors were more able than Scots contractors to tender for complete projects. At Glasgow, two had done so while only one Scots contractor had submitted a tender on this basis. When he won the competition for the new St Mary’s Cathedral in Edinburgh in 1873, however, an English contractor, G W Booth, was engaged for all the trades. <sup>101</sup>

Scott’s high regard for the very experienced Thompson of Peterborough did not prevent the architect from taking him to task when necessary. A strike of masons in connection with trade union demands for a ‘closed shop’ had slowed down building during the latter half of 1867, occasioning a ‘stony’ and ‘formal’ letter to the contractor, its despatch delayed because of the serious illness of Mrs Thompson. <sup>102</sup> Scott advised Thompson of his contractual duty to hire, at his own cost, extra staff in order to meet his obligations. <sup>103</sup> As a result of doing so, Thompson lost a large amount of money on the contract but was nevertheless eventually

considered by the university to have performed it with distinction.<sup>104</sup> His resoluteness in resisting the strikers' demands and his hiring of extra staff ensured that the strike gradually petered out by the early days of 1868.

The University's overall assessment of the experience of utilising Scott is found in a newspaper report of the 'Inauguration of the New University Buildings' at Glasgow of 1870, by which time the whole campus, excepting the graduation hall and tower, had been built. Here, Professor Allen Thompson, Secretary of the Building Committee, summarized his relationship with Scott:

'I am bound to say that I have ever found Mr Scott ready to listen to every suggestion, and to give it effect if, after due consideration, it met with his approval; and I must add that during a continued intercourse by correspondence and personal interview during six years I have had more and more cause to admire the purity of his taste, the quickness and soundness of his judgement and the promptitude and exactness of his business arrangements'.<sup>105</sup>

How did Scott's performance meet expectations as to time and cost? This is not straightforward, as the project's progress was constrained by the availability of funds from donors, which then gave access to government grants. It was only possible to proceed with working drawings after 24 June 1865, when the University advised Scott that funds were secure.<sup>106</sup> A decision was made, early, to defer the graduation hall and the spire to the entrance tower, not completed until the 1880's. Scott was, in any case, dependent on the contractors, particularly Thompson, to meet their deadlines of 1 August, 1870, over which

Scott had been consulted, but the matter was complicated by hundreds of alterations to the plans made by the client as the work proceeded. These extended the time allowed and increased the amounts payable to the contractors, who were on fixed price agreements which initially amounted to £191,347 but which ended up costing some ten per cent more by early 1872.<sup>107</sup> The opening of basic facilities to students at the end of October 1870, with other parts following on soon after, was considered an excellent outcome, given the size and complexity of the project and the fact that the first stone was only laid on 4 April 1867.<sup>108</sup>

The successful completion of the Glasgow project cannot be divorced from Scott's own Christian viewpoint and the absolute personal integrity which came with it at a time when Christian values were still strong throughout Britain. Complete probity and the fulfilment of duty were expected of the staff in his office and of all associated with his works.<sup>109</sup> This integrity also existed at the level of an explicitly Christian understanding between Scott and his largely like-minded clients. Proof of this shared world-view is found in a speech by Scott at Glasgow University in July 1870, reported in the *Glasgow Herald*. Replying to a toast to himself from the University, he noted that architecture 'with beauty...combines that utility which is ever found in all that proceeds from the Divine hand'.<sup>110</sup>

At the epicentre of the network of trust which had served the university and so many other clients so well was Scott himself, backed up by his office, manned by a carefully organized staff who on the whole adored and were completely loyal to him. The seemingly ubiquitous Scott was thus able himself or through his personal assistant to put his finger on key aspects of his commissions at critical points or respond to alarmed letters from clients as the inevitable, rare unforeseen difficulties turned up and appeals to subordinates did not yield sufficient action or reassurance. From the time the Glasgow University contract was awarded



(1864) to the point the main campus was complete (1870), Scott attended at the University on four known occasions, and was visited personally in his office or home by officials of the university on three known occasions. <sup>111</sup> He sent some 81 letters to Professor Allen Thomson, 40 of these penned personally, the remainder by his personal assistant. <sup>112</sup> The key officials were the project architect, J M Bignell, who dealt with all architectural matters connected with the job, sending 65 letters to the University over the 30-month period ended in late 1869 and receiving nine in return, and Conradi, who had written 600 letters while supervising the work in his first eighteen months on the job. <sup>113</sup> All this communication to and from Scott, senior architectural staff or his personal assistant depended on the telegraph and the twice-daily post.

In practice it was trust, orchestrated through and from Scott, which made the business work so well and building projects run so smoothly. Each of the above elements in some way explains why Scott's practice was so successful. His gracious personality captivated clients and business contacts and motivated staff, and the detailed, careful organisation and management of his hard-pressed office were critical elements in the efficient execution of his works, ensuring that the interconnected cycle of internal functions vital to success operated efficiently. His cheerfulness under pressure inspired clients and staff. None of the above factors, in isolation, would have been sufficient for success: all were interdependent. Scott fully understood this, taking great pains at the outset of each commission to formalise and tailor project networks out of his great cloud of personal contacts, subject to the necessities of tendering procedures and to the requirements of each job.

## **Conclusion**

George Gilbert Scott was driven by faith and a sense of destiny all his life to advance his Christian, Gothic project for the benefit of the nation and Empire. He had little interest in personal expenditure and reinvested in his business, also giving liberally to the poor. He was hugely successful, but his chief concern, financially, was his family, to whom he left £120,000 in his will. <sup>114</sup> Weber did not discuss this aspect of capitalism, but the family, and family business, except no doubt, to the most severe, focussed and miserable Puritans, were clearly also very important in the 16th and 17th centuries, the period on which Weber based many of his detailed arguments. <sup>115</sup> Christians such as Ryder or Alexander Cowan took very seriously the Biblical injunction to provide for family and household, as those that did not, ‘denied the faith’ and were ‘worse than an unbeliever’. <sup>116</sup>

Scott, as well as Joseph Ryder and Alexander Cowan, had a salient characteristic: his worldly activity directly reflected his spiritual drive, and in this broad sense, all three are Weberian. Ryder’s work environment consisted of a dye-house and a tenter garth (a yard for stretching cloth) of half an acre, together with the various premises in Leeds where he transacted his business, which operated on the putting-out system. Call Lane and Mill Hill Dissenting chapels were his spiritual *milieux*. His abiding legacy is, however, the record he has left of the mental and spiritual remonstrance which calibrated his activities, at a time when Enlightenment thinkers, of whom he most likely had limited knowledge, were undermining his religion. His was the more common world-view at this period, however, and Kadane <sup>117</sup> holds that it went on to power the Industrial Revolution. Cowan’s world is somewhat more advanced, technologically: the mechanized paper mills of rural Penicuik and close by, the Free Church he and his family so generously funded in post-Waterloo Scotland. His mental perspectives are not so very dissimilar to those of Ryder: an obsession with the best and most productive use of time, a consciousness of his own bad temper and his weaknesses of

Christian character being significant among them, but unlike Ryder, more obviously content in his faith. The age had brought new moral challenges connected with mass factory employment: the response was his family's generosity to individuals and employees, together with their civic-mindedness, eventually transmuted into Liberal politics in a heavily industrialized Britain. <sup>118</sup>

Scott, half a generation later, as has been shown, found his vocation in the world of architecture, in a new profession situated at the conjunction between creativity and practicality, at the start of the Victorian building boom as it coincided with the Gothic Revival and revivals in the Anglican Church. Although of a cheerful disposition and with a keen appreciation of the aesthetic realm, his secret, posthumously revealed, prostrate prayer reflected his deep piety which centred on the same moral concerns as Ryder and Cowan, namely, his dissatisfaction at his own performance as a Christian, particularly as he examined his bad tempered or inconsiderate relations with others. <sup>119</sup> Scott's Christian conviction was intellectual as well as emotional. He was well aware of the sceptical views of the faith that were beginning to be expressed. Before 1860, he had met the philosopher Arthur Schopenhauer while in Hamburg, regretting his 'infidelity'. <sup>120</sup>

But Scott's age and profession brought new and peculiar problems, such as the notion of architectural morality, in which Gothic buildings were held to be superior as a result of their Christian associations and since they honestly expressed structure and function on the outside, as opposed to the 'shams' in other styles which did not, <sup>121</sup> a concern which came to torture him in connection with the Foreign Office. This he had designed in an arguably 'unethical', classical, style, to secure, as a good Christian, his family financially for life, not for himself, bringing widespread, hurtful criticism upon him. The new age had again brought

with it fresh challenges for the thoughtful, moral Christian, making it both like and unlike the worlds of Ryder or Cowan.

Max Weber believed that Protestant religion was in decline in his own day, based on his interpretation of the situation in contemporary Germany, where theological liberalism had done much damage to the church. As Ghosh observes, Weber felt in 1894 that ‘the Christian religion was superseded and irrelevant to the social conditions of modern Germany...[a position that]...no authentic Christian thinker could accept’,<sup>122</sup> so that Weber was out on a limb in his belief in his own country. In other countries, such as Britain, Victorian Christian religion had undergone a number of revivals during the 19th century, with liberalism taking longer than in Germany to affect the church, which was, however, weakened by 1914. Weber similarly condemned the state of American religion as ‘decaying’, which turned out to be far from the truth. In spite of Weber’s declaration that the faith was dying, it is clear from the above study of Scott and his business world that vital Christian responses to capitalism in the late-19c were still numerous, various, rich, peculiar to the age and deeply embedded.

In exploring what Weber regarded as a transitional period in the history of capitalism, as he advocated,<sup>123</sup> we have examined above how economic and social change interacted upon faith-based business, in this case in the Victorian construction and architectural field. Perhaps when further studies which advance this agenda have been carried out, it will lead to the thoughts and motivations of Christian businessmen, variously assessed in the past, being better understood, producing more informed judgements of their deeds and times.

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- <sup>1</sup> McKinstry and Wallace, “Cullen, Lochhead and Brown”; Bailey, *Scottish Architects’ Papers*.
- <sup>2</sup> Mintzberg *et al*, “Strategy of design”.
- <sup>3</sup> McKinstry and Wallace, “Cullen, Lochhead and Brown”.
- <sup>4</sup> Gutman, *Architectural Practice*, 80.
- <sup>5</sup> Scott, *Personal and Professional Recollections*.
- <sup>6</sup> *The Builder*, 6 April, 1878.
- <sup>7</sup> *British Architect and Northern Engineer*, 5 April, 1878.
- <sup>8</sup> Stamp, *Lost Victorian Britain*.
- <sup>9</sup> *Country Life*, June 30, 2010, 92.
- <sup>10</sup> Child, *British Management Thought*, 33.
- <sup>11</sup> Wilson and Thomson, *The Making of Modern Management*.
- <sup>12</sup> Weber, *Protestant Work Ethic*, 97.
- <sup>13</sup> Kalberg, *Protestant Ethic*, 422.
- <sup>14</sup> Weber, *Protestant Work Ethic*.
- <sup>15</sup> Swatos Jr and Kaelber, *The Protestant Ethic Turns 100*, xv-xxviii.
- <sup>16</sup> Hills, *The Rise of Capitalism*.
- <sup>17</sup> Landes, *The Unbound Prometheus*.
- <sup>18</sup> Landes, *Wealth and Poverty of Nations*.
- <sup>19</sup> Joyce, *Work, Society & Politics*, 141.
- <sup>20</sup> Davenport-Hines (ed), *Capital, Entrepreneurs and Profits*.
- <sup>21</sup> Amatori and Jones (eds), *Business History Around the World*.
- <sup>22</sup> Ferguson, *Civilization*.
- <sup>23</sup> Kalberg, *Protestant Ethic*.
- <sup>24</sup> Kadane, *The Watchful Clothier*.
- <sup>25</sup> McKinstry and Ding, *Alex Cowan & Sons Ltd*.
- <sup>26</sup> Kalberg, *Protestant Ethic*, 178.
- <sup>27</sup> Marshall, *Presbyteries and Profits*.
- <sup>28</sup> Ghosh, *Max Weber*, 218.
- <sup>29</sup> Kalberg, *Protestant Ethic*, 144.
- <sup>30</sup> Scott, *Personal and Professional Recollections*.
- <sup>31</sup> Brown, *Providence and Empire*, 2.
- <sup>32</sup> Scott, *Personal and Professional Recollections*.
- <sup>33</sup> Cole, *The Work of Sir Gilbert Scott*.
- <sup>34</sup> Scott, *Personal and Professional Recollections*, 373.
- <sup>35</sup> Bremner, *Imperial Gothic*.
- <sup>36</sup> Scott, *Personal and Professional Recollections*, 219, 112.
- <sup>37</sup> Cole, *The Work of Sir Gilbert Scott*, 124.
- <sup>38</sup> Jackson, *Recollections*.
- <sup>39</sup> Scott, *Personal and Professional Recollections*, a, 126.
- <sup>40</sup> *The Builder*, 13 April, 1878.
- <sup>41</sup> Ostime, *RIBA Handbook of Practice Management*.
- <sup>42</sup> Cole, *The Work of Sir Gilbert Scott*, 12, 8.
- <sup>43</sup> Scott, *Personal and Professional Recollections*, 78.
- <sup>44</sup> Jackson, *Recollections*, 50, 8.
- <sup>45</sup> Vestry Minutes, 16/03/1854.
- <sup>46</sup> Vestry Minutes and papers.
- <sup>47</sup> McKinstry, *Rowand Anderson*.
- <sup>48</sup> Street, *Memoir of George Edmund Street*.
- <sup>49</sup> McKinstry and Wallace, “Cullen, Lochhead and Brown”.
- <sup>50</sup> Scott, *Personal and Professional Recollections*.
- <sup>51</sup> Scott, *Remarks on Secular & Domestic Architecture and Bremner, Imperial Gothic*.
- <sup>52</sup> Scott, *Personal and Professional Recollections*, 191.
- <sup>53</sup> Scott, *Remarks on Secular & Domestic Architecture*, 273.
- <sup>54</sup> Mintzberg *et al*, “Strategy of design”.
- <sup>55</sup> Cole, *The Work of Sir Gilbert Scott*, 126.

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- <sup>56</sup> Hill, *God's Architect*.
- <sup>57</sup> Scott, *Personal and Professional Recollections*, 78-79, 94, 130-131 and 251.
- <sup>58</sup> Bremner, *Imperial Gothic*.
- <sup>59</sup> *Ibid.*, 91, 98 and 391.
- <sup>60</sup> Jackson, *Recollections*, 54.
- <sup>61</sup> Scott, *Personal and Professional Recollections*, 379-380 and 260.
- <sup>62</sup> Scott, *Remarks on Secular & Domestic Architecture*, 7.
- <sup>63</sup> Kalberg, *Protestant Ethic*, 67.
- <sup>64</sup> Thorne, "Building the Memorial".
- <sup>65</sup> Jackson, *Recollections*, 50.
- <sup>66</sup> *The Building News*, March 29, 1878.
- <sup>67</sup> Cole, *The Work of Sir Gilbert Scott*.
- <sup>68</sup> Jackson, *Recollections*, 131.
- <sup>69</sup> Kalberg, *Protestant Ethic*, 155
- <sup>70</sup> Saint, *The Image of the Architect*, 68-69.
- <sup>71</sup> *The Builder*, Vol. 36, 1878, 340.
- <sup>72</sup> Toplis, *The Foreign Office*; *Glasgow Herald*, 8 Nov, 1870.
- <sup>73</sup> Jackson, *Recollections* and RCAHMS, MS5959.
- <sup>74</sup> Jackson, *Recollections*, 58-59.
- <sup>75</sup> Holden, *Richard Coad*.
- <sup>76</sup> Jackson, *Recollections*, 59 and GUA, 17146.
- <sup>77</sup> Stamp, Sir George Gilbert Scott, *Dictionary of National Biography*.
- <sup>78</sup> GUA, 1101, a letter from Scott to Glasgow University of 6 March 1868 asks for an estimate for the Professors' houses which Scott has not seen to be disregarded, and states that it will be replaced.
- <sup>79</sup> Jackson, *Recollections*, 59.
- <sup>80</sup> GUA, 1342.
- <sup>81</sup> Scott, *Personal and Professional Recollections*, 173.
- <sup>82</sup> Cole, *The Work of Sir Gilbert Scott*, 236.
- <sup>83</sup> *The Builder*, April 13, 1878, 383.
- <sup>84</sup> Hill, *God's Architect*.
- <sup>85</sup> Howell, "Francis Skidmore" and Sladen, "The Mosaics".
- <sup>86</sup> Burrows, "Measurers of Architecture".
- <sup>87</sup> GUA, 10469.
- <sup>88</sup> Kalberg, *Protestant Ethic*, 157, 209, 212.
- <sup>89</sup> Haynes, *Building Knowledge*.
- <sup>90</sup> GUA, 937, 17146.
- <sup>91</sup> GUA, 948.
- <sup>92</sup> GUA, 986.
- <sup>93</sup> *The Builder*, 6 April, 1878.
- <sup>94</sup> GUA, 16014.
- <sup>95</sup> Cole, *The Work of Sir Gilbert Scott*.
- <sup>96</sup> Conradi wrote 45 letters to the University Building Committee over the period of two and a half years it took to construct the main campus.
- <sup>97</sup> GUA, 10858.
- <sup>98</sup> GUA, 5224.
- <sup>99</sup> *The Builder*, December 12, 1868.
- <sup>100</sup> GUA, 5228; 8395.
- <sup>101</sup> St Mary's Archives, Edinburgh, B. 2.5.
- <sup>102</sup> GUA, 1045.
- <sup>103</sup> GUA, 1075.
- <sup>104</sup> GUA, 1067.
- <sup>105</sup> *Glasgow Herald*, 8 Nov, 1870.
- <sup>106</sup> GUA, 964.
- <sup>107</sup> GUA 17146.
- <sup>108</sup> *Glasgow Herald*, 8 Nov, 1870.
- <sup>109</sup> Indeed, Christian matters were regularly discussed in the office, as evidenced by a letter from George Gilbert Scott junior to J T Irvine referring to a conversation in Coad's room at Spring Gardens on the relative merits of the Anglican and Roman Catholic churches (RCAHMS, MS5959)].

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<sup>110</sup> *Glasgow Herald*, 30 July 1870. Scott's sentiments here are clearly influenced by Ruskin.

<sup>111</sup> GUA, 17146.

<sup>112</sup> GUA, *passim*.

<sup>113</sup> McKinstry and Ding, *Conradi*.

<sup>114</sup> Scott, *Personal and Professional Recollections*.

<sup>115</sup> Weber, *Protestant Work Ethic*.

<sup>116</sup> *King James Bible*, 1 Timothy 5 v 8.

<sup>117</sup> Kadane, *The Watchful Clothier*.

<sup>118</sup> McKinstry and Ding, *Alex Cowan & Sons Ltd*.

<sup>119</sup> Scott, *Personal and Professional Recollections*.

<sup>120</sup> *Ibid.*, 116.

<sup>121</sup> Hill, *God's Architect*.

<sup>122</sup> Ghosh, *Max Weber*, 97.

<sup>123</sup> Kalberg, *Protestant Ethic*, 178.

## **Bibliography:**

### **Primary Sources:**

Glasgow University Archives, Collection Concerning the Building of the Gilmorehill Campus:

GUA, 937

GUA, 948

GUA, 964

GUA, 986

GUA, 1045

GUA, 1067

GUA, 1075

GUA, 1101

GUA, 1342

GUA, 5224

GUA, 5228

GUA, 8395

GUA, 10469

GUA, 10858

GUA, 16014

GUA, 17146

St Paul's Episcopal Cathedral, Dundee, Archives: Vestry Minutes and papers, 1852-1857.

St Mary's Episcopal Cathedral Edinburgh, Archives: B. 2.5. Records concerning the building of the cathedral, 1872-1878.

Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS):

J T Irvine Collection, MS 6043 and MS5959.

### **Secondary Sources:**



Amatori, F and Jones, G (Eds). *Business History around the World*. Cambridge: University Press, 2011.

Bremner, G. A. *Imperial Gothic: Religious Architecture and High Anglican Culture in the British Empire*, New Haven and London: Yale University Press, 2013.

Brown, S. *Providence and Empire: 1815-1914*. London: Routledge, 2014.

Burrows, M. "Measurers of architecture: 1750-1850." *Chartered Quantity Surveyor*, (December, 1980): 189-191.

Child, J. *British Management Thought: A Critical Analysis*. London: George Allen and Unwin Ltd, 1969.

Cole, D. *The Work of Sir Gilbert Scott*. London: The Architectural Press, 1980.

*Country Life*, June 30, 2010.

Davenport-Hines, R (Ed). *Capital, Entrepreneurs and Profits*. London: Routledge, 1990.

Ferguson, N. C. D. *Civilization: The West and the Rest*, New York and London: Penguin Group, 2011.

"Funeral of Sir G Gilbert Scott, R.A." *The Builder*, (13 April, 1878): 383.

"George Gilbert Scott." *The Builder*. (6 April, 1878): 339-343.

Ghosh, P. *Max Weber and The Protestant Ethic: Twin Histories*, Oxford: Oxford University Press, 2014.

Gutman, R. *Architectural Practice: a Critical Review*. Princeton, NJ: Architectural Press, 1988.

Haynes, N. *Building Knowledge: An Architectural History of the University of Glasgow*. Edinburgh & Glasgow: Historic Scotland, 2013.

Hill, R. *God's Architect*. New Haven and London: Yale University Press, 2008.

Holden, P. *Richard Coad, Architect of 3 Duke Street, Adelphi, London*. Conference paper presented at Liverpool Architectural School, October 2008.

Howell, P. "Francis Skidmore and the Metalwork." In *The Albert Memorial, The Prince Consort National Memorial: its History, Contexts, and Conservation*, edited by C Brooks, 252-285. New Haven and London: Yale University Press, 2000.

"Inauguration of the New University Buildings." *Glasgow Herald*, (8 Nov, 1870).

Jackson, B.H. *Recollections of Thomas Graham Jackson, 1835-1924*. London: Oxford University Press, 1950.

Joyce, P. *Work, Society and Politics: Culture of the Factory in Later Victorian England*. London: The Harvester Press, 1980.

Kadane, M. *The Watchful Clothier: The Life of an Eighteenth-century Protestant Capitalist*, Yale: University Press, 2013.

Kalberg, S. *The Protestant Ethic and the Spirit of Capitalism*. Oxford: University Press, 2011.

Landes, D. *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor*. UK: Little, Brown and Company, 1998.

Landes, D. *The Unbound Prometheus*. Cambridge: University Press, 2003 ( first published 1969).

McKinstry, S. *Rowand Anderson: the Premier Architect of Scotland*. Edinburgh: Edinburgh University Press, 1991.

McKinstry, S and Wallace, K. "Cullen, Lochhead and Brown, architects: the business, financial and accounting history of a non-profit maximising firm, 1902-2002." *Accounting, Business and Financial History* 14, No.2 (2004): 183-207.

McKinstry, S and Ding, Y.Y. "Alex Cowan & Sons Ltd, Papermakers, Penicuik: A Scottish Case of Weber's Protestant Work Ethic." *Business History* 55, no.5 (2012): 721-739.

McKinstry, S and Ding, Y.Y. “The Making of a Victorian Clerk of Works: William Conradi and the Rebuilding of Glasgow University, 1866-1872.” *Scottish Business and Industrial History* 2, no.30 (2015): 4-27.

Mintzberg, H., Otis, S., Shamsie, J. and Waters, J. “Strategy of design: a study of ‘Architects in Co-partnership.’” In *Strategic Management Frontiers*, edited by Grant, J., 311-359. Greenwich, CT: JAI Press, 1986.

Ostime, N. *RIBA Handbook of Practice Management*. London, RIBA, 2013.

Saint, A. *The Image of the Architect*. New Haven and London: Yale University Press, 1983.

Scott, G.G. *Remarks on Secular & Domestic Architecture, Present & Future*. London: John Murray, 1858.

Scott, G.G. *Personal and Professional Recollections*. Edited by Gavin Stamp. Stamford: Paul Watkins, 1995.

“Sir George Gilbert Scott, R. A.”, *British Architect and Northern Engineer*. (5 April, 1878): 155-156.

Stamp, G. “Scott, Sir George Gilbert (1811-1878), architect.” In *Oxford Dictionary of National Biography*. Oxford: Oxford University Press, 2004.

Stamp, G. *Lost Victorian Britain: How the Twentieth Century Destroyed the Nineteenth Century’s Architectural Masterpieces*. London: Aurum Press Ltd, 2013.

Street, A. E. *Memoir of George Edmund Street, R.A., 1824-1881*. London: John Murray, 1888.

Swatos, W. H. and Kaelber, L (Eds). *The Protestant Ethic Turns 100: Essays on the Centenary of the Weber Thesis*, London: Paradigm Publishers, 2005.

Thorne, R. “Building the Memorial: the Engineering and Construction History.” In *The Albert Memorial, The Prince Consort National Memorial: its History, Contexts, and*

*Conservation*, edited by Chris Brooks, 134-159. New Haven and London: Yale University Press, 2000.

Toplis, I. *The Foreign Office: An architectural history*. London and New York: Mansell Publishing Limited, 1987.

“The Late Mr John Burlison.” *The Builder*, (12 December, 1868): 9-11.

“The Late Sir Gilbert Scott.” *The Building News*, (29 March, 1878): 309-311.

“The Bible: Authorized King James Version.” Oxford: Oxford Paperbacks, 2008.

Weber, M. *The Protestant Ethic and the Spirit of Capitalism*. London: George Allen and Unwin Ltd, 1984.

Weber, M. *The Protestant Ethic and The Spirit of Capitalism*, edited and translated by Stephen Kalberg, Oxford: Oxford University Press, 2011.

Wilson, J.F, and Thomson, A. *The Making of Modern Management: British Management in Historical Perspective*. Oxford: Oxford University Press, 2006.