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Nicolas Berland, Trevor Boyns, Henri Zimnovitch

Introduction

Costing appeared in the United States a century ago at the same time as and consubstantially with the scientific organisation of work (Epstein, 1978), but was not disseminated in Europe until after 1950. However, Taylorism experienced applications on the Old Continent very early on: Great Britain, the birthplace of major industry, did not remain indifferent to the phenomenon (Urwick & Brech, 1953). In France, the country of Descartes, engineers were its ardent instigators and the period between 1907 and the 1920’s progressively, but certainly, saw the adhesion of the managers of many large companies (Fridenson, 1987, Moutet, 1997).

Given that ideas relating to rationalisation gave rise from their birth across the Atlantic to the interest of European countries – strengthened during World War I by the need to produce more with less numerous and more unskilled workers –, the question was asked: why did costing take forty years to make its way across the ocean? There are two plausible answers: either, contrary to the idea generally admitted, it was used without waiting after World War II, or there were specific factors with regard to costing which hindered its dissemination.

Great Britain and France, like Janus, offer these two faces: on the one hand, the United Kingdom provides more than one example of the introduction of costing systems prior to 1950 (Boyns, 1999). On the other hand, we can see in France accountants engaged in a process of recognition of their profession (Bocqueraz, 2000) which put this technique into quarantine and thus contributed to hindering its dissemination (Zimnovitch, 1997).

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In terms of the accounting profession, 1880 was a milestone: on one side of the Channel it marked its crowning by a royal charter, on the other, a debate, it announced an aim: to obtain the place which corresponded to French accountants in the hierarchy of professions whose recognition by the Republic in 1945 of an Order of Chartered Accountants symbolises, even today, a major step.

This periodisation should not the conceal complexity and diversity of situations, which therefore need to be presented within their respective national frameworks, justifying the two sections hereafter.

In the British case, we have taken care to identify the different components of the accounting profession in order to reconstruct their influences on costing in detail, and the contrasts and differences between them and with regard to others, namely engineers (1.1). The choice made by Great Britain during World War I to base prices at which companies worked with the State for military supplies on costing needs to be examined with regard to its consequences on calculation methods and the professionalisation of accountants in this field (1.2); all the more so because the French authorities “followed” a different path.

It is not that French accountants did not have a costing method to propose; we shall see that their plans for professionalisation, from the beginnings (when they presented a common plan), included a rigorous, fundamentalist doctrine like their demand for theory which was maintained in parallel to their demand for a scientific approach for their discipline and their quest for recognition until the end of the period studied (whilst a differentiation within the profession gradually occurred) (2.1). Did these positions have secondary effects on the dissemination of costing? This is the question which we have finally tried to answer giving the point of view that engineers and managers adopted with regard to costing (2.2).

1. Costing by British Accountants

1.1. The accounting profession in Britain c.1900

By the beginning of the twentieth century, accountants had firmly established their professional credentials in Britain. Associations of accountants first developed in Scotland, where three associations were formed in the middle decades of the nineteenth century – Edinburgh (1853), Glasgow (1853) and Aberdeen (1867) (though it was not until 1951 that these three associations merged to form the Institute of Chartered Accountants in Scotland). It was not long, however, before similar local and regional associations began to be formed in England – Liverpool (1870), London (1870), Manchester (1871) and Sheffield (1877). Together with the Society of Accountants in England (formed in 1872), these four local associations merged in 1880 to form a national organisation, the Institute of Chartered Accountants in England & Wales (ICAEW), to represent accountants engaged in public practice. Although the ICAEW dominated the professional accounting scene in England and Wales, it was not the only national accountancy body in 1900, the Society of Accountants and Auditors having been formed in 1885 (becoming the Society of Incorporated Accountants and Auditors in 1908). Other bodies formed in Britain prior to 1900 included the Corporation of Accountants in Scotland (1891) and the Institute of Chartered Accountants in Ireland (1888).

The large amount of work available for accountants gave rise to the development of other associations, partly in response to the exercise of entry barriers by existing associations, including high entry
fees and examinations. Following the Revenue Act (1903), which authorised an accountant (defined as a person who had been admitted as a member of an incorporated society of accountants) to represent clients before the general commissioners, a 'second wave' of professional associations emerged: the Institute of Certified Public Accountants (1903); the London Association of Accountants (1904); the Central Association of Accountants (1905). Other organisations developed to cater for accountants working in specific sectors not covered by existing organisations: The Corporate Treasurers' and Accountants Institute was formed in 1885, becoming in 1901 the Institute of Municipal Treasurers and Accountants; in the industrial arena, the Institute of Cost and Works Accountants (ICWA) was formed in 1919.

1.1.1. THE BRITISH ACCOUNTING PROFESSION AND COSTING

Although it is generally considered that chartered accountants in Britain showed little interest in costing matters during the late nineteenth century and the first half of the twentieth century, there is sufficient evidence to suggest that they did not entirely ignore the matter. While it is true that editor of The Accountant implied (4 March 1898) that the issue of cost accounts had been fully dealt with in a series of four leading articles covering a total of twelve pages published in the journal in 1894, the publication from that date of numerous articles relating to various aspects of the subject indicate that this was far from the case. An examination of key articles in the accounting literature between 1887 and 1952 (Boyns et al. 1996) has shown that many of the key costing issues of the period were discussed in articles published in the main accounting journals, especially The Accountant (the weekly journal of the ICAEW) and, from 1921, The Cost Accountant (the journal of the ICWA). Amongst the subjects examined were budgets and budgetary control, standard costs, costing as a management tool, and marginal costing.

Prior to 1921, therefore, the main journal for professional accountants was The Accountant, and as the nineteenth century came to a close, and the twentieth century began, the number of papers or lectures dealing with costing matters reproduced in the journal increased. While many of these were fairly repetitive or dealt with costing in specific industries or trades, some of them were path-breaking, such as Garry's (1903) paper on standard costing in the chemical industry. While a number of the articles reproduced in The Accountant were written by non-chartered accountants, some of the more important papers were contributed by members of the profession, including that by Garry.

A rough survey of the literature published during the early twentieth century reveals a number of concerns: the nature, timing and causes of costing developments, including a comparison with developments in the USA; the relationship between cost and financial accounts, i.e. the theory and practice of the integration of accounts, and whether or not double-entry should be used for cost accounts; whether or not cost accounts should be audited and whether or not they could be of use to auditors; whether or not cost accounts should be designed by engineers or accountants; the allocation of overheads; and cost accounts as records of fact or as estimates. Not all of these themes were discussed at the same time, and some were the subject of more articles at one point in time than at others.

On the issue of the use of double entry bookkeeping in relation to cost accounts, as early as 1892, Plumpton had argued that "The only true and correct system of Cost Accounts is that worked out on double entry system" (1892a: 269-70). In small firms this could be achieved by having the Commercial and Cost Accounts interwoven but, in a large enterprise, where the magnitude of the
work involved in such integration would be large, the cost accounts should form a “separate and distinct set of Double Entry Accounts” (Plumpton, 1892b: 884). In an editorial in *The Accountant* in 1894, it was suggested that, until recently, few cost accounts were kept in the manner advocated by Plumpton and, since they had been designed by practical men rather than accountants, they “were (not having been audited) inaccurate in detail, and not infrequently defective in principle” (*The Accountant*, 1894: 655). More recently, however, since accountants had got involved in systematising cost accounts “they yielded the true results of manufacture shown by the financial books” (*The Accountant*, 1894: 655). Keeping two sets of books, even with both based on double entry, required some means of reconciliation to ensure compatibility (Urie, 1902: 51) and so, over time, more and more commentators advocated the integration of cost and financial accounts in a single system (e.g. Mann (Cowan, 1901: 115), Jackson (Cowan, 1901: 148), though not all were in total agreement with this view (e.g. Bardsley, 1902). That there was still no conventional view on this matter by the early 1920s is suggested by the comments of Bird who, in a similar vein to that of Plumpton nearly thirty years earlier, indicated that while there was no real need for two sets of books, since costs involved the allocation of general costs which had, in the first instance, to be estimated, it was best if separate financial books and cost accounts were kept (1921: 747). Like Plumpton, Bird favoured the keeping of cost accounts by double entry rather than single entry, while Cathles (1920: 255) strongly recommended “a proper double-entry system of cost books”.

On the question of who was best suited to design cost accounting systems, early views indicated that it must be the accountant. Although Bardsley (1902: 1055) indicated that “some good and effective cost accounts ... have been designed by engineers”, since the results could not easily be verified with the financial books, they were necessarily limited in what they could achieve. Although arguing that accountants were best-suited to devising efficient systems, Bardsley noted that, in practice, accountant-designed systems were not always fault-free. Some were “too much trammelled by rigid theory and over-elaboration”, while some were arranged for the purposes of “strict audit and for protection from nefarious operations on the parts of the staff” rather than for the benefit of those who would be using them on an on-going basis (Bardsley, 1902: 1055). Mark Webster Jenkinson, who was to become a leading chartered accountant involved with costing, in 1907 stated that “the most ignorant manufacturer knows more about costing in his own business than any average Chartered Accountant”, though the leader writer in *The Accountant* clearly did not agree with this view (1907: 549). The development of new production methods and the adoption of new forms of business organisation in the early years of the twentieth century, generated a need for scientific accounting (Jenkinson, 1914: 582) and, especially, the development of scientific costing. A bulletin of the US Federal Trade Commission published in 1917 noted that the best accounting brains in the US had tried to perfect general laws or rules for a ‘Cost System’. Such a system “provides not only for the determination of the amount of each element of cost properly chargeable to each job or operation, but also provides for an improved method of bookkeeping which causes the books to reflect at all times the true financial and industrial condition of the business and renders possible the preparation of monthly statements of conditions, as well as complete monthly statements of financial and factory operations” (*The Accountant*, 1917: 412). Emphasising the links to scientific management, Boyd (1919: 34) noted that the essence of scientific management was the elimination of waste, and this formed one of the principle uses of a costing system. Control of waste could be achieved through the setting of standards and the monitoring of performance against these standards (Boyd, 1919: 36).
By 1920, however, the view that only professional accountants alone could devise efficient cost systems seems to have been abandoned. Thus, it was stated in the leading article in *The Accountant* that “A properly designed costing system must necessarily be the result of a partnership between operating managers and skilled accountants” (1919: 151). Bird (1921: 745) noted that cost accounts should combine theory and practical common sense. Noting that the cost accountant was there to help the engineer, Boyd (1919: 39) suggested that a cost accountant was two-thirds a technical person and one-third an accountant. The switch from a pre-war position of antagonism towards the involvement of non-accountants in establishing costing systems seems to have coincided with the development of scientific management, and may also have reflected the growing importance of costs and works accountants, not least through the establishment, in 1919, of the ICWA.

### 1.1.2. ICWA

#### 1.1.2.1. Cost accountants and the professional accounting bodies

The Institute of Costs and Works Accountants began life in March 1919 as the Institute of Cost Accountants Ltd. but within months had become ICWA. According to Loft (1990: 3) “by the beginning of 1919 the stage was set for the formation of a professional body for cost accountants”, who argues that the main interest came from cost clerks and accountants employed during the war in connection with government control of industry Most of the accountants engaged at senior level without wartime government circles were chartered accountants, many belonging to the ICAEW. Possibly in response to the attempts to develop ICWA, at the annual general meeting of the ICAEW in May 1919, a group of chartered accountants with experience of government work suggested that the ICAEW embrace cost accountants. The reformers, led by Mark Webster Jenkinson (Controller of Factory Audit and Costs at the Ministry of Munitions) and supported by Sir Gilbert Garnsey (Controller of Munitions Accounts during the War) (Loft, 1990: 38), were faced, however, with a reactionary council. Nevertheless a committee of enquiry was established, and behind the scenes plans for the formation of a separate costing section of the Chartered and Incorporated bodies were developed (Loft, 1990: 40), but nothing ultimately emerged, leaving the field free to the ICWA (Loft, 1990: 43).

Clearly the reformers within the ICAEW had failed, not least because they were in a minority within a membership which numbered 5,642 in 1921. A heated exchange of letters in *The Accountant* in 1919 showed that many chartered accountants viewed cost accountants as the pre-war ‘works book-keeper’ or ‘works cashier’, and neither a professional nor ‘endowed with the sole right of advising businessmen on costing’ (quoted in Loft, 1990: 73). The ICAEW thus remained a body representing accountants in public practice, engaged in liquidation work, as auditors and/or business doctors. Though some well-known chartered accountants, including W.B. Peat, proffered advice and helped to install costing systems for their clients, for the majority of ICAEW members this was not the main part of their professional activities. For much of the profession, therefore, costing was either a subsidiary activity or one which did not, or was considered not to, affect them, and hence was largely ignored. For the ICAEW, therefore, costing was largely a non-issue, and the establishment of the ICWA, as the key body representing cost and works accountants in industry, was not seen as a major threat to the ICAEW or to the livelihood of its membership. The formation of the ICWA, however, was considered to provide a threat to the professional standing of chartered accountants and,
when the ICWA attempted to obtain a Royal Charter in 1923, the major professional bodies, the ICAEW and the SIAA, successfully opposed its petition on the grounds that cost and works accountants were not engaged in professional work, but were employed in the service of traders (Jones, 1981: 130).

1.2.2. The aims of the Institute of Cost and Works Accountants

A key aim of the ICWA was to establish the cost accountant "as an accountant with practical experience of manufacturing; a formulation which both distinguished them from chartered accountants, and explained their claim to similar status" (Loft, 1990: 43). Although the early attempt to gain chartered status was frustrated, some prestige was given to the new organisation when some prominent chartered accountants, most notably Reginald Townsend, Director of Ordnance Factories during the inter-war period, joined the ICWA. In the main, however, the leadership of the ICAEW shunned the new body (Loft, 1990: 73). The council of the ICWA, however, continued zealously with its mission of spreading "the message that cost accounting could 'save' British industry, from both foreign competition and union unrest" through advertising the benefits of cost accounting, most particularly the advance of scientific costing (Loft, 1990: 106-7; 113). In Loft's view, the use of the term 'scientific costing' by ICWA reflected the development of scientific management in the early decades of the twentieth century, though its precise origin is not known for certain. For some members it clearly encompassed uniform costing schemes, but lack of clear definition possibly explains the demise of the term over time, in favour of a concentration on budgetary control (Loft, 1990: 110-11). However, some indication of what scientific costing encompassed is provided in a paper prepared by the Executive Council of the ICWA for the first National Costing Conference held on 3 February 1922. In the paper, five main aims of scientific costing were listed, the first of which was the 'determination of true cost' (Todman, 1922: 179) which, it was considered, necessitated a complete system of cost accounts which interlocked with the financial books. The other four aims of scientific costing were: provision of a reliable basis for estimates; control of stocks and work in progress; valuation of work in progress and semi-finished products; and provision of statistical information for the guidance of management (Todman, 1922: 179).

The pursuit of scientific costing was clearly part of the attempt by the ICWA to secure the professionalisation of cost accounting, a key aim of the new organisation. While most aspiring accountants continued to see the ICAEW as the body to join for the greatest prestige, membership of the ICWA grew reasonably rapidly in the 1920s (see Table 3). In the early years, the majority of those who became members, either as an Associate or as a Fellow, were admitted on the basis of their track record of experience (though, in some cases, this appears to have been their record in industry in toto rather than in costing per se). To encourage links with industry, key industrialists were given honorary positions, including Lord Leverhulme as the first president, and Sir Herbert Austin as a vice-president. While an initial requirement of the new body was to generate funds from membership subscriptions, the desire to develop ICWA into a professional body meant that, within a short space of time, exclusivity was introduced through an emphasis on the need for new members to pass examinations prior to being admitted. Introduction of exams was largely to avoid the admittance of mere clerks or cost clerks: "The Institute needed members subscriptions to survive, but the dilemma between reducing the standard and increasing the membership, or retaining a moderately small but hopefully well-qualified membership, was resolved in favour of the latter" (Loft, 1990: 113).
ICWA held its first examinations in December 1920 and, students registering after 31 December 1927 had to have passed both the intermediate and final examinations before being admitted as an associate member (Loft, 1990: 93). Thus, the proportion of members who had passed examinations gradually rose. In the early years, the majority of new members were admitted without examination: “of the 139 members admitted in the year June 1921 to May 1922, only six had passed the examination ....... Of the 526 members listed in the 1923 Year Book around 14 per cent had done so through the examination route. By 1930 this had risen to around 50 per cent of the membership of 788, illustrating that after 1923 passing the examination was the rule, and not the exception” (Loft, 1990: 90).

It was not just costing experts, however, who sought membership of the ICWA. Indeed, Loft has pointed out that, in the early stages, members of ICWA came from a wide variety of jobs, only just over 50 per cent having job titles indicating they were concerned with costing (1990: 112). This finding has led Members of other bodies, including some chartered accountants, were admitted. Of the 526 members of the ICWA in 1923, 103 were members of other professional bodies: 57 were fellows or associates of the Chartered Institute of Secretaries (CIS), 24 were chartered accountants (10 of these Scottish) and 19 were incorporated accountants (Loft, 1990: 100). By 1930, 217 (28 per cent) were members of other professional bodies (including): 78 of CIS; 37 of Incorporated Secretaries Association; 32 chartered accountants; 18 incorporated accountants; 42 of London Association of Accountants (Loft, 1990: 100). Thus some chartered accountants clearly saw some benefit from being associated with the ICWA, including some notable writers on costing matters between 1919 and 1950: S.L. Gill (admitted as an FCWA in January 1921), H.J. Lunt (FCWA, December 1921), W. Annan (FCWA, January 1925), and G.T.H. Allen, W.Y. Glendinning, W.S. Risk and I.T. Morrow (all admitted after 1928).

Matthews et al (1998: 66) consider that the high proportion of members of ICWA who were not or only tenuously connected with costing “provides further support for the view that the ICWA was also set up to provide accountants working in industry, and thereby excluded from the established bodies, with a society of their own, rather than solely to serve the needs of cost accounting.”

Table 1. Membership of the ICWA (as at 31 December)

<table>
<thead>
<tr>
<th>Year</th>
<th>Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919</td>
<td>37</td>
</tr>
<tr>
<td>1920</td>
<td>216</td>
</tr>
<tr>
<td>1921</td>
<td>372</td>
</tr>
<tr>
<td>1922</td>
<td>472</td>
</tr>
<tr>
<td>1923</td>
<td>576</td>
</tr>
<tr>
<td>1924</td>
<td>635</td>
</tr>
<tr>
<td>1925</td>
<td>693</td>
</tr>
<tr>
<td>1926</td>
<td>657</td>
</tr>
<tr>
<td>1927</td>
<td>734</td>
</tr>
<tr>
<td>1928</td>
<td>754</td>
</tr>
<tr>
<td>1929</td>
<td>790</td>
</tr>
</tbody>
</table>

Source: Loft, 1990: 47 – In a footnote it is noted that the figures are as accurate as possible for 1919 to 1925, which are taken from the inconsistently kept membership book; figures for 1926 to 1929 are taken from the annual reports.
Table 2 shows the relative sizes of the ICWA and ICAEW, indicating that the former was tiny in comparison to the latter. Although it experienced faster growth over the period between 1921 and 1951, the ICWA still only accounted for 8.8 per cent of all accountants working in Britain in 1951, compared to the 43.2 per cent accounted for by the ICAEW.

Table 2. Membership of ICAEW and ICWA, 1921-1951

<table>
<thead>
<tr>
<th>Year</th>
<th>ICWA (members)</th>
<th>ICAEW (members)</th>
<th>Total Accountants Working in Britain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1921</td>
<td>372 (2.9)</td>
<td>5,642 (43.6)</td>
<td>12,926</td>
</tr>
<tr>
<td>1931</td>
<td>830 (3.8)</td>
<td>9,666 (44.1)</td>
<td>21,897</td>
</tr>
<tr>
<td>1941</td>
<td>1,430 (4.7)</td>
<td>13,694 (45.1)</td>
<td>30,305</td>
</tr>
<tr>
<td>1951</td>
<td>3,293 (8.8)</td>
<td>16,079 (43.2)</td>
<td>37,238</td>
</tr>
</tbody>
</table>

Note: Figures in parentheses give membership as a percentage of final column.

1.2. The influence of the First World War on the diffusion of new cost accounting method

1.2.1. THE EFFECTS OF THE FIRST WORLD WAR ON COSTING IN BRITISH INDUSTRY

Writing in 1902, Urie noted that cost accounts were especially necessary, and had been given most attention, in the engineering and kindred trades, where it was considered necessary to know the profit on each contract (1902: 51). Many observers writing after the First World War, however, consider that it was the war itself which provided the most significant positive impetus to the development of a cost-consciousness amongst British businessmen and the emphasis on cost-plus contracts led to the introduction of costing systems in places where none had previously existed. For Loft (1990), the First World War led to cost accounting ‘Coming into the Light’. Archival research carried out since the publication of Loft’s work, however, has suggested a much greater development of costing prior to 1914 than she believed (Boyns, 1993; Boyns and Edwards, 1997a,b). Locke (1979), writing many years before Loft, however, had commented that before the First World War accounting was preoccupied with actual costs and that, following the development of standard costs and budgetary control, the British fell further behind other countries, especially America, and also lost their claim to theoretical superiority in the subject. There are clearly a number of different views on the matter which still need to be resolved.

It is clear, however, that not all businessmen of the time were convinced as to the positive impact of the wartime experience of costing. Sir John Keane, an important industrialist (?) and advocate of cost accounting, in proposing the toast to the ICWA at its members’ second annual dinner on 28 January 1921, remarked that he hoped that, under the Institute’s auspices, cost accounting would not lead to “a perpetuation of what we saw largely during the War: that amateurs who knew little or nothing about the subjects were put in all kinds of important positions” (The Cost Accountant, vol. I: 16). Sir Herbert Austin echoed this theme, remarking: “Everybody has complained of it; there is no
doubt about it, the cost keeping of the Government, particularly during the War, was very very bad” (The Cost Accountant, vol. I: 22). Relating his ‘rather amusing experiences’ during the War in relation to costing of furnace products in the heavy iron and steel trades of the Midlands, E. Brown noted that Government inspectors who had come to ‘spread the light’ had bawled the backward condition of the art of costing there. However, he noted that, “when it came to ‘brass tacks’ none of them were able to offer any practical alternative to existing methods, while some of them knew so little of the practical working of the industry as to give up any attempt to make a real check of the figures submitted” (The Cost Accountant, vol. I: 250).

If the experiences of Hans Renold Ltd. were anything to go by, it seems unlikely that the government was a source of much dynamism in respect of cost accounting. The company’s records clearly shows that the company had problems in getting the Ministry of Munitions to understand the nature of their advanced costing system (which at that time was based on A. Hamilton Church’s system of scientific machine rates, but was moving over to the use of budgeted rather than actual expenses). In order to satisfy the Ministry’s requirements, the company was forced to calculate separate figures based on a retrograde method of costing. Furthermore, when it was suggested that the company’s expert on time and motion studies, and later vice-president of the ICWA, Henry W. Allingham, should be seconded to the government to carry out such studies to accurately determine costs, the offer was declined.

Although Hans Renold Ltd. began to develop the use of standard costs and budgetary control during the war, and other companies did so soon afterwards, it is clear that, at no stage during the First World War, did the government or the Ministry of Munitions advocate the use of standard costs or budgetary control, though there is some evidence that they knew of scientific management and the government was involved in attempts to (was it? – check!). If the development of techniques such as standard costs and budgetary control owed nothing to the government cost controls of the First World War, to what extent were they aided by the accounting profession or other groups?

**1.2.2 THE ROLE OF ACCOUNTANTS AND OTHER GROUPS IN DEVELOPING COSTING IN BRITAIN**

In 1921, it was commented that “The majority of the large manufacturers [in Britain] are already operating [cost] systems in varying degree of completeness, but among the medium sized firms there is a vast ground still to be sown with the seed of efficiency through the introduction of adequate costing systems ..... For many years there has existed in small and medium sized factories an uncanny fear of the supposed mysteries of anything appertaining to a cost system” (The Cost Accountant, vol. I: 177). A year or so later, in discussing the development of cost accounting, A. Alexander, in delivering a lecture on establishment charges at the Scottish branch of ICWA, noted that it was only with the advent of cost plus percentage contracts, a few years before 1914, “that accountants began to take their present live interest in this question, an interest which has been quickened ... during these past war years. Prior to that time, I think the engineer was from a practical point of view very much more advanced in this subject than the accountant ...” (The Cost Accountant, vol. II: 410).

With the formation of ICWA, and the publication from 1921 of its journal, The Cost Accountant, those wishing to write on the subject of costing and cost accounting and expound new ideas had, at last, a specialist publication in which to do so. However, while The Cost Accountant became the main
vehicle for publishing and disseminating ideas in cost accounting from 1921, many of the most important papers in cost accounting, including many of those presented at the annual National Cost Conferences held under the auspices of the ICWA from 1922, continued to be reproduced in the journals produced by the chartered accountants, such as The Accountant and the Incorporated Accountants Journal, indicating that chartered accountants were not entirely dis-interested in keeping abreast of key developments in costing. Indeed, a leader article in The Accountant in 1926 claimed that “only an unfortunate accident of history prevents us seeing that costing is the central core of accountancy” (The Accountant, 1926: ?), though unfortunately it did not spell out the precise nature of this accident. Perhaps developments would have taken a different course save for this ‘accident’, but what impact did accountants and cost accountants have on the development of costing systems and the development of techniques such as standard costs and budgetary control?

Reflecting on the lack of progress in cost accounting in 1930, Annan argued that it was not the fault of the professional accountants, but rather of a lack of demand from Britain’s manufacturers (1930: ?). Despite that fact that, in his opinion, they needed scientific costing in order to effectively compete with foreign manufacturers, many British businessmen were not convinced of the need for cost accounts. Despite this lack of demand, professional accountants were nevertheless looking to improve the supply of cost accountants, since many of the societies of accountants had included costing in their examination syllabi (Annan, 1930: ?). A few years later, however, Moran was less pessimistic, claiming that, with the help of ICWA, scientific costing had developed in less than twenty years since the First World War had provided businessmen with the “first glimpse of costing as a means of controlling production and as an aid to works management” (Moran, 1936: ?). Moran also noted that standard costs had made progress in budgetary control possible, and that budgetary control was “slowly gaining ground in this country” (1936: ?). For Leadbetter (1937: ), both standard costs and budgetary control had “permeated very thoroughly into British industry by now”. Not all, however, agreed. Writing of his experiences in the hosiery trade, Lloyd (1935) noted little progress in costing methods, a view echoed by a report in December 1936 for the National Federation of Hosiery Manufacturers’ Associations and another ten years later by a Board of Trade Working Party on Hosiery (1946), and that the introduction of standard costs would be useful.

In those industries where progress was being made, some of this progress was attributed by Moran to the growth of cost consultants, which proved especially important for those “smaller businesses which are unable to retain the full time services of a cost accountant as a permanent member of the indoor staff” (1936: ?). Consultants of all kinds had clearly been increasing their role during the inter-war years. Henry W. Allingham, for example, became an early time and motion expert, a number (how many?) of the early members of the ICWA referred to themselves as cost accountants, some American ‘management engineers’ began to carry out work for British firms in the 1920s, most notably Charles E. Bedaux. During the 1930s this tendency grew, though surviving evidence suggests that some of these individuals or firms did not engage in giving advice on cost accounting.

2. Costing by French accountants

From the 1880’s accountants nourished their ambition of working their way up the career ladder, they aspired to a situation comparable to that which their British counterparts enjoyed. The method for
costing was amongst other things one of the ways they used to achieve their enterprise, this was the stake for the profession in the making (Ramirez, 2001). Did this effort contribute to greater information for the managers of the time? We can observe that the effect of trying to push accounting towards formalisation, abstraction and theory was the alteration of its qualities in terms of logic, clarity, exactness, and that its image then became that of an inaccessible and mysterious language which expressed results with useless precision. Finally, the fact itself that the costing method was imposed in a hegemonic way did not favour the analysis of methods which had emerged in the United States.

2.1 Integration of the accounting profession and the fundamentalism of costing

2.1.1 THE QUEST OF ACCOUNTANTS FOR THE RECOGNITION OF THEIR PROFESSION

When in 1880 the first congress of French accountants was held in Paris, the work of accountants had not yet been coded. It was not recognised by any authority and enjoyed no prestige. Even in the 1920’s accountants still did not believe they were given the place they deserved in economic life, which is shown by one of the figureheads of the profession who did not hesitate, although not without humour, to paraphrase Sieyès, writing in substance: “What is an accountant? Nothing – What is he supposed to be? Everything” (Reymondin, 1928, p. 97). Is it also worth for our purpose remembering several milestones in the journey at the end of which an Order of chartered accountants received a statute close to that which exists today from the State in 1945.

The year which followed the congress, in 1881, the first national accountants’ organisation was created: the Academic Accounting Society (Société Académique de Comptabilité - SAC) which played an important role in the training and organisation of the profession, and its recognition by companies which called on their services, whether as salaried employees or as a liberal profession, and by the authorities. Firstly a teaching body was formed which awarded qualifications. This step was taken between 1881 and 1905 with the creation of a syllabus implemented by the SAC which successfully awarded an accounting diploma (1881), a bookkeeping certificate (1901) and a chartered accountant’s certificate (1905). The authorities then accompanied this movement: in 1913 they introduced an accountancy teaching proficiency certificate (which responded to the creation in 1912 of what later became the ENSET) and official diplomas corresponding to the three levels which the SAC differentiated (the SAC was state approved in 1916 and was re-christened on this occasion the Accounting Society of France)^4, i.e.:

- 1st grade: Professional diploma of proficiency as a finance clerk (1929)
- 2nd grade: Professional accountant’s certificate (1931)
- 3rd grade: Chartered accountant’s diploma (1927).

As mentioned earlier, the order of 1945, which legitimised the status granted to the accounting corporation by Vichy in 1942, marked a high point in the organisation and recognition of the profession. But its history cannot be simply summed up by an attempt to unify accounting which began in 1880 and which was completed in 1945. This story would be too biased in favour of the liberal branch of the profession to the detriment of the employed branch. We know for example that chief
accountants did not react at all favourably to the decree of 1927 which introduced a chartered accountant’s certificate; they did not rest until they achieved redress for this decision which they considered to be unfavourable to them (they partially obtained satisfaction: in 1947 through the SCF which introduced a specific chief accountant’s diploma and in 1963 by the State which created a diploma in accounting management of a level equivalent to that of public accounting). To complete this brief historical overview that can be illustrated using the diagram below, there is no need to repeat that accountancy teachers who taught at business schools and colleges, etc., played a non-negligible role which is even more difficult to apprehend than the separation with chartered accountants was porous, namely for those who taught at business schools.

### Organization of the accounting profession

**3rd grade**

<table>
<thead>
<tr>
<th>Chief accountant</th>
<th>Chartered accountant</th>
<th>Teacher</th>
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<tr>
<td>1947 / SCF and 1963 / State</td>
<td>1905 / SCF and 1927 / State</td>
<td>Proficiency certificate 1913</td>
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**2nd grade**

<table>
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<tr>
<th>Accountant</th>
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<td>1881 / SCF Diploma, 1931 / State</td>
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**1st grade**

| Bookkeeping SCF diploma 1901 then CAP (vocational training certificate) in accountancy awarded by the State in 1929 |

But, beyond the specificities of each part of the profession and differences which existed between them, they shared a common idea of costing which obviously does not mean that they were all equal: it was obviously the members of the higher degree, namely chartered accountants, who dictated to the rest who had to assimilate.

Admittedly, there were various arguments which led to the recognition of the accounting profession: the need to provide shareholders with reliable information on their companies for the distribution of dividends, to third parties for the financial balance, the State for performance appreciation (remember that profit tax was created in France in 1917). Nevertheless, all of these reasons and motives should not make us forget that accountants also introduced costing to justify their ambition.

#### 2.1.2. THE ROLE OF COSTING FOR PROFESSIONAL ACCOUNTANTS

To see this all you need to do is to look at what was taught, exam subjects, the subjects of theses for obtaining the chartered accountant’s certificate, the articles which were published in the different professional journals, speeches made at seminars and different works. These are all witness to the essential role played by costing for the profession: on the one hand, in the state of business and, on the other hand, in double entry accounting as a science. The triple alliance that accountants formed with double entry accounting and costing can be seen in the organisation project for the first national seminar the profession held in 1881:
The only system which provides effective and continual control for all transactions is the double entry. The double entry system is therefore the basis on which Accounting should rest. Bookkeeping is an important part of good Accounting practices. In order for accounts to be correct they must be complete. And costing is one of the essential parts of Accounts. Therefore any Accounts drawn up without the help of Costing are incorrect. No-one can contest the following general formula: Costing is the key part in any business, commercial, industrial or agricultural enterprise. It is undeniable that no transaction may seriously be attempted without previous exact Costing which has an infinite number of specific forms. Costing is the entire responsibility of the Accountant who, more than anyone else, must have both the practical knowledge and the equipment needed to draw up these types of Accounts. To sum up, I declare that the application of the Double entry system and Costing are the true bases of Accountancy. (1880, p. 117)

This seminal text contains most of the subjects which were dealt with over the years and which we will return to later on to show how efforts to achieve good accounting meant it had to be complete, including costing, and how it lead to a fundamentalist conception of accounting. We will specifically look at the hegemonic temptation of costing (cf 2.2.2) in what could be called its active ingredient which denied other approaches any means of obtaining valid information; but part of this hegemonic discourse was already outlined in the supra text whose standard subject is: “knowing the cost is essential to the company manager; costing is one of the main services that accounting provides” (Julhiet, 1922, p. 126); by which we understand that costing is the responsibility of the accountant and not the engineer, even if he is not named. This is above all illustrated by this phrase which we have taken from an eminent accounting author from the period – and which his colleagues also illustrated in similar words – it is similar to a syllogism whose premises are:

1. Accounting enables the cost to be determined
2. Knowing the cost is essential

Logically this means that accounting is essential.

Justifying the usefulness of accounting for the community was the objective that the accounting profession gave itself during this period, although it was also important for the intellectual attributes of the discipline to be respected, and for that nothing was more status-enhancing than obtaining the statute of a science at a time when science was triumphant. To write: “there is no scientific industrial accounting possible without the strict application of the Perpetual inventory of existing stock” (Blairon, 1926, p. 12) was to call costing a key element for the scientific nature of industrial accounting since this was what made the inventory perpetual.

If costing was considered essential for business to be correctly conducted, this was also true for accounting according to its theoreticians because “the law of the perpetual nature of the inventory of values at their cost price is the capital law in the science of accounts” (Guilbault & Léautey, 1889, p. 478), and by endeavouring to gain recognition for accounting as a science the profession was attempting to strengthen its position in order to demand for it only to be practiced by qualified members with a diploma awarded following a recognised training period on the labour market, if not by the State, at least by a credible institution, which was one of the main assignments of the SCF. Since the risk was that if it claimed to be a science justified merely by its own internal logic – like mathematics by providing the model and from which the accountant took inspiration – whose use for the industrialist was deduced from the truths enriched by the double entry, the result is a disjunction between theory and practice.
2.2. Responsible users deprived of alternatives

2.2.1. PROMISE NOT KEPT

Léautey & Guilbault, two accounting authors who were an authority in the period studied and the true patron saints of accounting, worked according to the petitio principii when they wrote in the preface of their Science des comptes: "through the permanence of the costing of inventory values, everything becomes clearer in the minds of those who exchange or produce. The ordinary entrepreneur follows his operations with mathematical precision, he knows where he is going, he can go forward or stop in time, he is master of his company, he searches for necessary improvements shown by his accounting" (Guilbault & Léautey, 1889, p. X). We will see that according to their reasoning what is to be proved is assumed.

The account of this former pupil of Industrial Arts and Crafts is representative of the opinion of inter-war engineers concerned with rationalisation when he wrote in the journal of the French Organisation's National Committee: "generally, for production engineers and shop managers, accounting represents a collection of "paperwork" and various books, enabling them to know what customers owe the company or to determine what the company owes suppliers and also to determine cash holdings. The impression of many technicians is that accounting can only give approximate, often fanciful and sometimes confused indications on the development of business" (Nottin, 1927, p. 1). The clarity that accounting was supposed to provide is certainly not confirmed by this remark, no more than the precision it claims.

When archives enable us to look inside companies, a similar opinion can be seen. Thus, at the motor manufacturer Marius Berliet, one of the pioneers of Taylorism in France, the minutes of a work meeting show us that "most of the costing methods were invented by accountants for the greatest benefit of finance managers [whilst] the main accounting function [should be] to enable the workshop manager to constantly know whether he is manufacturing or not as economically as possible, which does not occur in 99% of ordinary bookkeeping where information does not arrive or arrives too late to be able to make any use of it" (Zimnovitch, 1997, p. 359); an acknowledgment which faithfully reflected that of American experts in efficiency who were working on innovations in costing (Gantt, 1915).

To better decide whether costing by accountants has achieved its objectives in terms of clarity and precision or not, let us weigh up the pros and cons.

It is blamed for supplying confusing explanations, but the accounting technique, like any technique, involves an effort for whoever wants to master it and works on industrial accounting often began with an account of double entry principles, of the administrative organisation which underlies its correct working; neither lacked rigour, on the contrary! If they can be blamed for anything, it is that they were not presented in a simple enough form, by trying to vie with theory we fall into scholasticism which damages the clarity of the intention.

It was blamed for the approximation of indications it provided, it is true that in the distribution of general and administrative expenses what concerned the accountant, despite the intentions displayed, was balancing the balance sheet within the framework of the perpetual inventory; the rele-
vance of the allocation was not as important. Furthermore this is how French engineers introduced themselves to costing, namely with the method of cost centres perfected by Rimailho in the 1920’s.

Finally, is the fact that the problem was only solved late on not the price to pay for the precision desired which is dependent on the principle of recording bookkeeping vouchers relating to past events?

Rather than judging, we should try to understand and the following lines help us to do so:

“In most companies, accounting does not provide the precious services it could and should do. Why?

Sometimes because of the accountants who do not keep clear accounts, who are never ready to quickly give a statement and finally who give their information in an incomprehensible language instead of translating it into a language everyone can understand.

But the fault very often lies with the business manager who does not understand accounting jargon, who ignores everything to do with accounting, who does not know what it could provide him, who is consequently unable to give directives to his accountants and who does not provide the link between their services and other departments in the factory ” (Julhiet, 1922, p. 12).

We have mentioned the importance that accountants gave to costing and we have just seen that in this respect accounting did not satisfy the expectations of industrialists; we now need to examine whether the costing method of accounting was a brake on the dissemination of other methods which were invented at the beginning of the 20th century.

### 2.2.2. REASONING WITH HEGEMONIC DESIGNS

We outlined that the exposition of the principles and mechanisms of the science of accounting acted as intimidation because the difficulties inherent to the method discouraged the layman and its theoreticians applied themselves to giving it a scientific appearance which eventually dominated.

It is furthermore easy to discern the hegemonic temptation expressed by accountants with regard to retail costing: arguments were, on the one hand, used to dishonour calculation methods which did not come under the double entry and, on the other hand, used to inhibit the spreading of innovations which were to emerge in the United States.

In accounting, concurrently with the double entry, a century ago there was still the single entry but the cause had been heard: “theoretically, it would not be impossible to complete single entry accounts using a system of entries on manufacturing operations and manufacturing costs so as to also provide data on the profits, losses and the cost, but practically speaking this aim is easier to achieve using double entry accounting” (Julhiet, 1922, p. 64).

Therefore during the period from 1880 to 1950 no other accounting method shadowed the double entry technique; this is not true for the non-accounting procedure which namely enables estimates to be drawn up. The accounting discourse adopted with regard to this an offensive tone for which the following quotation provides an insight: “one of the causes of ruin of many companies is the failure to determine costs. A cost resulting from good accounting practices is exact, a cost through quotations can only accidentally be exact. In the first instance we obtained the truth […]. In the second case we simply calculated probabilities and obtained an approximation which events frequently contradict.” (Guibault & Léautey, 1889, p. XIII). Here we can see our syllogism from the
usefulness of costing to the double entry, but beyond it appears the criticism that it is calculated using non-accounting parameters.

Nevertheless, accounting authors from the period accepted, or tolerated, engineers taking part in the drawing up of estimates, and therefore non-accounting calculations, but in close collaboration with the accounts department and under its responsibility. Here we can see a concession to reality, i.e. the way in which companies were then organised, namely those which mass produced, like car manufacturers, where there was, next to the accounts department, a costing office which came under the authority of engineers, technicians, and which had a strained if not conflictual relationship with the accounts department.

Finally, the concern of the exactness of costs meant that all the charges were integrated in costing and, even if the distinction between fixed charges and variable expenses had been known for a long time, attitudes were not in favour of a direct costing approach whose principle is to calculate costs disregarding their fixed part. For the same reason, the idea of integrating costs on a provisional basis, as is the case with standards, was not in the spirit of costing. Whilst accountants have known for a long time the notion of technical prices or transfer pricing which enables transactions to be entered without waiting or without any effort and for the price at which such a charge entering manufacturing is paid to be known, the feeling was: “by working this way we are contradicting the basic principle of Accounting which is the perpetual nature of inventory values at their cost price, we fall back into empiricism and arbitrariness” (Bournisien, 1909, p. 134). We have grounds for thinking that this attitude has, in the least, inhibited any vague desire to innovate in the direction of costing. The statement made in April 1919 by the head of accounting at Renault, Meurisse, is significant in this respect: whilst the head of the costing department toyed with an idea close to that of predetermined costs, Meurisse disputed the capability to forecast them in a satisfactory manner due to failures and other variations encountered on a daily basis in manufacturing; he wrote to the management: “it will probably be argued that the costing department takes into account these considerations in the pricing. This cannot be done rationally, because, [...] if it takes into consideration these unknown factors, it will be obliged to do so theoretically or empirically and may in no case prove the results shown.” (Zimnovitch, 1997, p. 409).

As far as we know, Pont-à-Mousson (PAM) provides us with the only example where, from the 1920’s and to the greatest satisfaction of its managers a system close to standard costing worked (Dumas, 2000). It is furthermore highly probable that it was set up by the firm of consultants managed by Morrini – a disciple of Emerson, one of the method’s founding fathers – who intervened just before war at PAM (Dumas, 2000). Here we will not go into the reasons which made this case remain confidential in all respects, all we need to do is to note for our purpose that beyond differences in size and national culture which existed between American and French companies, at least one of them found satisfaction in it without waiting for it to spread to France in the 1950’s. It is also worth adding to this the companies which between 1910 and 1950 attempted to implement standard costing (Berliet) or which unsuccessfully tried to adapt their methods according to requests to which standard costing tried to answer (Renault, Saint-Gobain), and those which imagined costing systems distinct from orthodox costing, more crude than standard costing but coming close to it like the case at Pechiney where some of the managers regretted not having discovered it earlier on (Zimnovitch, 1997, p. 349), but were they not also responsible for not having looked?
To conclude on French costing, what could be better than giving the last word to an author who was part of that School:

"To sum up, we can formulate the following principles:
1 – Accounting and costing form a system whose two parts are interdependent.
2 – Well organised accounting must be able to give all the data needed for costing.
3 – There is no exact calculation or check for costing outside accounting.
4 – In some cases on the basis of accounting data costing demands additional counting and distribution" (Calmès, 1922, p. 132).

The first three principles illustrate the hegemonic dimension of costing, the latter authorises the use of methods other than those of the double entry in order to complete costing. This corresponds to the efforts undertaken to reach a more satisfactory indirect cost charging whose results were used in the spirit of establishing a uniform method for costing which the political, economic and social events of 1936 reflected and whose outcome was to be found in the 1942 and 1947 Charts of accounts.

Conclusion

At the beginning of the 20th century most accountants, both in Great Britain and France, considered that only the framework of the double entry offered sufficient guarantees for costing. Since the technique of debit and credit recording is the responsibility of the accountant and subsequently his main distinctive competence, according to this logic, costing should be under his responsibility rather than in the hands of anyone else.

In Great Britain liberal accountants generally paid little attention to the question of costing, a distinct professional association, the ICWA, took interest in the subject. In France although there were industrial accountants, they did not form a specific association comparable to the ICWA. French accountants as a whole attempted to progress in the hierarchy of professions and we can discern this powerful motivation behind their common conception of costing exclusively according to the principle of the double entry responsible for giving them, at least this is what they hoped, a surplus of legitimacy.

Costing was not however unanimously supported, engineers and managers blamed it for being useless in most cases both in France and in Great Britain. In Great Britain more than to costing itself, attention was increasingly given to a projected approach of costing and the use of standards clearly emerged from the end of the 1920's, and even more so during the 1930's, under the combined action of the ICWA and various key figures who took up their cause. On the other hand, in France, at the same time, the attachment of accountants to costing within the stricto sensu framework of the double entry helped keep standard costing out of the limelight.

If, in this study, the accent has been put on the influence of the British and French accounting professions in the spreading of standard costing, our conclusions do not exhaust our understanding of the comparison. Work on the development of budgetary control between 1920 and 1960 in France and Great Britain highlighted the role played by different groups such as the ICWA and Management Groups in the United Kingdom, the Cegos and the UIMM in France, for the dissemination of new
ideas driven by this tool (Berland & Boyns, 1999). Did progressive engineers and managers undertake actions in favour of standard costing with the same fervour? Here providing an answer means mobilising beyond the economic environment political, social and cultural factors which, by their very essence, differ from one country to another and make it necessary for greater research to be carried out.

Notes

1: This paragraph is based on Edwards (1989: 277-9).
2. Townsend became president of the ICWA in 1932/3.
3. The “Ecole Nationale Supérieure de l’Enseignement Technique” (ENSET) initially called the ENET when it was set up took this name in 1934, and kept it until 1980, except during the Vichy period. It is currently called the ENS Cachan; in some issues of the ENET Former Students’ Association Newsletter we can find a number articles concerning the teaching of accountancy during the period studied.
4. The SCF continued awarding its diplomas until 1950.
5. In the teaching given by the SCF, cost accounting was dealt with in great details in 2nd grade courses and several exam subjects refer to it (REYMONDIN & LINGER, 1930); but it was not absent from the 1st grade (REYMONDIN & LINGER, 1927), with regard to the third grade, we can see that approximately one third of theses presented with a view to obtaining the SCF chartered accountant’s certificate had dealt with this subject (Bulletin de la Société de Comptabilité de France, October 1951).
We can find the subject of costing both in general magazines like Le Commerce, La comptabilité et les affaires, Experta, Mon Bureau, and in the Bulletin de la Société de Comptabilité de France, which was perhaps of greater interest to chartered accountants whilst employed accountants were undoubtedly more attracted to the Compagnie des Chefs de Comptabilité newsletter.
6. A. Calmès, representative of his period, nevertheless stood out because of his shrewd comments about the relevance of costing, the allocation of overhead costs and transfer prices.

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