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**Refreshing and reframing accounting's double-entry 'controversy':
accounting as cognitive artefact**

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ABSTRACT

For more than 60 years, the controversy concerning the role of double-entry bookkeeping in the emergence and expansion of capitalism, initiated by the works of Sombart and Weber, has played itself out in the accounting literature. Based on the examination of the eighteenth-century merchant archives of *la Maison Chaurand* in Nantes, we refocus this debate by framing it in terms of accounting as cognitive artefact, a perspective heretofore not examined in the literature. Specifically, we highlight the fundamental role of the mundane yet neglected current account. We argue that the current account was the critical mechanism linking a set of actors who carried out a variety of transactions with each other, all the while pursuing their own goals. It was through this artefact, which established trust between partners, that double-entry bookkeeping then proved instrumental in the expansion of the merchant trade that preceded the rise of industrial capitalism.

Key words: capitalism, cognitive artefact, current account, double-entry bookkeeping

Introduction

For more than sixty years, the controversy concerning the role of double-entry bookkeeping in the emergence and expansion of capitalism, initiated by the works of Sombart and Weber, has played itself out in the accounting literature. This debate, as noted by Funnell and Robertson (2011), has centred primarily on developments in England to the neglect of those elsewhere. Funnell and Robertson examine Dutch and German accounting texts of the sixteenth century to test Sombart's thesis, concluding that at this time "a capitalistic form of double-entry bookkeeping was a curiosity in the north Netherlands, notably Amsterdam (p. 561)". While in broad agreement with their argument with respect to the desirability of expanding this energetic debate to other contexts, our approach differs from their study in two significant ways, context and critique. First, our research context is the eighteenth-century French trade. Second, our story has a distinctly different angle in that we are not so much debating the adoption or non-adoption of double-entry bookkeeping to test Sombartian claims or more recently, those of Bryer (2000b). To the contrary, our analyses indeed confirm that double-entry systems were utilised and these techniques highly developed, a feature that we have confirmed in other archives of this period. Instead our preoccupation resides elsewhere: if double-entry accounting was not employed for purposes of profit determination *à la* Sombart, what were the purposes for its adoption and development? Our investigations into this puzzle focus on the archive of a major family of *négociants*[2], *les Chaurand*, established in Nantes, France in the second half of the eighteenth century and the accounting methods used by these merchants.[3] The overarching objective of our research, based on our examination to date of accounting data along with a variety of other archival documents, is to better comprehend what *les Chaurand* might have been able 'to discern' in their account books, the information that they might have found there and perhaps more speculatively, to offer insights into the information that they might have been seeking.

Despite our inability to respond definitively to these last points, it is possible to identify what they apparently were not seeking, once one establishes that they dispensed with several of the possibilities provided by tools at their disposal, chiefly those tools that would have permitted the calculation of their annual profits. This observation, which has led us to question the role that these merchants *did* assign to their accounting, is all the more pertinent given the enduring dominance of the double-entry discourse in accounting historiography. While differing in degree, Werner Sombart (1919) and Max Weber (1923) have considered the properties of double-entry accounting, which the Chaurand brothers *apparently* neglected, to have played a defining role in the birth and rise of capitalism: utilising a capital account, establishing a balance sheet, calculating financial results.

Nevertheless, despite this ‘sub-optimal’ use of the techniques at their disposal, *les Chaurand* developed their business affairs to great success. Moreover, if their accounting did not correspond in totality to the ideal type promoted by bookkeeping treatises, it was far from being rudimentary. Their archives reveal instead a very elaborate administrative and accounting apparatus, going well beyond what was prescribed by the *Ordonnance du commerce* of 1673 yet well suited, it seems, to the variety, scope and complexity of their business affairs. The management of multiple operations in which they were implicated, as well as the tracking of accounts opened with their partners and those of their trade and investment portfolio, constituted undoubtedly the principal mission assigned to this accounting system.

The arguments advance by Sombart and Weber have been thoroughly and enthusiastically discussed, including the capacity of double-entry accounting to furnish a pertinent aid to decision making. Our examination of the Chaurand account books[4] presents an opportunity to renew this debate but also to re-focus it. Our deep immersion into the tangible reality of these merchant practices fosters a better understanding of the underlying issues related to the utilisation and potential contribution of double-entry accounting in the pre-industrial era. Allowing for the odd exception, profit determination has always been the privileged question in the literature; its being the principal point of demarcation between double-entry bookkeeping and other less sophisticated accounting methods. However, many other aspects, considered secondary or relating to routine practices and devoid of interest, have been neglected.

Such neglect has been the fate of the functioning of the commonplace current (debit and credit) account. The role of this elementary yet fundamental accounting ‘object’ deserves to be reconsidered by going beyond the narrow perspective of accounting at the service of rational calculation for a single actor. By moving from the individual to the collective, from the unilateral to the multilateral, our aim is to comprehend it as an instrument for establishing relations across a set of multiple actors undertaking amongst themselves various transactions all the while pursuing their own individual objectives. In this vein, we adopt the concept of ‘cognitive artefact’ defined by Norman (1993, p. 28) as an artificial instrument conceived to retain, make evident or act on information so as to serve a representational function’.[5]

The paper proceeds as follows. After a presentation of *la Maison Chaurand* in the context of eighteenth-century commerce in Nantes, we return to our main the themes relative to the cognitive artefacts, the theses of Sombart and Weber, concluding our story by developing the role of the current account.

The material: the archives of the Maison Chaurand

Eighteenth-century trade in Nantes

The port of Nantes managed to maintain its place as the second-ranking French port of the eighteenth century after Bordeaux, and to overcome the competition posed by Marseille and Le Havre, thanks not only to the entrepreneurial spirit of Nantes merchants but equally due to its favoured geographic position.

From the outset, the geographic situation of the city of Nantes conferred upon it a strategic advantage in terms of commercial development. This location enabled it to exploit readily the French maritime and colonial system, centred on the Atlantic, and by the same logic, to take advantage of its relations with an immense hinterland, structured by the hydrographical network of the Loire and its tributaries. The Loire was one of the principal communication routes of the country, taken by thousands of vessels and which assured the Nantes-Paris link via the canal of Orléans and the Loing River.

Beginning in the early-thirteenth century, Nantes turned its gaze to the Atlantic. The Newfoundland cod fishery first played an important role in capital accumulation, supported and then surpassed by its relations with the Antilles beginning in the 1680s (Saupin, 1995; Laucoin, 1999). In effect, the growth of the port rested largely on its relations with the colonies in the Antilles, principally Saint-Domingue; shipping known as *la droiture antillaise*[6] as well as the slave trade represented two complementary pillars of the city's prosperity. Nantes occupied the position as the principal French port for the outfitting (*l'armement*) of ships during the first half of the eighteenth century but saw itself gradually distanced by Bordeaux (Butel, 1973). Nevertheless, at the eve of the Revolution, Nantes remained the first-ranked port in terms of the slave trade and second in importance for colonial trade.

Maritime outfitting continued to be the linchpin of commercial enterprise in the city throughout the eighteenth century and all the major families, the new port élites, participated en masse. These élites were *négociants-armateurs*. Yet as noted by Meyer, "the outfitting of vessels was only one form of commerce amongst others, certainly essential but encompassing only a part of it"[7]. The other branch was *le négoce* and all of the activities that it incorporated: commission sales, consignment of merchandise, chartering, re-exporting. Thus, in a global sense, the *négociants* participated in the circulation of merchandise by practising trade in all its forms. In the eighteenth century, a major *négociant* at Nantes was also a major *armateur* who owned as well plantations in the colonies. The élite worked equally to maintain relations with the hinterland of Nantes, France more widely, and with other parts of Europe to secure export merchandise, along with the practical necessity of finding outlets for the colonial staples that he imported.

The world of *le négoce* was characterised by three principal features: its international dimension, its network functioning and the versatility of its operations (Marzagalli, 2004, p. 8, vol. 1). It is often not straightforward to distinguish the activities involved especially as they were superimposed and intermingled, but one can state that the *négociant* was an intermediary, an essential link in the commercial chain of the eighteenth century, providing the bridge between the place of merchandise production and that of its consumption. The

négociant dealt in both the importing and exporting of merchandise, played the role of commission agent equally for buying and selling and acted as a consignor for trade goods. What we hope to tease out in more concrete terms the professional reality to which these activities referred.

If we attempt to define these activities technically, here is what we can say: in commercial and maritime law, the commission agent was a *négociant* who undertook commercial operations on account of a third party known as *le commettant*, receiving thereby a commission that represented his remuneration; the consignor for his part was a *négociant* to whom one addressed merchandise that he received in stock and/or took care of selling it. The consignor therefore also represented a commission-agent intermediary. As one can quickly see at the level of definitions, the approaches were divided neatly into sectors but one would be hard pressed to draw the fine line between commission and consignment activities. It appears, from the analysis of our sources, that the *négociant* did not undertake either the role of commission agent, or that of consignor, but rather often filled concurrently these different functions as opportunity arose.

On the one hand, *négociants* found themselves acting simultaneously as purchase commission agents, when they contacted their suppliers of fabrics, wines, or other merchandise; as sales commission agents and as consignors when they received colonial staple goods from the Antilles. On the other hand, the most important *négociants nantais*^[8], following the example of the Chaurand family studied here, were property owners in the colonial islands. Thus, beyond the commissions earned on merchandise bought and sold for third parties, they also marketed their colonial production, as well as directly purchasing goods to resell ‘as is’ on their own account. Finally, as their account books reveal, they were highly versatile. They acted as insurers, invested in loans *à la grosse aventure*[9] and undertook banking operations such as the discounting and collection of commercial bills, as well as participating in a diverse set of speculative activities in conjunction with other merchants. The profits of the *négociant* – *armateur*, planter, insurer, lender, banker, etc. – stemmed from the multiplicity of functions and activities that he fulfilled.

The Chaurand family

With ancestral roots in the Alps of Haute-Provence and descended from the *bourgeoisie de robe*, Honoré Chaurand settled in Nantes during the 1740s. His marriage to Marie Portier de Lantimo in 1748 signalled the beginning of his economic and social ascension. This alliance with one of the most notable families of *négociants nantais* was most certainly due to his already possessing a personal fortune of consequential size. The marriage contract concluded between the couple indicates that Honoré possessed 150 000 *livres* that belonged to him on his own account[10]. This significant sum derived from real estate that he owned in Provence, at Valensole, and also a plantation in la Martinique, *La Jambette*, of which he held a one-half share interest with a certain *sieur* Bérard. In fact, Chaurand had already started to interest himself in colonial trade, founding a company in la Martinique in 1744, with Antoine Bérard and Louis Rateau, *négociants* from Bordeaux, and Joubert and Boimafour, probably *négociants* in the colonies. Despite its being organised in la Martinique, company operations actually were established at le Cap in Saint-Domingue[11]. Even if the origins of Honoré Chaurand’s fortune remains somewhat blurry, it is clear that once he arrived in Nantes, he was able to integrate himself easily into the milieu. On a final note, Jean Meyer estimated the

fortune of Honoré Chaurand in the 1750s to be as much as 500 000 *livres*, after the integration of his wife's dowry established at 106 000 *livres* (Meyer, 1969, p. 192).

Honoré Chaurand purchased a *charge anoblissante*[12] in 1751 and some landholdings in the following years. Scarcely ten years after his arrival in Nantes, he was elected *juge consul* by the *négociants nantais* and was counted henceforth amongst the most powerful members of Nantes society. An interesting question is the facility with which Honoré Chaurand was assimilated into this merchant world; it appears, in the final analysis, that until the 1770s he devoted only a minor portion of his activities to trade strictly speaking. Instead, Chaurand acted above all as an investor before actually being a *négociant*. His investment strategy led to his taking share interests in a number of vessels outfitted *en droiture* and for the triangular trade. Of his 32 such investments made between 1752 and 1771, 17 were in slaving voyages, slightly more than half[13]. When the voyages in the long-distance trade – from France to the îles Bourbon as well as to the East Indies – became open after the suspension of the monopoly of *la Compagnie des Indes* in 1769, Honoré Chaurand placed investments in these areas of endeavour. The variety of his financial investments bear witness to a truly speculative mentality: he held interests in tax farms (le Minage[14], les Fermes de Bretagne), the Indian Ocean both in terms of exports and redistribution, *cambies*, purchases at Lorient, the slave trade (vessels from Nantes and La Rochelle), *la droiture*, and in the redistribution of goods to Northern Europe as well as Spanish America.

In short, Honoré Chaurand was a *brasseur d'affaires*, in today's parlance, a big businessman, the quintessential example of the country land-based fortune redeployed into large-scale commerce. From the investments in the Antilles in the 1740s, arrival in Nantes and then the alliance with les Portier in 1748, the financing of tax farms, and ultimately to the share interests in trading vessels beginning in 1751 – the completion of a picture-perfect process – he immersed himself in the world of *le grand négoce*. The final touch was his becoming an *armateur* on his own account from 1771. However, this latter activity was only really developed by his sons beginning in 1774 with Honoré being content to participate in a more moderate fashion in this sector – he outfitted his own vessel *La Comtesse de Menou* for Saint-Domingue only four times. The objective, it seemed, was to place his sons on a solid financial footing with some experience of the sea. Honoré Chaurand did not grow up in the merchant milieu and the training that he provided his eldest sons rather confirms this fact in that it privileged formal studies over maritime experience. In all likelihood it was this gap that he wished to fill in embarking on the outfitting of ships and in encouraging his sons to follow his example.

The training followed by the Chaurand brothers was in keeping with that given to all young gentleman of the period. We focus on the two eldest as it is the archive of their company that we have studied. Honoré-Anne pursued his studies at the Oratoire de Nantes then completed sojourns in Lisbon, London, Hamburg and Paris. As for Pierre-Louis, whose education was entrusted to one Henry Casthaing, he assumed the responsibility for outfitting vessels for the trading house and reserved the right to manage dealings with banking houses.

Honoré-Anne and Pierre-Louis founded their commercial enterprise on 20 September 1774 under the name *Chaurand frères*. The articles of incorporation indicated, amongst other conditions, that the duration of the partnership was for nine years and that each partner would provide one half of the capital funds[15]. The two brothers had participated financially in the last vessel outfitted by their father in 1774 and the profits earned from this venture enabled

them undoubtedly to raise the necessary capital, which amounted to 140 000 *livres* when the partnership was created (Rinchon, 1956, p. 77). Despite a rather unpromising start, due to the bankruptcy of the Babut trading house in Amsterdam, the operations carried out by the two brothers proved to be profitable as some data from their accounts will later demonstrate. In the 1780s, *Chaurand frères* further developed their trade and their network extended from one side of Europe to the other and across the Atlantic to Saint-Domingue, so much so that their firm capital had grown by 1785 to 2 000 000 *livres*[16]. The war of American independence proved highly lucrative for *les Chaurand*; between 1776 and 1784 they appear to have earned the greatest profits. Encouraged by the good results of their business affairs, the two brothers came to regular agreement to extend the duration of their partnership. In 1783, the deadline date for the first nine years established by the initial contract, they signed a new one for seven years, then for an additional 10 years on 1 January 1790[17]. At the end of 1793, the firm of *Chaurand frères* had assets in the millions. Notwithstanding all of this apparent success, the firm went into liquidation in 1806; the definitive loss of Saint-Domingue and the return to war against England eventually won out and got the better of the previous glory days of the Atlantic trade.

The archive - le fonds Chaurand

The composition of the archive is interesting in itself as it provides initial tangible evidence of the administrative and accounting organisation put in place by the two brothers, well beyond the documents required by the *Ordonnance du commerce* of 1673. The requirements that concerned them were presented in articles I and VII of titre III (*Des livres et registres des négociants, marchands et banquiers*):

- Article I. *Négociants* and merchants, both wholesale and retail, will have a book that contains all of their trade, their bills of exchange, their active and passive debts and the funds used for the maintenance of their household.
- Article VII. Every *négociant* and merchant, both wholesale and retail, will put in bundles the missive letters that they receive, and record a copy of those that they write.[18]

Beyond this book, which article V made clear was referring to a journal, and the registers and bundles of correspondence, *les Chaurand* utilised most certainly a general ledger, within the framework of double-entry bookkeeping. Their administrative tools included a series of other registers, some of which were specific to certain activities:

- *carnets de caisse* (cash book)
- *comptes de vente* (sales accounts)
- *brouillards de factures* (invoice blotter)
- *livres de factures* (invoice books)
- *livres de magasin* (warehouse book)
- *lettres et billets à recevoir* (letters and bills receivable)
- *lettres et billets à payer* (letters and bills payable)
- *livres d'armement et désarmement*[19] (ledgers for vessel outfitting and laying up)
- *livres des assurances* (insurance books)

In total, there are more than eighty volumes covering the period 1774-1793 with unfortunately a few gaps, most notably the journal collection which ends in 1784.

The entries recorded in the journal of the firm of *Chaurand frères* from 22 October 1774 to 31 December 1775, then for the first three months of 1784, were collected and integrated into a relational database created especially for the Marprof programme. This paper reports results based on our manipulation of this data set, as well as our analyses of various other archival elements.

Capitalism and accounting

Weber, Sombart and the on-going controversy

Beginning with the early articles of Basil Yamey (1949, 1964), many authors have examined and re-examined the relationship between capitalism and accounting: Pollard (1963), Winjum (1971), Most (1972), Carruthers and Espeland (1991), Nikitin (1992), Lemarchand (1992), Bryer (1993, 2000a, 2000b) and most recently but rather indirectly, Yamey (2005); not to overlook Chiapello (2007), Edwards et al. (2009), Basu et al. (2009), Toms (2010), Stoner (2010) and Funnell and Richards (2011). Rich discussions of these debates can be found elsewhere, for instance Chiapello (2007), Toms (2010), Funnell and Richards (2011) and also Lemarchand and Nikitin (2009). We do not attempt to re-state this literature or to repeat the exercise but instead frame the debate in more general and condensed terms as follows.

Weber raised this topic in *Wirtschaftsgeschichte Abriss der Universalen Sozial-und Wirtschaftsgeschichte*, translated by F.H. Knight (1923) as *General Economic History*. The original volume published student notes from a lecture series presented by Weber in 1919-20 shortly before his death (14 June 1920), texts initially collected at the request of his widow Marianne Weber. It linked and connected four concepts that have since engendered much controversy, capitalist rationality, double-entry, capital account and profit calculation:

Capitalism is present wherever the industrial provision for the needs of a human group is carried out by the method of enterprise, irrespective of what need is involved. More specifically, a rational capitalistic establishment is one with capital accounting, that is, an establishment which determines its income yielding power by calculation according to the methods of modern bookkeeping and the striking of a balance (Weber, 1923, p. 275).

Depending on one's persuasion, one could consider that Sombart (1919) in *Der moderne Kapitalismus* had been much stronger in his opinions and gone even further in affirming:

[t]he essential characteristic of double-entry bookkeeping had undoubtedly this objective: to track the complete cycle of the capital of an enterprise, to quantify it and to record it in writing [...] For the first time, thanks to these two new elements ['profit and loss' account and 'capital' account], double-entry bookkeeping allowed for the understanding, without a break, of the complete cycle of capital: from the capital account to the stock accounts, then to the profit and loss account, to return lastly to the capital account (translation by the authors).[20]

Yamey was one of the first to issue a radically opposed opinion, based first on the study of British manuals of the seventeenth and eighteenth centuries (Yamey, 1949), then on the examination of a set of merchant archives dating from the same period (Yamey, 1964). His first judgement is unequivocal:

The evidence is largely against the view that the merchants of the period required anything more from their ledgers and journals than a clear and ready record of transactions for easy reference, and descriptive details of their cash, merchandise, and other assets bought and sold. Double-entry bookkeeping, to the extent that it was adopted in practice, could bring order and system to such records and so contribute towards the ‘methodising’ of business life [...] However, this role of systematic bookkeeping, important as it is, is considerably more circumscribed than the other roles ascribed to it by some. (Yamey, 1949, p. 110)

He reiterated his argument with equal force 15 years later: “In fact knowledge of the total profit of an enterprise for a period, either absolutely or in relation to the amount of capital in the enterprise, is rarely necessary or useful for business decision-making [*sic*] within that enterprise” (Yamey, 1964, p. 119). Then further:

[t]he business man wanted to have an accounting reminder of the existence of his claims (even if their effective enforcement were doubtful), and was well aware, from the descriptions in the asset-accounts and from his knowledge of his firm’s affairs, of the real nature and probable value of these assets. Calculation and quantification were less important than the availability of records for ordinary administration. (Yamey, 1964, p. 122)

This debate ‘for and against’ Sombartian claims, the extent to which Weber supported or moderated them, and the various challenges beginning with those of Yamey has met with renewed interest in the past decade especially in the reaction to the seminal papers by Bryer (2000a, 2000b). Funnell and Robertson (2011) recently have challenged Bryer’s thesis and broadened the horizon by shifting the discussion to the Dutch context. Thus, one might reasonably ask what further contribution could be made to this controversy. Our response is two-fold and one which we believe the evidence of the Chaurand archives corroborates. First, as argued by Yamey, profit calculation was not a characteristic of double-entry systems of this period, but as we intend to indicate, double-entry was a requisite once commerce attained a certain scale and scope.[21] Second, notwithstanding that merchants hardly ever called upon double-entry accounting as a tool for providing profit calculations or for making strategic decisions, it did not preclude its otherwise playing a fundamental role in the birth and expansion of modern capitalism. We later explore the second point through the concept of cognitive artefact.

The accounts of *les Chaurand* and profit calculation

The diversity of operations

To underscore our earlier comments concerning merchant activities, the list of the types of operations recorded in the Chaurand’s journal during the first year of the firm’s existence (1774-1775) offers an initial glimpse into the diversity and importance of their own operations. The latter would multiply over the next 10 years, notably the outfitting of vessels, for both the trade *en droiture* and the slave trade. One significant characteristic of the port trade, namely risk diversification, also stands out. This diversification was pursued through joint participation such as merchandise held in common, vessel share interests and *les pacotilles*[22], but evident also in the speculative protection against the risks assumed by others, such as insurance syndicates and loans *à la grosse aventure*. Any number of ways existed to grow one’s capital by dividing it to shield oneself as much against commercial risks

as the hazards at sea.

- Commission operations
 - *Purchases on account of a third party and shipment* (brandy for Amsterdam ...)
 - *Sales on account of a third party* (coral from Marseille ...)
- Joint Operations
 - *Merchandise in common, one-half, one-third, etc.* (principally with *négociants* from Amsterdam)
 - *Outfitting of vessels in co-proprietorship* (*La Comtesse de Menou*, 1/4)
 - *Share interest in vessels outfitted by third parties* (*Le Lion*, 1/12; *Le Dominique*, 1/24)
 - *Insurance* (insurance on account of a third party)
 - *Pacotilles* (*pacotille* on account of a third party with Berthomé, captain of the vessel *Comtesse de Menou*)
- Operations on one's own account
 - *Loans à la grosse* (4000 livres on *La Bricole*, 5000 on *La comtesse de Ségur*)
 - *Insurance* (on the vessel *la Brune* of Bordeaux)
 - *Exchange operations* (foreign exchange gains on drafts drawn at Amsterdam)
 - *Banking operations* (negotiation, discounting and collection of trade paper)
 - *Financing operations* (issuances of drafts and promissory notes)

Initial observations

Our first question was to establish from the Chaurand accounts the information that they might have found in terms of profit understanding and thereby, to tease out the accounting perception of profit. We can state right away that there was no effort to calculate a periodic and global profit result, contrary to what the accounting manuals of the time advocated. Opened in 1774, the accounts were not closed and transferred to a new general ledger until 31 December 1783, at the expiration of the initial partnership agreement, when the partnership was extended for another seven years. Only a variety of partial results were calculated, considered perhaps to be the only ones pertinent. Several net results, such as profits on speculative activities – the interest on loans *à la grosse* in situations where the vessel for which the loan had been made returned to its home port safe and sound –, were transferred to the profit and loss account once identified. This treatment was also the case for losses on active insurance agreements. The debit and credit entries were made from time to time to the profit and loss account, without any specific periodic recapitulation, other than a summation at the end of each page when moving to a new one. In April 1777, the balance of the commissions account was transferred to the credit of the profit and loss account but why at this particular time and for what particular reason are not evident.

Certain operating accounts never seem to have been closed. Expenses and revenues

continued to accumulate in the debit and credit columns of many accounts. This situation was sometimes the case with vessel share interests. We know that such accounts often remained open due to the anticipation of further returns, nonetheless it does not rule out their apparent lapse for other reasons. While our answers remain provisional, a general impression emerges. Despite the scope and size of the administrative and accounting apparatus produced and of which a few figures next will illustrate, the calculation of profits was not a dominant preoccupation of *les Chaurand*. Thus, in our view, the utility of accounting resided elsewhere.

A paint-by-numbers illustration of les Chaurand - business volume and partners

The data collection to date covers two periods: the early beginnings of the firm *Chaurand frères* from 22 October 1774 to 31 December 1775, then the first three months of 1784[23] after the prolongation of the firm. 1530 lines of entries have been captured for the first three months of 1784 compared to only 970 for the 14 months of the first period. The average monthly volume of administrative transactions therefore had increased by 7.5 times. In the same interval, the average total of the monthly flow of funds recorded in the accounts (total debits and total credits, which obviously are the same) had multiplied by 14. The total flows recorded at the end of 1775 had grown to approximately 2 050 000 *livres* in 14 months, compared to 4 700 000 *livres* in the first three months of 1784 alone. These figures indicate not only a net expansion of activity but that this activity was accompanied by an almost doubling of the average unit volume of transactions.

The operations dealing with financial paper – issuance, negotiation (purchase or sale), discounting, presentation for collection or endorsement of bills of exchange and promissory notes – also provide an indication of the intensity of the firm's activity. In 1774-75, almost 400 drafts were handled, either inflow or outflow, at an average amount of approximately 2800 *livres*. Eliminating Sundays and other holidays, roughly one draft per day was received or issued at the trading house of the two brothers. At the beginning of 1784, the figure was roughly four drafts per day that were handled for a slightly higher average amount of 4000 *livres*. On January 1st, 1784, the portfolio of bills and letters of exchange receivable contained 55 instruments for a total of 512 520 *livres*, whereas it also included 98 letters and bills payable totalling 814 200 *livres*. One final important detail, there were at the same date 853 *billets de prime* to pay, that is premiums corresponding to that number of maritime insurance contracts taken out by *les Chaurand* on their own behalf or on account for a third party.

The various partners of *Chaurand frères* are present in two different ways in the accounts. First there are those for whom a nominative account was opened. If on 31 December 1775, only 36 accounts of this type existed, there were 132 at 1 January 1784, as outlined in Table 1. A quick analysis of this table allows one to appreciate the importance of credit tracking *vis-à-vis* their partners in the Antilles. While the latter comprised 30 per cent of the debtors, they also represented 70 per cent of the credit outstanding with third parties. This figure is moreover revelatory in terms of the fragility of the enterprise, whose prosperity was overly linked to the fate of the Antilles and would be liquidated with the irrevocable loss of Saint-Domingue in 1806.

Yet many other actors – individuals and corporations – were in direct or indirect contact with the two brothers within the context of their business activity, without as far as we know

having an account opened in their name. One finds approximately 260 actors in the journal entries in the first year and another 170 who intervene during the first three months of 1784. They were a diverse group, quite probably small-scale suppliers or clients, and the transactions in which they were involved also were handled through ‘sundries’ or ‘miscellaneous individuals’. These actors were often intermediaries involved in the shipment of merchandise – consignors, ship captains, bargers or common carriers – and finally other *négociants* implicated in one capacity or another in finance operations as a drawee/er, beneficiary, endorser or discounter of trade paper, or acting in the role of insurers.

Our intention is not to provide a micro description of the extensive operating situation of *la Maison Chaurand*. Instead delving into the accounts and the numbers can enrich our perceptions and understanding of the important administrative and accounting techniques that such an organisation required. This tracking of accounts and the players involved also provides a greater appreciation for the role assigned to accounting *at this point in time*. It is certainly difficult, after having examined in detail accounting records such as those of *la Maison Chaurand*, to accept the earlier reasoning of Yamey (1964, p. 134) that a “system of single entry, with personal accounts for debtors and creditors as well as a cash account, provides a large part of the information necessary in routine administration”. In our view, once activities surpassed a certain scale and scope, one could do without neither operating and asset accounts nor double-entry accounting if one wished to disentangle the resulting maze of relations amongst multiple actors.

Table 1. Distribution of partners for whom nominative accounts opened at 1 January 1784.

| Types of partners and location | Debit balance | | Number of partners | | Credit balance | | Number of partners | | Total | |
|--|---------------------------|-----|--------------------|-----|---------------------------|-----|--------------------|-----|-------|-----|
| | Amounts (<i>livres</i>) | % | No. | % | Amounts (<i>livres</i>) | % | No. | % | No. | % |
| Plantation owners | 589 460 | 54 | 9 | 11 | | | | | 9 | 7 |
| Colonists, <i>négociants</i> , brokers | 175 136 | 16 | 16 | 19 | 52 697 | 15 | 5 | 10 | 21 | 16 |
| Partners in the Antilles | 764 596 | 70 | 25 | 30 | 52 697 | 15 | 5 | 10 | 30 | 23 |
| | | | | | | | | | | |
| Foreign <i>négociants</i> | 54 466 | 5 | 5 | 6 | 1 182 | 0 | 4 | 8 | 9 | 7 |
| French <i>négociants</i> (beyond Nantes) | 110 978 | 10 | 27 | 33 | 94 327 | 26 | 21 | 43 | 48 | 36 |
| <i>Négociants nantais</i> | 59 422 | 5 | 10 | 12 | 25 498 | 7 | 6 | 12 | 16 | 12 |
| Family-related accounts | 13 410 | 1 | 5 | 6 | 128 283 | 35 | 4 | 8 | 9 | 7 |
| Metropolitan trade | 183 810 | 17 | 42 | 51 | 248 108 | 68 | 31 | 63 | 73 | 55 |
| | | | | | | | | | | |
| Banking houses | 4 105 | 0 | 3 | 4 | 56 037 | 15 | 5 | 10 | 8 | 6 |
| | | | | | | | | | | |
| Unspecified | 92 850 | 8 | 8 | 10 | 4 834 | 1 | 4 | 8 | 12 | 9 |
| Total | 1 099 827 | 100 | 83 | 100 | 362 858 | 100 | 49 | 100 | 132 | 100 |

Refocusing the debate

Beyond the apparent indifference for the utilisation of accounting tools for the purposes of calculating financial results, what the Chaurand archive reveals to us (and as other similar accounting archives do also) is that accounting could not be reduced solely to the technical

device and specific mechanisms of double-entry bookkeeping. It was accompanied by the construction and development of a series of auxiliary books and ledgers designed for the capture and elaboration of data, that were then recorded in the journal, synthesised or not depending on the situation, or which originated from this same journal and were intended to be processed in a specific context.[24] These registers might also have provided for a more detailed tracking of certain elements, for example trade paper, letters and bills payable/receivable, and insurance premium notes. Moreover, French bookkeeping manuals of the period made reference to them, following the example of Mathieu de La Porte (1704) or those books which deal more specifically with maritime commerce (Gaignat de l'Aulnais, 1773; Degrange, 1799-1800 (An VIII); Boucher, 1803).

Thus it is the administrative apparatus in its entirety of this 'information system' that must be considered if we wish to appreciate the utility of accounting in the development of commerce and thereby, the later development of industrial capitalism. This analysis shifts the debate from one centred on the utility of accounting for the specific individual (or entity) who maintained it to one focused on the role that it might have played in the emergence and functioning of merchant networks, which became increasingly complex and ramified, and in the expansion of commercial activity. In our opinion, this approach requires moving from an individual or unilateral view to a collective or multilateral vision of accounting.

The account as cognitive artefact

As noted at the outset, a 'cognitive artefact' is as an artificial instrument conceived to retain, make evident or act on information so as to serve a representational function' (Norman, 1993, p. 28)[25] Acting as an external memory for its users, this cognitive instrument facilitates the development of operations and influences, additionally, the perceptions that actors will have of each other. While reminding each other of his or her obligations, it establishes confidence through the possibility for scrutiny and mutual control that it provides them. We introduce the concept of the cognitive artefact by first looking at a relatively primitive 'accounting object', the tally stick, before moving to the more complex (yet seemingly commonplace) current account.

Tally and counter-tally

Tally sticks are amongst the oldest 'accounting objects' known, if not the oldest (Baxter, 1989, Kuchenbuch, 2006), and were still used in France in the middle of the twentieth century in certain retail shops such as bakeries. The *Thrésor de la langue francoyse* (Ranconnet (de) et Nicot, 1606, p. 615) defines the tally in the following manner:

Une petite pièce de bois, en laquelle par osches ou inciseures on marque le compte et nombre de quelque chose, et lors vient de ce mot latin Talea. Selon ce on dit, prendre du pain, du vin, et autres telles choses à la taille, Taleae caesuris ac crenis amphorarum vini, panum, modiorum alteriusve rei numerum notare. Et de cette signification vient taille, pour tribut imposé sur le peuple pour estre payé au Prince, d'autant peut estre que les imposeurs, ou asséeurs, ou distributeurs de tel subside, bailloyent anciennement à chascun taillable, sa quotité du tribut, merquée et oschée en tels petits bastons. Selon ce on dit, imposer ou asseoir la taille et taillable, celuy et celle qui sont sujets à payer la taille.[26]

More concretely, a stick of wood is split into two symmetrical halves, one of which – the tally or stock – was retained by the shopkeeper, whereas the other – the counter-tally or foil – was given to the client. At each sale, the shopkeeper would juxtapose the two halves, and then carve them simultaneously, making as many notches as necessary depending upon the size of the transaction.

This accessory object to credit operations – it was not indispensable – symbolised the underlying relationship. Adopting the terminology of Jubé (2011), the object served a function of *rappel* or ‘recall’, of one’s rights on the one hand and of one’s obligations on the other. Buyer and seller knew at any time the amount of credit agreed upon. In the case of litigation, the tally or the counter-tally constituted a means of proof: a non-written contractual proof which the French Civil Code has maintained in that article 1333 devoted to it remains in effect. In the chapter entitled “of the proof of obligations and of that of payment”, this article is worded: “The tallies corresponding to their counter-tallies bear witness between individuals who are in the habit of declaring in this way the supplies that they make or purchase”[27].

Yet litigation was expected to be the exception; what was expected by both the seller and the client was that this relationship would be long-term in nature and that after each payment, a new period of credit would unfold. Thus, other than the fact that it saved the seller the trouble of memorisation, an effort that quickly could become onerous, the object and its successive manipulations participated in the construction of confidence between the two partners. As Jubé notes, “the institution of confidence – of *credit* – presupposed that each party would be reminded of the fair execution of his obligations”[28]. The current account (and the statement of account prepared from it) operated in the same manner between two merchants. This object, however, possessed one additional property. It could play the role of money.

The current account

For accountants and accounting, the current account has long ceased to be the focus of attention. The common debit or credit account, whose balance changed along with transactions that were recorded in it, was the foundational element for single-entry, double-entry or even mixed systems (those which combined charge and discharge accounting with debit and credit accounts). Although the terms now has a more restricted sense, particularly in the banking sector, we adopt the expression ‘current account’ for the account in debit or credit opened on account of a third party, in accordance with earlier usage as it was referred to at the beginning of the nineteenth century by the jurist Dalloz (1827): “There is a current account between two *négociants*, as soon as there is a credit or debit between them for commercial affairs. There is some basic knowledge needed about this matter and for this one need only consult the first bookkeeper to come along”[29].

However this account was not simply a framework for recording accounting entries. It was an accessory of the credit process, following upon the example of the tally; it also was a payment instrument. With origins in banking practice, the current account provided a means to complete payments without the physical movement of funds, either through the transfers from account to account, or more readily, between partners, who were at the same time both supplier and client one of the other; this scenario being a frequent one in commerce of the

period. All that was necessary was the rudimentary clearing of the account. By its very functioning, it effected *novation*, in the legal sense of the term[30], by converting a set of debt or credit obligations into new ones, the value of which corresponded to the account balance at time *t*. While the legal theorisation is relatively recent – the mid-nineteenth century in France – the practice dates back to the middle ages and no doubt much earlier.[31] What is evident from its multi-faceted role is that it cannot be understood simply from the perspective of a given enterprise but instead in terms of a ‘mediating object’, one between two partners, and as a central element in their exchange relations over time.

This single observation is all that is necessary to appreciate the importance that this tool quite possibly had in the development of commercial exchange, in the same capacity as a bill of exchange, in a world long portrayed as one in which hard currency was in short supply and in which transportation was relatively insecure. One must, however, delve more deeply into the logic of its use to grasp all of the implications. Freed from the necessity of proximity that the utilisation of the tally assumed, the current account enabled by means of written communication the undertaking and tracking of transactions between partners geographically removed from one another. In the accounts of two merchants in a business relationship together, once all the operations that linked them had been correctly recorded at their respective trading house, one should have found reciprocal and symmetrical current accounts with opposite balances. Periodically or on demand, it was possible to calculate the balance of an account open on account of a third party in order to inform the latter of his debit or credit position by issuing him a detailed copy of this account – extract or statement – such that he would be able to compare it with his own ledgers. As outlined by Ricard in 1724, a current account was based on the fundamental principle that it was not sent unless the correspondent could verify and see that all the entries matched those in the account that he maintained at his own establishment. Such verification would be quite difficult if such entries were not specified in detail, making it necessary to distinguish all debit and credit amounts such that the third party could verify that they matched those put down in writing in his account books[32]. The forwarding of such statements followed standard format.

“We have just closed, sir, as per our custom at the end of the year, our account with you, you will find it enclosed and after its examination if you would be so kind as to credit us once again for £ 68 833.11.9 including the interest balance of our advances which we have carried at 5% as per the account also enclosed”[33].

Depending on the circumstances, the current account could carry interest *agios*, whether they be sums which the *négociant* had advanced or on funds that he had temporarily at his disposal. In other words, these interest amounts were calculated in proportion to the time elapsed, on the successive account balances. The statement of account always included equally the detailed calculation of this interest amount. La Porte (1704) provided an example of the calculation method, as did the majority of accounting manuals which later appeared. If the reconciliation led to the discovery of differences, a re-examination of the accounting entries led to the dispatch of a new extract:

“We have received the letter [...] in which you make various observations about the extract of your account remitted to you, enclosed you will find a revised one in which we have added and rectified all that we consider to be fair, as a result, on this new account you are indebted to us in the amount of 5

316. 7. 9 [livres, sols deniers], would you be so kind as to examine it and sign it for its correctness if there are no further errors”[34].

For the intended receivers, the reading and interpretation of these extracts assumed a minimal level of competence. Nonetheless the graphic form and the vocabulary utilised would render it immediately intelligible to anyone who possessed the knowledge shared by merchants using double-entry systems. In effect, accounting served as an international language understood and shared within merchant networks extending across Europe and the Atlantic world. For each partner, the current account constituted a record or memory device of the relationship with the other party. If one adds to it the copy registers of active correspondence and the bundles of correspondence received, along with the various auxiliary books, one would be in the position to retrace the entire history of this relationship.

Preliminary Conclusions

Accounting information and thereby, the device that produces it, is almost always considered from a unilateral perspective, either that of the producer or that of the user. In terms of internal information for strategic decision making and operational control, producers and users are readily confounded – management accounting and control; information destined for investors and more generally, third parties, and respecting the set of norms intended to make the financial statements comparable across space and time – financial accounting. In the first case, one reasons in terms of pertinence; in the second, fidelity, transparency and perhaps pertinence yet still in terms of the individual decision maker.

Consequently the perspective that we bring to the history of accounting has been frequently guided and influenced by these same preoccupations, which has translated itself into much questioning into the emergence, diffusion and evolution of methods of cost calculation; or the evaluation, reliability and harmonisation of financial information. All of these issues are important, and far be it for us (who have been engaged in such endeavour) to debate their research interest. Nonetheless another entire side of the production from routine accounting work is potentially overlooked; less noble and unremarkable it may be, yet also far removed from debates over cost calculations and fair value.

In a similar manner despite the relative abundance of old account books; accounting historiography has tended to overlook these sources. Studies which rely on their potential insights are rare. The archival documents of enterprises more frequently consulted are those which *describe* the systems used, offering on occasion a critical analysis, with frequent emphasis on their modification, adoption, decisions by boards of directors, regulations and internal memoranda. When account books are placed in the limelight, it is more often to study a specific operating category, for instance closing entries, or to focus on the use of a particular type of account. Our immersion *de longue durée* into the account books draws us into the practices themselves and allows us to envision the reality of the accounting work undertaken, something that is not possible from the study of accounting manuals alone.

While currently a work in progress, our analyses to date permit us to speculate on what we consider to have been the essential contribution of double-entry accounting in the emergence and expansion of commercial capitalism. This contribution was to have made possible the

development of international commerce, in somewhat the same manner as maritime navigation and its instruments. Nonetheless we should not push the metaphor too far. If accounting assisted in taking stock of the situation, it did not necessarily indicate the direction to be taken!

Rather it was the role of this accounting object in relation to others that we underscore: the role played by the 'current account' object in the establishment of exchange relations between partners, in the institution of trust between these partners, in the extension and longevity of merchant networks. Other elements clearly intervened in the creation and functioning of networks of this nature, including social and family relations, matrimonial strategies, control and incentive mechanisms. However, the current account distinguishes itself as a necessary condition of such a network. It was indispensable in the construction of long-lasting commercial relations between two partners, once the latter had attained a certain volume and degree of complexity and/or had gone beyond the limits of immediate physical proximity. In the same manner, beyond a certain volume of business, the use of a set of open accounts for partners, as well as for operations and for assets, was indispensable for the exercise of commercial activity. Our conclusions are consistent with the general observation of Basu *et al* (2009) that records influence impersonal exchange and, as argued much more eloquently by Jubé (2011), in terms of the function of *rappel*. While it is not possible to state precisely for the two cases when it took place, there is a point at which complexity could no longer be accommodated by more rudimentary accounting systems and double-entry techniques made these extensions possible. In terms of the double-entry discourse, our arguments align in certain ways with the views of Bryer (2000b) by underscoring the requisite nature of double-entry accounting once the scale and scope of operations reached a certain magnitude.

More generally, our approach is grounded in an anthropological approach to accounting which privileges the nature of accounting objects and their actual use, thus removed from a narrow theoretical vision that might be offered by accounting manuals or by accounting research lacking historical perspective. Along with the current account, which has been our present focus, we would need to add invoices, sales and profit accounts, *les comptes d'armement et désarmement*, etc. – all of these accounting objects that could not have been produced or used in a satisfactory manner without a minimum of administrative and accounting organisation and which also contributed to the construction and the enduring nature of the co-operative commercial relations between their users.

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¹ This programme brings together researchers dispersed geographically and across several disciplines – history, economics, and management – who have undertaken the collaborative study of a group of archival collections of merchants from the modern era, with the intention of teasing out and reconstructing their profit-seeking strategies. This work comprises two streams: 1) the construction of an on-line relational data base, from the capture of accounting journals and passages of related commercial correspondence; and 2) quantitative and qualitative analysis of the collected data.

² We use in this paper the following French terms: *le négociant* - merchant, but distinct in that the individual was engaged in wholesale trade but was prohibited from retail activity; *l'armateur* - a ship owner-entrepreneur who was involved in maritime trade and operated a diversified business. The scope ranged from vessel selection, acquisition of investment capital, hiring of experienced captains and management of the trade with significant amounts of personal capital at risk. Pétré-Grenouilleau (1997, pp. 35-101) provides a detailed analysis of the emergence and evolution of these terms.

³ These archives are housed in the Archives du département de Loire-Atlantique (101 J): *le fonds Chaurand*. This collection has already been the subject of various studies, notably by Dieudonné Rinchon (1956, pp. 77-136) and much more recently by Laure Pineau-Defois (2008) and Albane Forestier (2011).

⁴ As well as those of other *négociants* studied in the context of the Marprof programme such as the *Maison Gradis* of Bordeaux.

⁵ « un instrument artificiel conçu pour conserver, rendre manifeste l'information ou opérer sur elle, de façon à servir une fonction représentationnelle »

⁶ The term '*la droiture*' designated the shipment of products to colonists in the Antilles and the acquisition and stocking of colonial staples, primarily sugar and coffee, in return; as opposed to the 'triangular trade' of the slave trade.

⁷ « l'armement de navires n'est qu'une forme de commerce parmi d'autres, essentielle certes, mais ne le couvrant qu'en partie » (Meyer, 1969, p. 93)

⁸ We employ the French adjective *nantais* 'of Nantes' to simplify.

⁹ A contract '*prêt à la grosse aventure*' or '*cambie*' was designed to finance high-risk maritime expeditions, the interest rate premium was very high, but in the event that the vessel was lost, the lender received neither interest nor principal.

¹⁰ AD44, 4 E2/364, notaire Boufflet, acte du 29 janvier 1748.

¹¹ AD44, 4 E2/935, notaire Girard de la Canterie, acte du 12 décembre 1768, protest by Chaurand for the restitution of the sum of 20 000 *livres* owed by Antoine Bérard and Louis Rateau, at Portier de Lantimo.

¹² These offices and positions, in this case conferring noble status, were frequently purchased and sold subject to market forces. The Crown had well established administrative decrees and procedures to regulate these transfers and the royal treasury benefitted from a portion of the sales proceeds (cf. Barbiche, 2001).

¹³ AD44, B 4500 to 4504, actes de propriété de navires.

¹⁴ Le Minage refers to a royal or seigniorial duty received on grains and other merchandise sold in the fairs and markets (cf. Picard, 1923, p. 380).

¹⁵ AD44, 21 U 144, tribunal commercial. Arbitrated judgement of the Chaurand beneficiaries, filed 29 May 1830.

¹⁶ According to what they themselves reported, AD44, 101 J 3, correspondance Chaurand. Letters addressed to America, mail of 14 January 1785, to le Cap, Saint-Domingue.

¹⁷ AD44, 21 U 144, tribunal de commerce, Arbitrated judgement of the Chaurand beneficiaries, filed 29 May 1830.

¹⁸ *Art. I. Les négocians et marchands tant en gros qu'en détail auront un livre qui contiendra tout leur négoce, leurs lettres de change, leurs debtes actives et passives ; et les deniers employez à la dépense de leur maison.*

Art. VII. Tous négocians et marchands, tant en gros qu'en détail, mettront en liasse les lettres missives qu'ils recevront, et en registre la copie de celles qu'ils écriront.

¹⁹ On the functioning of *les comptes d'armement et de désarmement*, cf. Lemarchand (1995) and McWatters (2008).

²⁰ “*die wesentliche Eigenart der doppelten Buchhaltung, die zweifellos darin besteht, den lückenlosen Kreislauf des Kapitals in einer Unternehmung zu verfolgen, ziffernmäßig zu erfassen und buchmäßig festzulegen, [...] Erst mit der Einstellung dieser Konten kann sich der von der doppelten Buchhaltung zu erfassende Kreislauf des Kapitals ohne Unterbrechung vollziehen: aus dem Kapitalkonto über die Bestandskonten durch das Gewinn- und Verlustkonto in das Kapitalkonto zurück*” (Sombart, 1919, p. 114).

²¹ The emergence of the profit concept has also been examined in other later contexts (cf. McWatters, 1993). In the nineteenth century, the Calvin Company did not see the need for annual profit determination despite its diversified operations and international network until such time as its institutional environment motivated changes in its internal strategies and structures.

²² This word referred to articles which officers and certain members of the crew had the right to bring on board, over and above the normal cargo of the vessel, without paying freight – *le port-permis* – and to sell on their own account, thus providing them with supplementary revenue. Individuals could finance all or part of the officers' purchases and receive a share of the profits; in short, a variation of the Italian *commenda* (commission contract).

²³ The process of data collection and database entry is on-going with the intention to have a complete digitised record up to the end of 1784.

²⁴ A rich example of this process of recording, synthesis, re-recording and reporting are the *comptes d'armement* and *de désarmement* referred to earlier.

²⁵ « *un instrument artificiel conçu pour conserver, rendre manifeste l'information ou opérer sur elle, de façon à servir une fonction représentationnelle* »

²⁶ “a small piece of wood, on which with notches or incisions one records the count and the number of something; and comes from the Latin word *Talea*. Accordingly one speaks of taking bread, wine, and other things by the tally, *Taleae caesuris ac crenis amphorarum vini, panum, modiorum alteriusve rei numerum notare*. And from this meaning comes tally, for the tribute imposed on the people to be paid to the Prince, as much perhaps as tax collectors, assessor or distributors of some subsidy previously had granted on each tally holder, his tribute quantity marked or notched on these small sticks. Accordingly, one says, to impose or to tax the tally and the tally-holder – he and she who are subject to paying the tally.”

²⁷ « *de la preuve des obligations et de celle du paiement* » ; « *Les tailles corrélatives à leurs échantillons font foi entre les personnes qui sont dans l'usage de constater ainsi les fournitures qu'elles font ou reçoivent en détail.* » On the legal aspects and jurisprudence, cf. Vidal (2003) and Perruchot-Triboulet (2004).

²⁸ « *L'institution de la confiance – du crédit – suppose que chacun soit rappelé à la juste exécution de ses obligations* » (Jubé, 2011, p. 51).

²⁹ « *Il y a compte courant entre deux négociants, dès qu'il y a crédit et débit entre eux pour affaires commerciales. Ce sont là des notions élémentaires en cette matière, et pour lesquelles il suffit d'interroger le premier teneur de livres.* » Dalloz (1827, pp. 312-313)

³⁰ In law, “novation was defined as the changing of an obligation into a later one, as such the novation destroyed the previous obligation and created a new one”. « *le changement d'une obligation en une autre postérieure, ainsi la novation détruit l'ancienne obligation, et elle en constitue une autre.* » (Ferrière (de), 1769, p. 245).

³¹ Cf. Jubé (2011, pp. 45-112).

³² « *Pour revenir aux comptes courants il faut poser pour principe fondamental que l'on n'envoie un compte courant à un correspondant, qu'afin qu'il puisse le vérifier et voir si tous les articles répondent à ceux du compte qu'il tient sur ses livres. Or cette vérification ne se pouvant faire que très difficilement si tous les articles tant du débit que du crédit ne sont pas spécifiés en détail, il est nécessaire de les distinguer tous afin que celui auquel on envoie le compte, puisse trouver sans difficulté tous les articles qui répondent à ceux qu'il a couchés sur ses livres.* » (Ricard, 1724, p. 23).

³³ « *Nous venons d'arrêter Monsieur, suivant notre usage à la fin de l'année N/C Ct avec vous, vous le trouverez*

ci-joint et après examen il vous plaira nous créditer à nouveau de £ 68 833.11.9 y compris le solde des intérêts de nos avances que nous portons à 5% suivant le CCt aussi ci-joint. » Letter of 3 January 1784, addressed by les Chaurand to Griemard at Le Cap Français at Saint-Domingue (A.D. Loire-Atlantique 101 J 1)

³⁴ « *Nous avons reçus la lettre [...] par laquelle vous faites diverses observations sur l'extrait de votre compte à vous remis, en voici un nouveau où nous avons ajoutés et rectifier tout ce qui nous a paru être juste, il résulte de ce nouveau compte, que vous êtes nos débiteurs de 5 316. 7. 9 [livres, sols deniers], veuillez le faire examiner et le passer de notre conformité s'il n'y a plus d'erreurs.* » Letter of 6 February 1785, addressed by les Chaurand to Laval et Wilfesheim of Paris (A.D. Loire-Atlantique 101 J 79).