

Radu-Daniel LOGHIN
Academy of Economic Studies, Bucharest, Romania

AN ETYMOLOGICAL APPROACH TO THE MOLDAVIAN CHART OF ACCOUNTS

Case
Study

Keywords

*Chart of accounts,
Linguistics,
Accounting,
Moldova*

JEL Classification

M40, M41, Z19

Abstract

Empirical research in accounting history can help the scholar gain a better insight into the various cultural influences that shape the reasoning of accounting professionals. An empirical approach to accounting history can provide an additional dimension to the context which shapes the underlying principles and practices. This paper proposes an etymological analysis performed on the chart of accounts from the Republic of Moldova since March 2015, with the purpose of identifying the various layers of the accounting terminology and their probable corresponding periods in history. The research reveals a surprising linguistic profile which has not been influenced significantly by the Soviet Union, with major influences being drawn from the 19th and early 20th centuries.

INTRODUCTION

Research in accounting history is more than a historical analysis of differences in policy-making and standard-setting. Accounting professionals convey more than numbers to their customers, they convey a narrative. And the narratives are exposed to various cultural and social factors.

The history of accounting narratives is drawn mainly from archival research methods, which build a narrative through the exploration of major manuscripts and personalities (Ionascu, 2015). While fundamental to the formulation of hypotheses and debating points of doctrine, an empirical approach is nonetheless useful for the historical scientific enterprise.

Empirical approaches can be done by applying quantitative methods to the underlying accounting terminology, such as etymological analyses of the accounting texts. Etymological analyses are an integral part of linguistics, and while rarely covered by the scientific literature, they nevertheless bridge the gap between accounting and other social sciences.

With regards to the scientific literature which covers aspects concerning both linguistics and accounting, there is significant progress in the field. Such contributions include Sydserff & Weetman's (1999) applied linguistics experiment into the reading of accounting narratives, Sydserff & Weetman's (2002) forays into computer-based analysis of accounting narratives as well as Macintosh & Baker's (2002) depiction of accounting reports and information as texts rather than as economic commodities.

Significant efforts involving historical linguistics and accounting have also been made by Richard (2002) to uncover the origins of the very notion of „accounting”.

As such, it is apparent that the international literature has helped to considerably bridge the gap between linguistics and accounting. However, when it comes to Romania, such a scientific literature is largely underdeveloped as a complete Romanian etymological dictionary is currently unavailable. B.P. Hasdeu, the only Romanian linguist who has ever pursued an etymological dictionary has only managed to finish the third volume of the series at the letter B (Tabacu, 2007).

The approach outlined in this paper is a novel one, and it draws on the Romanian vocabulary used by accountants in the Republic of Moldova, the only major independent state which uses Romanian as an official language besides Romania proper. While there was previous interest in the Moldavian accounting culture, the research mainly focused on national regulations and economic conditions (Alexander & Ghedrovici, 2013).

The research paper draws from Ionascu's (2015) history of accounting in Romania, with

considerations for the peculiarities of the Moldavian context. Superimposing the etymological map on the chronology we obtain a quantitative expression of the historical changes which affected Moldavian bookkeeping practices and their influence today.

HISTORICAL BACKGROUND

While both Romania and The Republic of Moldova share much of their history and culture, accounting professionals in the Republic of Moldova have made their own unique contributions to the Romanian accounting culture.

When dealing with accounting history prior to 1812, which is relevant for the Republic of Moldova, it is important to consider that the Principality of Moldova had an important influence over the administrative affair in current day Transnistria and Little Russia, through historical personalities such as Danylo Apostol (the so called Dănilă Apostol in Romanian language) who contributed to the socio-economic development of the Cossacks (Plokhly, 1992)

From the period of the principality there is a multitude of accounting records, mainly inventories of estates kept by the boyar aristocracy (Dumitru Iacob, D. (ed), 2015). Such records are valuable in identifying key terms preserved by the Romanian accounting glossary into the modern era. Accounting concepts like revenue (venit, Rom.) are present.

The common features of the Romanian and Moldavian accounting cultures will be retained until 1812, when through the Treaty of Bucharest Bessarabia in its entirety is incorporated into the Russian Empire (Ismail, 1979).

For the following century, a major part of the historical province will remain under Russian administration. Russian influence on the accounting profession of Bessarabia is hard to identify in an appropriate manner, since through the XIX century an indigenous accounting profession was lacking in the Russian Empire (Owen, 2002) for large-scale operations, at least.

One possible explanation for the inadequate development of the Moldavian accounting profession under the Russian Empire could lie with the centralization of power which occurred during the formation period of the Russian Empire. Unlike the United Kingdom, where the economic power of the monarchy recedes gradually after the reign of Queen Elisabeth the First (Calabresi & Price, 2012), the Russian tsars manage to consolidate considerable economic power. Such developments encourage the emergence of the “*prikaz*” accounting system, which emphasised the state as a prime user of financial statements (Olearius & Baron, 1967).

Despite the strong Russian grip, a fraction of the province came briefly under Romanian administration after the Treaty of Paris between 1856 and 1878 (Duminica, 2011), namely the Cahul, Bolgrad and Ismail counties. These accountants from these counties shall be exposed to the most recent Romanian improvements in accounting of the day.

During this period, Romania will adopt Commercial and Civil Codes inspired almost entirely by the French legal system. The most respected foreign population at the time by Romanians were the French (Ozanne, 1878/2015). While L. Toussaint worked on a translation of the French accounting curriculum, Th. Stefanescu provides a Romanian theoretical work in accounting with a major French influence (Ionascu, 2015).

The territorial changes brought by the War of Independence in 1878, bring with them an interruption of the Romanian influence on Moldavian accounting affairs. From 1878 to 1918 all of Bessarabia will be administrated by the Russian Empire.

The reunification with Romania on the 9th of April 1918 achieves the integration for the major part of the future Republic of Moldova. Among the benefits of reunion are the emergence of CECCAR in 1921 (Fotache & Pavaloaia, 2015) which provides a formal organization to the budding Moldavian accounting profession. Bessarabia also captures the influence of Petrescu's and Trancu-Iasi's literature, which are inspired by developments in French and Italian accounting thought (Ionascu, 2015).

Meanwhile, across the Dniester River the Soviets developed a standardized accounting system with significant advances, such as the chart of accounts published in 1929 (Richard, 1995). These changes also affected the small Moldavian Socialist Republic with the capital of Balta, which the Soviets hoped to reunite with Bessarabia.

After 28th of June 1940, the Moldavian Socialist Republic and Bessarabia were merged into a single political entity inside the Soviet Union. During Operation Barbarossa Bessarabia was briefly reunited with Romania and the Moldavian Socialist Republic was governed by a Romanian administration.

Afterwards, Bessarabia (the Republic of Moldova) would be annexed by the Soviet Union until Moldova declared independence in 1991. During the Soviet period, Moldova witnesses the maturation and decline of the Soviet accounting system. The lifting of cultural barriers comes also by adopting a Latin script in place of the Soviet Cyrillic alphabet.

The accounting reform in the Republic of Moldova began with key personalities as well as foreign financial aid. With respect to the key personalities,

we might consider the decisive contribution of Paul Bran to the joint development of ASE Bucharest and ASE Moldova (Ghinculov, S. (ed.);, 2010), institutions which have made a significant contribution in the cultural exchanges between auditors and accountants on the banks of the Prut River, mainly by promoting the Romanian accounting practices among Moldavian undergrad and grad students.

Foreign assistance was also a deciding factor in the emergence of a Moldavian accounting culture. This came mainly through USAID's MARP program, and oversaw the development of 23 national accounting standards based upon the International Accounting Standards (Armitage, Neider, & Shelaru, 2003). The accounting reform is still an ongoing process.

THE LINGUISTIC APPROACH TO ACCOUNTING HISTORY

The comprehensive analysis of the accounting terminology used by professionals in the Republic of Moldova is a daunting challenge, since it involves an analysis of the entire accounting curriculum.

However, the most important source for an accounting glossary is the full chart of accounts, since the purpose of a chart of accounts is to help standardize and organize the bookkeeping process, which concentrates all major types of assets, liabilities, and equities. Thus the source used for analysis is the Moldavian "*Nomenclatorul Conturilor Contabile*", as approved through the Ministry of Finance's Order 26/2015 (File id: Plan_1534).

An overview of the document reveals its foundations upon the old Soviet chart of accounts, with expenses and revenue arranged by destination, rather than nature as in the French-inspired Romanian chart of accounts.

Another note is that the document is written in Romanian using the Latin script. Besides the Latin script, the citizens of Moldova also use the Russian language in administrative affairs, while in separatist-controlled areas only the Cyrillic script is in use.

From the document, all words were extracted, except prepositions like "pe", "de", etc. Then derived adjectives, verbs, adverbs and nouns of a word were eliminated to ensure only unique forms remained in the list. For instance the pair "*corporale/necorporale*" was reduced to one term "*corporale*". Roots were preserved where the meaning was jeopardized.

Thus, a total of 262 unique terms was compiled from the 13th page extended chart of accounts.

Then, the etymology of each word was investigated with the help of dictionaries. The main source used

was the *Dictionary of the Modern Romanian Language* (Institutul de Lingvistica din Bucuresti, 1958), whose etymologies have also been used extensively for online dictionaries such as Dexonline. For a more comprehensive Latin understanding of the word, specialized dictionaries were used such as *The Etymological Dictionary of the Romanian Language* (Candrea & Densusianu, 1907) and *The complete English-Latin dictionary; for the use of colleges and schools* (Riddle, 1838).

Etymologies were thus collected for each unique word. Where the origins of the words were conflicting, the oldest possible origin was considered to be the correct one, if it was possible for the Romanian professionals to have prior knowledge of the term before the borrowing allegedly took place.

For instance, "reducere" was considered of Latin origin, since the verb was derived into a noun, with a similar meaning to the French one. Wherever the term used is not a new concept, like the French loan-word "regim" (regime, Eng.), the origins were considered to be Latin. When the origins were unclear and no specific argument could be about the origins of the word, a joint origin is considered. When dealing with a term designating a branch of Science such as Economy or Biology, since the term is coined from Greek words such as "bios" and "logos", a distinct classification is done separately from the others, with a **st.** abbreviation.

Regarding terms with Balkan etymologies such as Neogreek "lipsa" (lack, Eng.) a local etymology "ea" was developed to group the Sprachbund influences. The Balkan Sprachbund includes Romanian, Aromanian, Greek, Serbian, and Bulgarian, as well as other Balkan languages and dialects (Tomic, 2006) The Greek Orthodox Church and intermarriages with the Fanariote dynasties might have contributed to the development of the Sprachbund features. Terms with unknown etymologies such as strain (stranger, Eng.), but with possible Latin or Greek origins (extraneus, Lat.) are also considered to be a part of the local etymology.

Old Slav terms are considered their distinct category while the obvious English loan-words the origin were identified as English. Overall, 10 simple categories were drawn, of which 9 have a direct correspondence with living or dead languages, one represents a neutral category for scientific terms coined in the modern era, and one pools together words with an unknown or Balkan Sprachbund etymology. These combine to generate 21 unique possible combinations of origins. The combinations follow the existing abbreviations in the DEX, with the exception of the ea. and st. abbreviations, which are an innovation for the purpose of the paper. The frequencies were compared with the known accounting literature within The Republic of Moldova, and used to

explain the relative influence of historical periods described in the paper. The periods proposed for the analysis were the periods of the Moldavian principality (prior to 1812), the periods of Romanian administrations and the Period of Independence after 1991.

RESULTS

The first result confirms that the Moldavian language does not exist as a separate Romance language distinct from Romanian, since all the terms used in the Chart of Accounts were covered by the dictionary. Thus there is no language barrier between Romanian accounting professionals and Moldavian accounting professionals.

The second finding is important, since it supports a Latin origin of the Romanian people and a significant Slav influence on the Romanian language. Though the Old Slavic glossary is small (barely 2% of the total), it covers important terms such as interest (dobanda, Rom.) and payment (plata, Rom.). Since Latin, Sprachbund and Old Slav terms were available before the annexation of Bessarabia by Russia, they could be considered earlier than the French translations, amounting to 22, 1% of the total.

An alternative hypothesis would also place a large portion of the Latin terminology into the XIXth century, and reflect a boom in the accounting terminology occurring after 1948. Still, the inheritance is significant and reveals that the concepts of interest, revenue and expenses were known to the early modern accountants as a basis for further developments.

Loan-words from the XIX and XX centuries represent 75.6% of the total, with nearly half falling into the category of Latin terms imported through French translations into the Romanian language. Lastly, English and French-English terms amount to 2, 2% of the total. These terms are associated heavily with promotional activities and intangible assets, such as the know-how.

A surprising implication for the research process is that the Russian influence over the language used in the Chart of Accounts is minimal, and limits itself to terms which are older than the Soviet Union itself. The other possible borrowings also have multiple possible sources.

The profile painted in Table 1, reveals a strong knowledge of accounting terms before the annexation of Bessarabia by the Russian Empire, coupled with a minimum cultural influence during the Russian period of occupation. This period also witnesses major Western European influences from the two periods of Romanian administration (1856-1878 and 1918-1945). Pure Anglo-Saxon influence is minimal, at best, with only 2% of the total, despite the efforts of the USAID.

CONCLUSIONS

The purpose of accounting professionals is to provide more than quality financial statements for decision-making. The purpose of accounting is to build trust among the different stakeholders and shareholders who offer legitimacy to the accounting profession.

By better understanding differences in language, accounting professionals can augment their narratives to provide a clearer picture to the laymen and thus promote social harmony at the microeconomic level.

The limits of the study refer to the sampling technique used which favoured only a small part of the overall accounting curriculum, which is represented by Chart of Accounts. For a clearer picture, an analysis covering other textual sources and “museums of words” is recommended. Also, specialized charts of accounts, such as those of governmental and financial institutions could reveal different results.

Further research could use similarity coefficients across countries to better underlie differences in language and possible common ground between practitioners.

REFERENCES

- [1] Alexander, D., & Ghedrovici, O. (2013). Evolution of accounting in Moldova: some reflections about the importance of historical and cultural factors. *Research in Accounting in Emerging Economies*, 121-142.
- [2] Armitage, J., Neider, M., & Shelaru, M. (2003). Accounting Reform In The Republic Of Moldova. *International Business & Economics Research Journal*, 29-36.
- [3] Calabresi, S., & Price, L. (2012). Monopolies and the Constitution: A History of Crony Capitalism. *Faculty Working Papers*, 211, 1-120.
- [4] Candrea, A., & Densusianu, O. (1907). *Dicționarul etimologic al limbii române. Elementele latine* [Etymological dictionary of the Romanian language. Latin elements]. Bucharest: Socec & Comp. Library.
- [5] Duminica, I. (2011). Duminivăța spirituală a bulgarilor din basarabia română în anii 1856–1878. *Revista De Etnologie Și Culturologie*, 92-100.
- [6] Dumitru Iacob, D. (ed). (2015). *Avere, prestigiu si cultura materiala in surse patrimoniale* [Wealth, prestige and material culture in economic sources.]. Iasi: "Alexandru Ioan Cuza" University Publishing House.
- [7] Fotache, D., & Pavaloaia, V. (2015). Enterprise Resource Planning's Revolution for the “Facelift” of Accounting Profession. *Audit Financiar*, 106-116.
- [8] Ghinculov, S. (ed.); (2010). *Paul Bran - Economist, filosof, cercetător, pedagog* [Paul Bran - Economist, philosopher, scientist, educator]. Chisinau: Scientific Library of the Academy of Economic Studies of Moldova.
- [9] Institutul de Lingvistica din Bucuresti. (1958). *Dictionarul Limbii Romane Moderne* [Modern Romanian language dictionary]. Bucharest: The Academy of Romanian Socialist Republic Publishing House.
- [10] Ionascu, I. (2015). Reflections on the formation of Romanian accounting doctrine. *Audit financiar*, 89-105.
- [11] Ismail, F. (1979). The making of the treaty of Bucharest, 1811–1812. *Middle Eastern Studies*, 163-192.
- [12] Macintosh, N., & Baker, C. (2002). A literary theory perspective on accounting: Towards heteroglossic accounting reports. *Accounting, Auditing & Accountability Journal*, 184-222.
- [13] Olearius, A., & Baron, S. (1967). *The Travels of Olearius in Seventeenth-century Russia*. Stanford University Press.
- [14] Owen, T. (2002). *The Corporation Under Russian Law, 1800-1917: A Study in Tsarist Economic Policy*. Cambridge: Cambridge University Press.
- [15] Ozanne, J. (1878/2015). *Three Years in Romania 1870-1873 (Vladimirov I. translation)*. Bucharest: Humanitas Publishing House.
- [16] Ploky, S. (1992). "The Symbol of Little Russia: The Pokrova Icon and Early Modern Ukrainian Political Ideology.". *Journal of Ukrainian Studies*, 171-188.
- [17] Richard, J. (1995). The evolution of accounting chart models in Europe from 1900 to 1945: some historical elements. *European Accounting Review*, 87-124.
- [18] Richard, J. (2002). A literary theory perspective on accounting: Towards heteroglossic accounting reports. *Accounting, Auditing & Accountability Journal*, 184-222.
- [19] Riddle, J. (1838). *A complete English-Latin dictionary; for the use of colleges and schools*. London: Longman.
- [20] Sydserff, R., & Weetman, P. (1999). A texture index for evaluating accounting narratives: An alternative to readability formulas. *Accounting, Auditing & Accountability Journal*, 459-488.
- [21] Sydserff, R., & Weetman, P. (2002). Developments in content analysis: a transitivity index and DICTION scores. *Accounting, Auditing & Accountability Journal*, 523-545.
- [22] Tabacu, J. (2007). Etymologicum Magnum Romaniae, un vis neimplinit. *Studii de Biblioteconomie și Știința Informării* [Magnum

Etymologicum Romaniae an unfulfilled dream.
Studies of Library and Information Science,].
189-197.

[23] Tomic, O. (2006). *Balkan Sprachbund
morpho-syntactic features*. Dordrecht:
Springer.

ANNEXES

Appendix A

Table No.1
Major sources of accounting terminology found in the Moldavian chart of accounts

Origins	Proposed period	Number of individual words	Percentage
latfr	Period of Romanian administrations	94	35,9%
fritgerm	Period of Romanian administrations	2	0,8%
frit	Period of Romanian administrations	4	1,5%
latfrsus	Period of Romanian administrations	1	0,4%
fr	Period of Romanian administrations	68	26,0%
frgerm	Period of Romanian administrations	10	3,8%
eng	Independence period	5	1,9%
sl	The Moldavian principality period	5	1,9%
lat	The Moldavian principality period	44	16,8%
it	Period of Romanian administrations	4	1,5%
itgerm	Period of Romanian administrations	1	0,4%
st	Period of Romanian administrations	3	1,1%
germ	Period of Romanian administrations	3	1,1%
itfr	Period of Romanian administrations	3	1,1%
ea	The Moldavian principality period	9	3,4%
freng	Period of Romanian administrations	1	0,4%
latrusgerm	Period of Romanian administrations	1	0,4%
latit	Period of Romanian administrations	1	0,4%
latfrgerm	Period of Romanian administrations	1	0,4%
frsus	Period of Romanian administrations	1	0,4%
ruspol	The Moldavian principality period	1	0,4%

Source (own research based on the analysis of the dictionaries)