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Comments On: Nohora Garcia, *‘Understanding Mattessich and Ijiri: A Study of Accounting Thought’*

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Abstract: For Nohora Garcia’s monograph, *Understanding Mattessich and Ijiri: A Study of Accounting Thought*, as well as the practice of *Accounting, Economics, and Law: A Convivium (CONVIVIUM)* to organize a book-critics’ panels at the SASE annual meetings, are welcome developments for accounting scholarship. Fortunately, interest in exploring the history of accounting remains strong in many parts of the world. Garcia’s analysis of Mattessich and Ijiri’s thought is a unique and deep intellectual contribution to accounting. I hope that it will help bring more scholarly attention to the history of accounting thought.

Keywords: Mattessich, Ijiri, accounting thought, history

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1 Introduction

For Nohora Garcia’s monograph, *Understanding Mattessich and Ijiri: A Study of Accounting Thought*, as well as the practice of *Accounting, Economics, and Law: A Convivium (CONVIVIUM)* to organize a book-critics’ panels at the SASE annual meetings, are welcome developments for accounting scholarship. For reasons that remain to be articulated, writing research monographs in accounting has almost vanished. It is refreshing to see that at least some of our colleagues are writing

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books (and I do not mean textbooks) to frame and present new ideas and perspectives, to ask important questions, and to revisit past thinking in accounting. This thought leadership represents an invigorating departure from confining ourselves to writing and publishing journal articles and textbooks (whose predominant sales pitch is that they cover the latest authoritative rules). And “cover” does not mean asking questions about why these rules were made, what the alternatives were and why they were rejected, what might have happened without these new rules, and what the consequences of the rules is likely to be. The textbooks cover accounting rules only in the sense of telling the students what the rules are, giving a few numerical examples, and adding some exercises to help them pass the examinations. In contrast, books discussed in this Critics’ Panel, including the work of Professor Garcia, bring a unique sense of intellectual adventure and innovation to our discipline. For this reason, this budding tradition at the *CONVIVIUM* to submit new monograph literature for critical scrutiny is a valuable development for the accounting community.

2 Accounting history

Fortunately, interest in exploring the history of accounting remains strong in many parts of the world. William Hallo (2004), the former head of Babylonian Studies at Yale wrote about what he believed is evidence of double entry book-keeping in the cuneiform clay tablets of 21st century BCE. It is fascinating to read the recent examination of accounting records of the construction of Persepolis (in modern day Iran; Vollmers, 2009) and the construction of the Parthenon (on Acropolis of Athens; Chan, 2017). Kautilya’s Sanskrit treatise *Arthashastra* written in the early third century BCE includes three detailed chapters on accounting and auditing (Shyam & Sunder, 2008). In Fall 2017, I had the pleasure of attending the Museum of Accounting History’s inaugural conference at Shanghai Lixin University in China. I learned not only about an incomparable collection of millennial-old accounting artifacts from around the world but also about the intensive engagement of Chinese scholars in accounting history (China Accounting Museum, 2015). Turkey is another good example where a vigorous exploration of accounting history dating from the Ottoman and even earlier empires continues (Toraman, 2008; Guvemli, 2013). Besides a large collection of Sumerian clay tablet records of business transactions in its Sterling Library, Yale’s Peabody Museum has a large *quipu* (also spelled *kipu*)

used in Inca civilization for keeping accounting records on knotted threads, although the details of how it was used remain to be deciphered.¹

As an intellectual discipline, it is important to know its history - the roots of how and why accounting functions the way it does. Otherwise, we run the risk of reinventing the wheel, while thinking we are advancing. Fortunately, the roots of accounting as a discipline run deep and the interest in its history appears to be widespread, albeit somewhat less in the United States.

3 Thought leaders in the history of accounting: Mattessich and Ijiri

Accounting history is a subset of accounting, and the history of accounting thought is a subset of accounting history. Attention given to the history of accounting thought has declined during recent decades. I congratulate Professor Garcia not only for reviving a flagging tradition, but also for selecting two of the most important contributors to twentieth century's accounting thought – Mattessich (1964) and Ijiri (1975).

For a perspective on their work, it is useful to think of three approaches to theory: what accounting is; how it works; and how to fix its problems. In medicine, for example, one could think of anatomy, cell biology, and clinical practice as concerned with parallel questions about an organism. In accounting, a large part of Mattessich's work and some early work of Ijiri's falls into the category of accounting history. On the second question – how it works – physiology is an example from medicine. In accounting, examples are decision-making and accountability relationships on which Ijiri worked during the 1970s. After that, Ijiri concentrated his efforts on how to fix or improve accounting. I might add that this most important aspect of accounting research has received insufficient attention from researchers during recent decades, although the *Journal of Accounting and Public Policy* and *Research in Accounting Regulation* have been pioneers in emphasizing this important aspect of accounting research.

Mattessich's work is an example of constructivist rationality in accounting, (though a part of Ijiri's work is also in that category). His focus is to address what accounting is, to develop a general theory using economics and mathematics as its basic framework, and to dissect it into its component parts. Surprisingly for an engineer, he devotes little effort to linkages between accounting and law, and to solving problems of practice.

¹ See Chu and Urton (2015) and <http://khipukamayuc.fas.harvard.edu/>.

I had the privilege of taking my first and only class in accounting from Ijiri as a master's student at Carnegie Mellon University. In the early years, his focus was on operations research, logic, mathematics, and foundations of accounting (the "what is" part of his work). Next he addressed the question of how accounting works and found the answer in accountability relationships. In his later years, he began to address questions about how accounting could be improved, and wrote about triple entry and momentum accounting. But, predominantly, I think Ijiri remained a constructivist, not impressed by the ecological perspective on rationality. Others might disagree, and may find the presence of an ecological perspective in his work.

4 Constructivist and ecological rationality

Returning to constructivist and ecological rationality, Descartes's constructive approach relied on conscious human reason and deduction to arrive at social institutions, and rules of action with preferred and predictable outcomes. F.A. Hayek (1988), Vernon L. Smith (2008), and Gerd Gigerenzer (1999) emphasize the ecological perspective. To them, social and economic interactions are too complex; the evolution of social systems and rules over time functions better. The idea of emergence captures ecological rationality.

Whether or not we look at accounting as an engineered artifact like an airplane, a car or a house, is an open question. There is no question that human reason and deduction shapes their design. But it is also true, that if we examine earlier designs of these objects, we are likely to see evolution quite similar to what happens in biology; over time, the design of an airplane, a car and house evolves to accommodate to their environment, and thus become ecologically rational. In this sense, constructivist and ecological rationalities do not stand as far apart as their respective defenders may believe. Both seem to play important roles in most domains of knowledge, including accounting. Having said that, perhaps it is fair to point out that there is so much more emphasis on constructivist than ecological rationality in business school as well as accounting research that the proponents of the latter might be justified in making a clamor, just to be noticed.

Dissecting the human body into its parts and understanding the location of every cell and its contents hardly prepares us to understand what life is, or to become a physician. In Figure 1, we can look at the image on the left in as much detail as we want but that will only make us better anatomists. Will that help us live more fulfilling lives? That may require us to understand the right picture in Figure 1

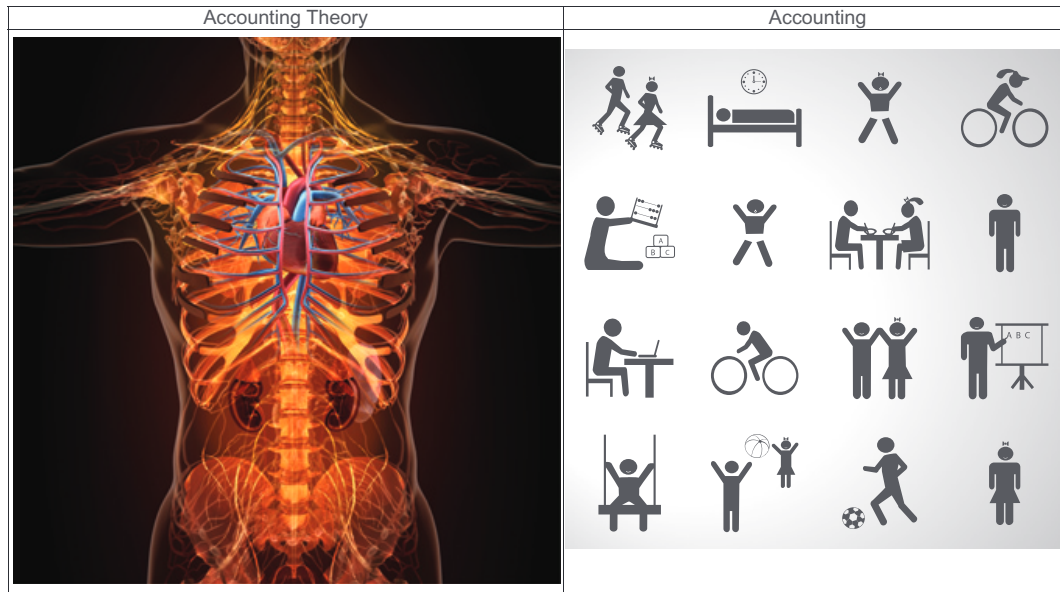


Figure 1: Human Anatomy vs. Human Life.

which depicts many different aspects of our lives, all of which may involve anatomy in one way or another, but anatomy is far from capturing the essence of life. Perhaps it would not be unfair to suggest that if we think of the left picture (anatomy) as depicting accounting theory, accounting itself is more like the right image that has many overlapping but different aspects; no theory — general or fundamental — can capture the essence of these accounting variations. Yet the dominant approach in accounting research and accounting thought represents the picture on the left side of the figure. Some day we may want to look at both images combined to expand our knowledge and theory.

Professor Garcia’s analysis of Mattessich and Ijiri’s accounting thought is a unique and deep intellectual contribution to our field. I hope it will encourage more scholarly attention to the history of accounting thought.

References

- Chan, J. L. (2017). Stone inscriptions of accounts in classical Athens: Discovery, display, and discourse. *Research in Accounting History. Journal of the International Center for Accounting History Research, China Accounting Museum, 1*(1). Lixin Accounting Publishing House.
- China Accounting Museum. (2015). *The Essence of Collections at the China Accounting Museum: Comprehensive Volume*. Shanghai, China: Lixin Accounting Publishing House.

- Chu, A., & Urton, G. (2015). Accounting in the King's Storehouse: The Inkawasi Khipu Archive. *Latin American Antiquity*, 26(4), 512–529. doi:10.7183/1045-6635.26.4.512.
- Gigerenzer, G., & Todd, P. M. the ABC Research Group. (1999). *Simple Heuristics that Make Us Smart*. New York: Oxford University Press.
- Guvemli, B., (ed). (2013). *Proceedings of the III International Conference on Luca Pacioli in Accounting History and III Balkans and Middle East Countries Conference on Accounting and Accounting History, Volumes I, II, and III*. Ankara, Turkey: Public Oversight, Accounting and Auditing Standards Authority.
- Hallo, W. W. (2004). Bookkeeping in the twenty-first Century BCE, Chapter 4 In M. Hudson, & C. Wunsch, (Eds.), *Creating Economic Order: Recordkeeping, Standardization, and the Development of Accounting in the Ancient Near East, Vol. IV*. The Institute for the Study of Long-term Economic Trends and the International Scholars Conference on Ancient Near Eastern Economies. London:Capital Decisions Ltd.
- Hayek, F A. (1988). *The Fatal Conceit*. Chicago: University of Chicago Press.
- Ijiri, Y. (1975). *Theory of Accounting Measurement*. Sarasota, FL: American Accounting Association.
- Mattessich, R. V. A. (1964). *Accounting and analytical methods: Measurement and projection of income and wealth in the micro- and macro-economy*. Homewood, IL: Richard Irwin.
- Shyam, M., & Sunder, S. (2008). Appraising Accounting and Business Concepts in Kautilya's Arthashastra. In C. Toraman (Ed.), *Proceedings of the World Congress of Accounting Historians, Vol. I* (pp. 69–81). Istanbul, Turkey: Association of Accounting and Finance Academicians. (<http://faculty.som.vale.edu/shvamsunder/Research/Accounting20and20Control/Published20Articles/159.KautilvasArthasastra/159.KautilvasArthasastraIstanbul2008-2.pdf>).
- Smith, V. L. (2008). *Rationality in Economics: Constructivist and Ecological Forms*. New York: Cambridge University Press.
- Toraman, C., (ed.). (2008). *Proceedings of the Twelfth World Congress of Accounting Historians, Volumes I, II, and III*. Istanbul, Turkey: Association of Accounting and Finance Academicians.
- Vollmers, G. L. (2009). Accounting and Control in the Persepolis Fortification Tablets. *Accounting Historians Journal*, 36(2), 93–111.