Review of

Maryvonne Spiesser (ed.), *Une arithmétique commerciale du XV^e^ siècle.* Le *Compendy de la praticque des nombres* de Barthélemy de Romans. (De Diversis artibus, 70). Turnhout: Brepols, 2004. 762 pp.

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At least since Montucla and Cossali, the historical importance of Italian late medieval and Renaissance treatises on commercial arithmetic has been recognized; since Libri it has also been known that Fibonacci and Pacioli were not the only authors of such writings. More treatises between these two were described before 1930.

Only thanks to Gino Arrighi's and Warren Van Egmond's work, however, the notion of a vernacular abbacus *tradition* gained foothold. Until c. 1980 it was supposed that this tradition was exclusively Italian (apart from its inspiration of Chuquet's *Triparty* from 1484) until the appearance of printed Catalan and Provençal works (Sanct Climent 1482, Pellos 1492) and the sixteenth-century emulation by German cossists; until quite recently it was believed to build on Fibonacci's work as its exclusive or almost exclusive inspiration.

In 1984 and 1993, respectively, Jacques Sesiano's analysis of the "Pamiers algorism" and Jean Cassinet's of the "Cesena manuscript" showed that Chuquet built on a Provençal branch of the tradition going back at least to c. 1430. Quite recently Betsabé Caunedo del Potro (2000), Stéphane Lamassé (to appear) and Maria do Ceu Silva (unpublished) have shown that the abbacus tradition also reached Castile, France proper and Portugal. As the reviewer has argued, it must antedate Fibonacci and have been alive in Provence already during his youth.

Maryvonne Spiesser's book is an important contribution to this understanding of the broad abbacus culture of the Romance world. Its core is an edition and a modern French version of a major component of the Cesena manuscript, Barthélémy de Romans' *Compendy de la praticque des nombres*, probably first written around 1467 but present in a revised redaction from 1476 due to Mathieu Préhoude. Barthélémy was a Dominican friar, Préhoude an unspecified *clericus*; both probably engaged in abbacus teaching along with other activities.

Another major component of the manuscript is an anonymous *Traicté de la praticque d'algorisme* which Cassinet ascribed to Préhoude but which Spiesser shows is either identical with a *livre* which Barthélémy refers to as his work or (more likely) quite close to it, probably from 1456/57; much of it is translated from the Pamiers algorism.

Spiesser describes both treatises and their mutual relation. Obviously, the *Compendy* is discussed in greatest detail. The *Traicté*, as already pointed out by Cassinet, is a genuine abbacus treatise meant for the training of merchants (etc.). The *Compendy*, on its part, has theoretical ambitions; its introduction tells so (it aims at clarifying the understanding of those who might possess Barthélémy's previous work); it is also clear from the pedagogical exposition and from the composition of the work, as made manifest by Spiesser.

The theoretical ambition is shared with Fibonacci's *Liber abbaci*, to which the

Compendy appears to be indebted in several places (see imminently). However, Barthélémy's idea of how to transform abbacus mathematics into theory is rather different than Fibonacci's. For instance, he concentrates on treating a few topics is depth – rarely those of direct practical use but with predilection sophisticated linear problems with many unknowns like the "purchase of a horse" – and aims at generality; Barthélémy's ability to explain intricate procedures by purely rhetorical means is quite impressing; his introduction of auxiliary concepts is interesting.

The book was written at a time when Fibonacci's role as the father of abbacus culture had hardly been challenged, and Spiesser accepts this conventional wisdom repeatedly without ever feeling the need to support it by arguments. All the more interesting is her analysis of a number of sophisticated passages in Barthélémy's treatise which are closer to passages in the *Liber abbaci* than anything found in Italian treatises (apart from the rare direct translations and from badly understood straight copying in a few manuscripts). Here, Spiesser is very cautious and does not conclude that Barthélémy must have known the *Liber abbaci*, only that he must have been familiar either with this work or with something quite close to it. Since Fibonacci did at times copy verbatim from unacknowledged sources (for instance, Gherardo da Cremona), the existence of such sources close to but not descending from the *Liber abbaci* is possible; but since no other trace of such sources are known, it seems almost certain that Barthélémy had access to the *Liber abbaci* (in full or in excerpt) or to writings descending from it.

Spiesser's edition is careful, the commentary and the extensive general discussion are clear and well argued; noteworthy are the analysis of Barthélémy's pedagogical project and the examination of his mathematical language and linguistic strategy. Among the appendixes a survey of the genre of (Italian, French, Catalan and Provençal) commercial arithmetic books until 1500 and a number of translations (with mathematical commentary) of relevant parallel texts, in particular extensive excerpts from the *Liber abbaci*. The material quality of the volume should allow it to withstand intensive use – which it deserves.

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