

The preterite loss in Southern German

How extralinguistic and intralinguistic factors conspire

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Abstract: Southern German varieties (SouthG) lost the preterite forms of verbs between 1450 and 1550. In spite of an abundance of attempts to explain this loss, no factor has so far been identified that explains both timeline and areal extension of preterite loss (Fischer 2018). I propose that the spread and professionalisation of merchants' accounting in the 15th century was the triggering factor that led to increased use of perfects (stage 1), perfect extension (stage 2), reanalysis (stage 3) and preterite loss due to insufficient L1 input in acquisition (stage 4). The approach builds on evidence from merchant and craftsmen's writings, a source unexplored so far. These show a correlation between topic and tenses, between profession and tense choice, and education and tense choice. The proposed analysis, finally, is consistent with the European area of preterite loss.

1. Preterite vs. Perfect: The record

The present perfect is attested since Old High German (OHG). Sources around 800 offer evidence for a newly emerging form (Oubouzar 1997), most likely following the pattern of Latin *habere* perfect (Drinka 2017). The form is consolidated by 1000 where we see the typical division of labour between perfect and preterite, in line with contemporary patterns in European languages (de Swart 2007).

In the west and south of Germany, including the Alpine area, dialects underwent further perfect expansion to the total loss of preterite forms (Reis 1894, Nagl 1886, Jörg 1976, Rowley 1983, Thieroff 2000, Fischer 2017, 2018). Speakers exclusively use the analytic perfect to render past events, extending the paradigm by new forms like the double perfect (Brandner et al. 2012). The present paper focusses on Southern dialects (Swabian, Alemanic, Bavarian) where dialect speakers today are effectively bilingual between Modern Standard German (ModHG) and dialect. While they know the ModHG preterite forms, dialect speakers are often unsure about when to use them appropriately (Rowley 1983). They report that pronouncing preterites in dialect phonology feels like “mock dialect”. Finally, some strong verbs exhibit different Ablaut in ModHG and dialect participles (e.g., ‘walk’, ModHG *laufen* — *gelaufen*, Swabian *laufa* — *gloffa*). As Ablaut in participle and preterite are connected, we would expect the Swabian preterite form *loff* (patterning with *saufen* — *soff* — *gesoffen* ‘swig’) instead of ModHG *lief*. Yet such forms are unattested and dialect speakers judge forms like *loff* as ungrammatical (in any variety). This corroborates the change in the tense paradigm.

The time scale of SouthG preterite loss was first investigated by Lindgren (1957). In his impressive corpus study of sources between 1200 and 1600, Lindgren diagnoses a phase of strong variation between 1490 – 1500 and maintains that the loss was completed by 1550 at the latest. While I found sporadic evidence in favour of an earlier loss (see 4.2) we take Lindgren's timeline as our starting point.

The geographic distribution of preterite loss in Europe is delineated in Thieroff (2000). He lists French perfect-only varieties (Paris/Île-de-France) adjacent to German varieties in the Cologne area and the South of Germany followed by the northern Italian varieties (Venice, Florence, Genua) expanding to mid Italy. Drinka (2017) argues that the loss commenced in the Île-de-France and spread by cultural contact west and south, a view which will be critically reviewed in Section 4.4.

The present paper proposes a novel causing factor for the preterite loss: the development and professionalization of book-keeping between 1300 and 1500. Section 3.1 shows that the hypothesis is consistent with the synchronic semantic analysis of preterite/perfect, which predicts that book-keeping as a type of text should trigger the use of perfect (in terms of ModHG today as well as the grammar of German varieties 1400 – 1500). This diagnosis is turned into a four-stage model of the change in Section 3.2. Sections 4 and 5 provide diachronic evidence for the model, looking at the tense use in merchants' diaries and accounting (Sections 4.1 and 5), discussing the distribution of perfect vs. preterite according to topic (Section 4.2), investigating the correlation between perfect spread and author's vocational background (Section 4.3) and discussing areal distribution (Sections 4 and 5). Section 2 will start with a brief overview over earlier accounts of preterite loss in German. Section 6 concludes.

2. Earlier accounts

Why did some speaker communities simply “forget” the preterite? Research on the preterite loss in SouthG started in the 19th century and is ongoing. Causes were proposed at all linguistic levels: phonological change (Reis 1891), ambiguity avoidance in verbal paradigms (Sapp 2009), optimization of information structuring in the German clause (Abraham & Conradi 2001), or a trade-off between subjunctive and indicative paradigm (Dal 1960), to name but a few.

In an early corpus study on German, Lindgen (1957) showed that the ratio of perfect/preterite in oral language (appx. 50/50) dramatically differs from the ratio in written language (appx. 10/90).¹ He reports that the frequency difference is stable through time and persists in ModHG. The view of perfect as a “tense of orality” inspired further explanations alluding to regional mentality. Trier (1965) insinuates that preterite loss was driven by Southern Germans' affinity to a non-literate life and, therefore, to oral registers in general (a position also favoured by Lindgren).² German dialects in general, and Southern dialects in particular carry negative sociolinguistic stereotypes, such as backwardness, low intelligence and low competence. Such theories, which attribute preterite loss to a group's “inclination to be tied to the present” (Wunderlich 1901) will confirm negative stereotypes in unfortunate ways, and discourage speakers from using their dialect confidently (Obschonka et. al 2019). Luckily, there are good objective reasons against this account: If non-literate life and oral register were a driving factor, we would expect early preterite loss in the South of France and Italy, instead of

¹ Lindgren's reported numbers differ slightly as he includes plusquamperfect forms in his counts. The general trend remains the same.

² In 1901, philologist Wunderlich openly attests Southern dialect speakers „carefree talk“ and a „inclination to be tied to, and relate to the experienced present“, see Fischer (2018: 349).

the intellectual and cultural centers at Paris and Florence/Venice. — We can therefore dismiss explanations based on lacking intellectual refinement.

Fischer (2018) provides a comprehensive survey over theories of preterite loss. She meticulously demonstrates that none of the explanations remain without severe challenges. Specifically, most accounts fail to explain why the change is restricted to the South (and West) of Germany but leaves the center and North, including ModHG, unaffected. Fischer's final diagnosis remains somewhat pale, favouring *perfect expansion* over *preterite avoidance* as driving force, yet without giving any reasons for the newly expanded use.

Drinka's French-First hypothesis (Drinka 2017) could in principle explain the preterite loss in SouthG as a process caused from outside. Still, two questions would remain open. For one, while it may be statistically less adventurous to claim a change by chance at one place (the Île-de-France) than at several, it would be even better to have some first cause, language internal or external, to explain the changing balance between perfect and preterite. Secondly, it is surprising that a single grammatical change – the loss of preterite – should successfully spread over far distances. Language contact facilitates loan of content words (words travel with things) or phonological change. Both are attested in the contact areas between Bavaria and Italy, and between France and West Germany. However we see no further shared *grammatical* features in French, German and Italian in the critical region. It is highly surprising that speakers should specifically imitate each others' predilection for the perfect, and Drinka's account has nothing to say about this.

3. Theory

The present section introduces the theoretical background of the analysis. In order to elaborate the hypothesis that book-keeping led to preterite loss, we need to cover two aspects: the semantics of the original perfect/preterite system, and the diachronic developments. Section 3.1 recapitulates Reichenbach's (1947) account for the preterite/perfect opposition and argues that the theory also applies to 14th century Early ModHG. We thus have a basis to diagnose regular versus irregular perfect use in historical sources. Section 3.2 outlines a model of the loss in four stages, resting on earlier theories of grammaticalization and semantic change. Section 3.3 elaborates these stages and discusses possible objections.

The agenda in Section 3 defines the range of data that would lend empirical support to my hypothesis, and to exclude alternative developments. Evidence in support for the model will then be surveyed in Sections 4 and 5.

3.1 Core difference between perfect and preterite

The opposition between an analytic perfect and a synthetic preterite form can be found in Romance and Germanic languages throughout Europe. Different varieties divide perfect use and preterite use slightly differently, and as a consequence speakers of one language often find it hard to learn the correct use of (present) perfect as opposed to preterite (past tense) in another – even closely related – language.

In spite of microvariation, most authors agree that the opposition essentially rests on the distinction between the preterite to report about a past time frame, as contrasted with the perfect as a tense form to report about past events in their relation to the current

speech time. This basic distinction underlies current analyses for Germanic languages (Rothstein 2006, Musan 2001, Rathert 2004, Alexiadou, Rathert & von Stechow 2003) as well as Romance languages (Kamp & Rohrer 1983, de Swart 2007, Becker et al. 2018). Microvariation is accounted for by different notions of what counts as *now* (the *Extended-now* analyses), different notions of what counts as being related to speech time (Yao 2016, Schwenter 1994, McCawley 1981, on the *Hot-News* use of the English perfect) and other parameters. The development in SouthG is an outlier in this system, as the perfect transgressed the flexible boundaries of the perfect-preterite divide and adopted the meaning of a past tense. This means that register-specific uses, as described in (Yao 2016), are insufficient to understand the categorical change to a new tense system (Brandner, Salzmann & Schaden 2012, Larsson & Brandner 2014).

Reichenbach (1947) assumes that the temporal content of an utterance is encoded by E (event time), S (speech time) and R (reference time). Reporting an event E in the past, the speaker can have in mind a time R before now ($R < S$) and report what happened *then* (E happens in R). This is coded by the preterite. Alternatively, the speaker can report a past event E while keeping a focus on speech time ($R = S$). This is coded by the (present) perfect. In summary:

- (1) a. *perfect*: $E < R$ and $R = S$
 The speaker is concerned with the speech time S.
 Past events E are narrated as being of consequence to the present S.
- b. *preterite*: E happens in R and $R < S$
 The speaker is concerned with a time R in the past.
 The report answers the question *What happened at time R?*

In the remainder of the paper I adopt the terminology of the German tense system with plusquamperfect (English *past perfect*), preterite (English *past tense*), perfect (English *present perfect*) and present. While Reichenbach's analysis aimed to account for English (Reichenbach 1947, Hinrichs 1986, Kamp & Reyle 1991, Klein 1994), the analysis has been successfully extended to ModHG (Musan 2001, Rathert 2004, Rothstein 2006), the opposition of French *imparfait* and *passé composé* (Kamp & Rohrer 1983) and European languages in general (Lindstedt 2000, de Swart 2007). The account is moreover adequate to capture the perfect/preterite distinction in Middle High German, as argued in (Trier 1965, Zeman 2010, Brandner, Salzmann & Schaden 2012, Fischer 2018). We are hence justified in adopting (1) as a basic analysis for the preterite and perfect around 1400 in Germany.

3.2 A four-stage model of preterite loss

At the outset, we see a German-speaking community with the original tense system as described in 3.1. All speakers applied the same criteria when deciding whether to use the perfect tense or the preterite in a report on past events. At **stage 1 (increased frequency)** a specific subpopulation of the community adopted a new practice: mercantile book-keeping and merchants' diaries. This specific kind of practice required them to use the perfect with increasing frequency. The choice of perfect was not primarily a matter of register (in the sense of imitating speech practices of others in a given situation). The perfect form was singled by Early ModHG grammar as the optimal way to express the contents that writers wanted to convey. Sections 4.1 and 5 offer empirical support for this diagnosis.

In book-keeping and merchant diary, the writer protocols past events that are of consequence for the speech time *now* – in particular they have consequences for the merchant's present financial situation. At **stage 2 (transfer)**, speakers of the same sub-population extend this frame of thinking about past events “as consequential for present property”. They started to frame past experiences as gains in experience and knowledge, past deaths of relatives as persisting loss in the writer's environment, or past donation as adding to one's spiritual assets. Such uses of the perfect are licensed by the original grammar (3.1), assuming a semantic extension of ‘being of present consequence’ from financial or legal consequences to other domains. Such extensions are well-known for other Germanic varieties (see, e.g., the *hot news* perfect in English).

While extended uses of perfect are motivated for the speaker, the listener doesn't necessarily share the speaker's frame of mind. At **stage 3 (reanalysis)**, listeners witnessed extended perfect use and saw two options to interpret these. Sticking to traditional grammar, they would have to guess how an event E is relevant for S. This pragmatic enrichment creates pragmatic overload (Eckardt 2009). Alternatively, the listener could assume that the speaker used the perfect with a novel meaning. In this novel sense, the perfect form is used in the preterite sense (E in R; and R<S). The listener (falsely) assumes that the speaker uses a novel tense system, but the error is not likely to be detected as the essential timeline remains the same (E < S). Reanalysis is entrenched when speakers start to produce utterances in the novel tense system.

At **stage 4 (acquisition)** more and more children, growing up in households of low-frequency preterite use, never acquired the preterite paradigm of native verbs. While we can but speculate as to what happened in the nurseries of Southern Germany around 1500, the evidence shows that preterite forms of verbs were gradually lost from the mental lexicon, starting with content verbs to the eventual loss of even high-frequent modal and auxiliary preterites.³

3.3 *A closer look at the four-stage model*

This section elaborates the proposed stages and discusses possible objections.

Stage 1 (increased frequency). The frequency factor is crucial in many, if not all analyses of language change (Bybee et al. 1994, Blythe & Croft 2012). Lindgren (1957) showed that the perfect is used with higher frequency in oral than in written language. This inspired simpler theories stating that the preterite was lost because the oral style was extended to written language. The imbalance however is detectable in sources from all German-speaking areas and at all times: Lindgren found almost constant rates of perfects in oral language up to ModHG in the 19th century. If this preference was the causing factor for the preterite loss, the loss should have taken place in all parts of Germany, not only in the South. Orality-based theories are therefore insufficient to account for the areal distribution of the preterite loss, unless they tacitly presuppose deficiencies in education in the South. Section 5 below argues that if anything, the opposite was the case. Schooling in the South was better developed than in the North, including study abroad and specialized curricula in mathematics and accounting for

³ The preterite paradigm *war-* of *sein* ‘be’ is the only stable remain, with the possibility of being a late re-introduction from the standard. I thank one of the reviewers for pointing this out.

merchants/craftsmen.⁴ If education is involved at all, I maintain that SouthG lost the preterite because speakers were too educated.

Stage 2 (transfer). At first sight, allusions to putative frames of mind may sound dangerously like a fits-all explanation in diachronic semantics. However, several sources allow us to connect the author's book-keeping frame of mind to specific topics. Section 4.2. inspects autobiography and travel reports as particularly fruitful source. The writings include reports on physical travelling as well as reports on sedentary times when the author engaged in trade. When settled at a place, dinner invitations could be viewed as social events or as gain in naturals (a meal paid for). Both preterite or perfect were viable options. Passages about travel in terms of actual movement (e.g., riding from A to B) are plausibly written when the author has reached a destination and remembers past episodes.⁵ We find that such reports are rendered in the preterite. Some authors show systematic and revealing alignments of subjects and tenses that illustrate the stage of transfer.

Stage 3 (reanalysis). Bridging contexts, i.e. examples that can plausibly be analysed in terms of older and newer grammatical stage, play a crucial role in grammaticalization research (Diewald 2002, 2006, Heine 2002, Eckardt 2006). Their ambiguity is normally diagnosed from the perspective of the modern researcher, whereas the potential ambiguities for contemporary speakers remain a field for speculation. The present data set is different in that we witness different language uses of contemporary speakers, sometimes even close colleagues.⁶ We are justified in asking what happened when speaker A utters a transfer perfect to hearer B. A's utterance is potentially ambiguous for B (A might use *perfect_{new}* as a new form to convey $E \subset R, R < S$) though it is not for A (who intended to use *perfect_{old}*). Both speakers use the old system but B is mistaken about A's intentions.

If B construes *perfect_{new}* as part of A's speech style and aims to imitate it, B can produce further utterances that are no longer covered by *perfect_{old}*, not even under the most liberal notion of "being of consequence for now". This leads to further increase in ambiguous perfect tokens in the speech community, potentially initiating a cascade of reanalyses and spread of the "new style".

Stage 4 (acquisition). Stage 3 had the potential to turn into a stable quasi-bilingual grammar with ambiguous perfect and a preterite – possibly register triggered. The data record, however, shows that the preterite was not retained. This might suggest that new generations of language learners lacked sufficient evidence to acquire the preterite. For a general mechanism of construction loss, see Yang (2016) who argues that the number of exceptions to a grammatical rule in the input may not exceed a certain threshold, or else children fail to acquire the rule (*tolerance principle*, Yang 2016; Runge & Yang 2022). If we assume that SouthG exhibited the dominant rule "use analytic forms *haben/sein* + participle to talk about the past", then the preterite could only be retained as an exception. This would have come down to a putative minor rule like "preterites are preferred to perfect under circumstances χ " that children would have had to learn. In

⁴ Historians in economy propose that the lack in education contributed substantially to the decline of the Hanse competing with South German trade companies (Stromer 1973).

⁵ Theoretically, an author could also report travel episodes with relevance for his present situation. This would license the use of present perfect. Our data did not comprise such uses.

⁶ See e.g. the co-authors of the *Dacher-Chronik* in Konstanz in Section 4.3.

this scenario, tokens of extended perfect in the input would have constituted exceptions to the minor preterite rule. Yang's account predicts that when tokens in evidence for the preterite rule went below his threshold, input was insufficient to acquire the rule. In retrospect, we can just diagnose that children failed to learn any trigger, be it semantic, pragmatic or register, to use preterite forms. Later preterite input at school or church was insufficient to stabilize the dialect lexicon, or for children to acquire the ModHG system (3.1). — While general theories of language acquisition under compromised input may help to shed more light on stage 4, I have to leave it at these general considerations for the time being.

We are now at the point to inspect the relevant data. These include an analysis of tenses in book-keeping sources (4.1 and 5), evidence for the expansion of the book-keeping frame of mind to other topics (4.2), and evidence that this new expansion occurred mostly in the writings of craftsmen / merchants, as opposed to scholars / clerus. The proposed causal chain is moreover consistent with areal data in Central Europe (4.4) and the German North-South divide (5).

4. Empirical support

This section presents evidence in support of the hypothesis that merchant book-keeping was an important boosting factor for the perfect. I argue that it caused higher numbers of perfect use and led to extended use of perfect. 4.1 describes merchants' book-keeping as a text type that invites the perfect. 4.2 reports on the correlation between topics and tense choice in the writings of Albrecht Dürer (painter, Augsburg) and Lucas Rem (merchant, Augsburg), two southern craftsmen/merchants around 1500. 4.3 surveys evidence for the correlation between educational background and preterite loss. 4.4 argues that areal data lend further support to the hypothesis that writing practice in trade was a driving factor in the preterite loss not only in Southern Germany but in central Europe (Thieroff 2000, Drinka 2003, 2004, 2017).

4.1 Book-keeping: The new blueprint

The organization of international trade underwent dramatic changes between 1200 and 1400 (Bec 1957, Le Goff 1993). The travelling merchant was replaced by sedentary merchants who supervised a company and organized exchange of goods between branches throughout Europe. Representatives travelled and transacted on behalf of the trading company, and transfer of goods and money had to be kept track of. New systems of loaning and credit developed and had to be managed (Penndorf 1933, Gleeson-White 2012). Around 1300, advanced book-keeping techniques developed in Northern Italy (Venice, Florence, Genoa, Milan). While craftsmen and traders had always taken private notes to document their transactions, keeping systematic diaries became a key technology in the 15th century (Denzel 2002).

Southern Germany hosted flourishing trade companies at Nuremberg, Augsburg, Ulm, Ravensburg/Konstanz and Basel since the 14th century. Merchants were in close contact with trade centers in the Mediterranean, and writing and book-keeping was a key skill in maintaining connections and keeping track of business affairs. Extended correspondence is retained for instance in the Große Rekordanzten der *Ravensburger Handelsgesellschaft*. In 1478, the senior merchant urges young apprentice Leibfrid to “always write, write diligently” in a letter from Ravensburg to Barcelona (Schulte 1923,

Vol.3:60). The advice to keep daily notes is typical in correspondence from seniors to juniors.

While not every trader or craftsman mastered double-entry accounting, merchant notebooks are first attested in the 13th century with increasing numbers in the 15th and 16th century. They are typically organized as lists with a column for the good, and one for the prices. In the introduction we find partners, time and circumstances; such reports can also be integrated in the description of goods – in particular when a section of the diary is devoted to transactions with one fixed partner. Latin *item* was used to mark the beginning of new transactions. Below transactions, an empty space was left for notes on incoming payments (Penndorf 1913, Tophinke 1999). While such diaries are intensely studied in historical economics (Spuffort 1991), their value for linguistic diachronic research has so far been overlooked.

In accounting, events and transactions in the past are reported in their relevance for the state of wealth (or poverty) of the tradesman now. The Reichenbach analysis (3.1) thus predicts that the present perfect will be the most appropriate form. And indeed, many merchants and craftsmen chose the perfect for their entries. This is illustrated in the following entry in one of the oldest Southern sources, the Ruland accounting book (14th c., Penndorf 1913:32). The perfect is marked in bold.

- (2) *Item das ich Ott Ruland ain kauf **hab** **getroffen** mit*
item that I Ott Ruland a sale have made with
Jan Hagen von Ach, der sol mir schicken 100 tuch (...)
Jan Hagen von Ach who shall me send 100 cloth
*daran **hab** ich im **geben** 1500 reinisch gulden, das ander*
of.which have I him given 1500 rhenian Gulden the other
soll ich im czaln, wenn ich das gwand nimm...
shall I him pay when I the cloth take

‘Item that I, Ott Ruland, have made a deal with Jan Hagen von Ach, who shall send me 100 pieces of drapery (follows quality, date of delivery and price, rendered in present tense). I paid 1500 Gulden of the price, the rest shall I pay when I collect the drapery.’

(Account book Ruland, quoted after Penndorf 1913:32)

Ruland describes two past events as relevant for the present: arranging the deal with Hagen and partial payment. Still in the future are the delivery and settling the bill. When these events would happen, Ruland could complete the note with “Hagen has delivered” or “I have paid”. The passage’s perfect tense would still be justified at times of later entry, as the initial event is of consequence for all subsequent transactions until the trade is settled (and the entry gets crossed out). The perfect thus has a dynamic quality in these sources, implicitly saying *this will be relevant at whatever times when I come back to the transaction*. We can conclude that the traditional perfect-preterite division justified the use of perfect in accounting. – Section 5 below surveys extant German account books in general, and compares accounting in the North and South.

4.2 Correlation between topic and tense in Merchants’ writings

Around 1400, the first autobiographic writings by private persons emerge (Jancke 2002). Of particular interest for our case are authors with a mercantile background in

the South of Germany and this section investigates two sources around 1500, written by *Albrecht Dürer* (Nuremberg) and *Lucas Rem* (Ulm). Both were successful tradesmen/craftsmen, and both left writings that include notes on gains, losses and sales as well as narratives about travels, family history and other events of interest. We find interesting trends in the distribution of perfect/preterite, with perfect dominating whenever the topic comes close to book-keeping. Both authors in question are in command of the preterite and use it in narrative passages. The choice of tense is thus driven by the text type.

A major part of Dürer's autobiographic notes (ed. Ullmann 1978, 1- 67) is the *Diary of a journey to the Netherlands* (pp. 21 – 65), written around 1520/21. A first informal pass shows travel narratives in the preterite, confirming that Dürer was in command of the tense system in 3.1. For instance, a trip to Seeland includes the following passage (p. 43):

- (3) *Aber zu Armuyd, do ich anfuhr_{pret}, do geschah_{pret} mir ein großer*
 But at Armuyd when I started there happened me a big
Unrat. Do wir am Lande stießen_{pret} und unser Seil anwurfen_{pret},
 mishap. When we to land hit and our line threw
da drüng_{pret} ein großer Schiff neben uns so kräftig,
 there pressed a big ship near us so forcefully
und was_{pret} eben in Aussteigen, also daß niemand dann ich,
 and was just at leaving such that noone but myself
Görg Köczler, zwei alte Weiber und der Schiffmann
 Georg Köczler two old women and the skipper
mit einen kleinen Buben in Schiff blieben_{pret}.
 with a small boy in ship stayed.
*'But at Armuyd, when I landed, a big misadventure happened to me. When we hit the land and threw our rope, a big ship pushed in so forcefully – and we were just unboarding – that nobody but me, Jörg Köczler, two old women, and the skipper with a small boy stayed on board. ...'*⁷

As the annotation shows, all verb forms are rendered in the preterite. This matches Reichenbach's account: Dürer was thinking about a past time R and reported events that happened in R. When Dürer settled at Antwerp and started contacting other artists and merchants, he starts to report on sales and acquisitions like the following (p.27).

- (4) *Item hab_{perf} abermal mit den Portugales gessen. ...*
 item have again with the Portugese eaten
Item Sebald Fischer hat_{perf} mir zu Andorff abkauft 16 kleiner Passion
 item Sebald Fischer has me at Andorff bought 16 small passions
pro 4 Gulden.
 per 4 Gulden
Item zum andernmal hab_{perf} ich den Felix, Lautenschläger, konterfeit.

⁷ In this exciting incident the ship near capsized, and the three men - of whom two had never sailed before - had to raise sails to stabilize her.

item to another.time have I the Felix Lautenschläger portrayed

So oft hab_{perf} ich mit dem Tomasin gessen: jooooooooj.
 so often have I with the Tomasin eaten: jooooooooj

‘Item ate again with the Portugales ... Item Sebald Fischer at Andorf bought 16 small passions, 4 Gulden each, from me. ... Item I portraid Felix, Lautenschläger, the second time. ... So many times have I eaten with Tomasin: jooooooooj.’

All verb forms are in the perfect. Dürer had a broad notion of earnings, including sales for money but also invitations to meals. Generous hosts had their own entry where he added a stroke per meal. Dürer’s use of perfect and *item* reveals that he framed these events as adding towards his present finances, an ever-worrisome topic in his writings.

Dürer’s habit of using the preterite in travel reports is violated in one trip, the visit of Mecheln and Bruxelles (pp. 31/32). A closer look reveals that these perfects are not due to book-keeping. In these sections we find a high number of experiential perfects where Dürer reports impressive pieces of art and curiosities, as in the following example.

(5) *Ich hab gesehen_{perf} zu Prüssel im Rathaus in der gülden Kammer*
 I have seen at Brussels in-the town hall in the golden chamber
die 4 gemalten Materien (...). Auch hab ich gesehen_{perf} die Ding,
 the 4 painted martyrs also have I seen the things
die man dem König aus dem neuen güldnen Land hat gebracht_{perf} (...).
 that one the king from the new golden land has brought
Diese Ding sind_{perf} alle köstlich gewesen, daß man
 these things are all excellent been that one
sie beschätzt_{present} um hunderttausend Gulden wert.
 them estimates at hundred-thousand Gulden worth

‘At the town hall in Brussels, I saw the four painted Martyrs in the golden chamber. I also saw th things that one brought to the king from the new golden country; (follows a list of objects). These things all were excellent, such that one estimates their value at 100.000 *Gulden*.’

We may assume that the artist Dürer perceived these experiences as another kind of intellectual gain. This interpretation justifies the surprisingly high number of perfects in spite of the genre ‘travel report’. Even the stative quality *excellent* is reported in the present perfect, which would be licensed if the conclusion “one estimates a high value” is framed as a lasting result of their excellent quality.

In order to quantify the correlations, I took the sections of the diary and determined the (main) topic of each one. I then counted the uses of perfects and preterites (to the exclusion of a lamentation of Luther’s death, written in the present tense), resulting in the following numbers.

Table 1. Ratio of perfect and preterite in sections of travel diary

section (page numbers)	content	perfect	preterite
1 <i>Journey to Antwerp (21 – 25)</i>	travel	34 (13,7%)	214 (86,3%)
2 <i>In Antwerp (25 – 31)</i>	settled	74 (56%)	57 (44%)

3	<i>Visit to Mecheln and Brussels (31 – 33)</i>	see below	73 (89%)	9 (11%)
4	<i>In Antwerp again (33 – 37)</i>	settled	119 (98%)	3 (2%)
5	<i>Journey to Aachen ... (37 – 41)</i>	travel	114 (68%)	54 (32%)
6	<i>Third stay in Antwerp (41 – 42)</i>	settled	38 (93%)	3 (7%)
7	<i>The trip to Seeland (42 – 44)</i>	travel	28 (37%)	48 (63%)
8	<i>Fourth stay in Anwerp (44 – 50)</i>	settled	215 (96%)	10 (4%)
9	<i>Visit to Brugge and Gent (51/52)</i>	travel	12 (16%)	62 (84%)
10	<i>Fifth stay in Antwerp (52 – 59) excluding lamentation of Luther's death (54 – 57)</i>	settled	136 (92%)	12 (8%)
11	<i>To Mecheln again (59/60)</i>	travel	17 (68%)	8 (32%)
12	<i>Last stay at Antwerp (60 – 64)</i>	settled	154 (96%)	7 (4%)
13	<i>Journey back via Brussels and Cologne (64 / 65)</i>	mixed/travel	38 (48%)	42 (52%)

Three longer paragraphs motivated further subdivisions. The travel sections 5 and 7 include notes on gains and expenses on the way whereas the sedentary time in Antwerp 2 includes two extended narratives on a banquet in honor of Dürer and the Antwerp procession on Ascension day. With these further subdivisions we get the following distribution of tense forms in the categories *travel*, *gains/expenses* and the outliers journeys 3, 11 in *Trip to Mecheln*, which show a high number of perfects beyond book-keeping in the economic sense. The visit at Mecheln impressed Dürer with pieces of art and other costly curiosities, and these experiences are consistently reported in what we may interpret as experiential perfect.

Table 2. Overview

text type	perfect	preterite	total (100%)
<i>travel / events</i>	138 (23%)	471 (77%)	609
<i>gains and expenses</i>	841 (95%)	49 (5%)	890
<i>Trip to Mecheln</i>	73 (89%)	9 (11%)	82

Dürer's family chronicle looks very differently. The standard tense in official chronicles is the preterite (see 4.3) while the authors list – rather than narrate – deaths, births and marriages. Dürer's chronicle uses perfect and preterite in free variation. The reports on deaths (p. 16) alternate between the preterite and perfect in subsequent sentences when Dürer writes about his mother '*ist_{perf} sie christlich verschieden*' ('she died in Christ', perfect), about his mother in law '*verschied_{pret} sie in der Nacht*' ('died she at night', preterite) and about his father in law '*an Unser Lieben Frauen Tag (...)
ist verschieden_{perf} Hanns Frey*' ('on Our Dear Lady's day died Hanns Frey', perfect). It seems implausible to assume any pragmatic reasoning behind Dürer's choices.

The second source by *Lukas Rem*, a merchant at Ulm, consists in a body of writings from 1494-1541, organized in sections by topic.⁸ A major part consists of the narrative

⁸ See Appendix 1 for a the list of sections in Rem.

of Rem's autobiography and family chonicle, where Rem almost exclusively uses the preterite. Yet, we also find parts closer to accounting, such as purchases of land, trade during his years of travel and spendings and earnings on the occasion of marriages. The latter exhibit a list structure and use *item* which renders them close in form to book-keeping, and these passages are written almost exclusively in the perfect. Rem proves better educated than his contemporary Dürer when it comes to family chronicle. The preterite predominates the chonicle parts, in spite of occasional variation. The longest section of the diary is devoted to Rem's stressful travels in Southern Europe (25 of overall 76 pages) and is consistently written as a narrative in the preterite.⁹

The following passages illustrate preterite use in autobiography (6), and perfect in book-keeping (7).

- (6) *Am palmtag 1492 gong ich dz erstmal zuom hailigen Sacrament;*
on palm sunday 1492 went I the first.time to.the holy sacrament
ain Jar darnach schickt mich mein vatter selig gen Leiphain (...).
one year after sent me my father blessed to Leiphain
(Lucas Rem, p. 5)

The preterite form *gong* of *gehen* ('go') is a ablaut variant of the strong form *ging*, the form *schickt* is a reduced form of preterite *schickte* (*schicken* 'send').¹⁰

- (7) *Mein Muotter hat mir im ottobrio 1502 Jar fir aigen und frey*
my mother has me in october 1502 year for own and free
übergeben ... fl. 2000
given ... fl. 2000.
(Lucas Rem, p. 30)

The verb *übergeben* (hand over) is in the perfect. Situated at the beginning of Rem's report on his lifetime's incomes and spendings, example (7) frames the gift of his mother as the first income counting towards his present property.

Entries are often organized in two columns where the left (broader) column reports on the circumstances of a transaction while the expenses or gains are noted on the right side. In transaction reports, tenses can alternate between preterite and perfect without clear pattern. Rem's choice of perfect in book-keeping passages extends to instances where uniformity of tenses (he wanted to keep the perfect) seems to overrule semantic criteria, as in the following entry¹¹:

- (8) *14. settembr. 1518 Berbelin O, die meyn muoter erzogen hat: 1 1/3 fl.*
14. september 1518 Berbelin O who my mother educated has: 1 1/3 fl.
'14. September 1518: (to) Berbelin O, whom my mother educated: 1 1/3 fl.'

A standard distribution of perfect/preterite would predict that the background information about Berbelin "she was educated by Rem's mother" is of no relevance at the time of accounting (it may have been at the time of deciding on the sum endowed).

⁹ The evaluation of tenses in *Rem* was conducted by Nina Rudy, which I gratefully acknowledge.

¹⁰ Formally *schickt* could also be present tense, but the use of historical present is implausible here as the text doesn't start a witness report of events.

¹¹ from the section *Was Ich auff mer hochzeytten gegappt hab* 'what I at more marriages given have' (edition Rem, p. 52) Online access (02.12.2022) <https://archive.org/details/tagebuchdesluca00remgoog>. The passage is on p.80 of the pdf version.

Traditional grammar would thus dictate the use of preterite. Possibly Rem's perfect in (8) was primed by perfect in the preceding text. Yet, the evidence in the source is too sparse to test this priming hypothesis.

In summary, Rem's writings confirm the trends in Dürer. Narrative passages trigger reliable use of preterite, while clear cases of book-keeping show perfect. Rem also maintained the preterite in the family chronicle. The use of tenses is most variable where narration of family history and transactions interleave, for instance in the reports on gains in land and loans (pp. 56-63) that were often triggered by marriages, death or vocational decisions of siblings. One might say that the practices of trade forced these authors to operate in text types where the semantic boundaries between perfect and preterite got blurred.

4.3 Profession, education and tense use

The present section explores the correlation between a writer's profession and education and their use of tenses. If book-keeping is indeed an important factor, we expect that merchant or craftsmen's writings should show perfect expansion, while writers with a clerical education or scholarly background should follow the older distribution. The authors Dürer and Rem in the previous section illustrate the first correlation. The trend is also confirmed in *Schuldbuch des Basler Kaufmanns Ludwig Kilchmann* and *Schuldbuch des Goldschmiedes Stefan Maignow* (1477 – 1501).¹² The Kilchmann book includes book-keeping (*Schuldbuch*) and chronicle (*Chronik*) where six writers contribute between 1452 – 1518. The *Schuldbuch* (debts and earnings, pp. 43–103, 1452 – 1518) is written almost exclusively in the perfect and present. But also the chronicle part (family deaths and marriages, warfare, earthquakes; most entries after 1500) is written in the perfect and present with only one preterite¹³. The perfect extension is illustrated in (9).

(9) *Doselb* het *man* *erlich* kocht.
there has one honestly cooked

‘There you could find fair cooking’, “there” being the recommended restaurants *Zum Saffran*, *Zum Brunnen* and *In Schniedens Hus*.

The writer expresses a habitual statement in a narrative passage (eminent visitors from Switzerland were taken out for meals). Even though offering background information for events on a past occasion R<S, the habitual is rendered in the perfect. The Kilchmann family consists of writers for whom the perfect was effectually the only form to report on the past.

While private family chronicles reveal the grammar of merchants and craftsmen, official town chronicles, written by professional scribes, show a very different use of tenses. The *Dacher-Chronik* of Konstanz, written 1425 – 1471 by Gebhard Dacher, is almost exclusively written in the preterite. Other official chronicles – Öheim's chronicle of the Reichenau Monastery (written as late as 1600), as well as the Richental chronicle (after 1420) – show the same preterite dominance.

¹² Lit. *Book of debts of the Basel merchant Ludwig Kilchmann* and *Book of debts of the goldsmith Stefan Maignow* (Signori 2012).

¹³ The exception occurs when an earthquake is reported in 1512.

However, the Dacher-Chronik includes two further pieces of evidence that allow insights into their production. Firstly, it includes reports on Vlad III's cruel deeds in Romania —and these are exclusively rendered in the perfect.¹⁴ According to the editor, the respective passages most likely draw on *Flugschriften* (news flyers) that were circulated among merchants travelling Eastern Europe (Dacher/Wolff, p.203ff.). Dacher split the original news and integrated passages into the corresponding years. Yet, he obviously did not change the text itself – or else, it would be inexplicable why these, and only these events are rendered in the perfect.

Secondly, when Dacher died his colleague Conrad Albrecht took over and added about 10 pages in the next years (1472 – 1473).¹⁵ In these final passages the perfect predominates, in spite of the fact that Albrecht intended to continue the chronicle in content and form. The education of Dacher and Albrecht can only be speculated about. Dacher probably had some knowledge in Latin, as his daring project of writing a chronicle required the ability to consider Latin documents. Albrecht was trained on the job by the senior writer Hans Krafft and left no signs of scholarly engagement (Dacher/Wolff:51ff.). Based on this sparse information, we can hypothesize that official chronicles were *conventionally* written in the preterite, although the use of tenses was not explicitly normed (or else, the Vlad episodes would exhibit the preterite) nor following some standard (or else, Albrecht would have continued in the preterite).

Beyond such anecdotal finds, a systematic survey would be desirable in order to get reliable data on the correlation between education and tense use. In an exploratory student project, we inspected autobiographic texts by 12 authors, mostly from the South of Germany between 1450 – 1600. Authors and results are summarized in appendix 2. In spite of the study's small scale and pragmatic choice of authors, some interesting trends emerged.

Chronicles by learned administrative writers show the preterite as the predominant tense form.¹⁶ Authors included Kaspar Frey, Aargau (South, 1500), Rathsmester Spittendorf, Halle (North, 1474-1480)¹⁷, Georg von Ehingen (South, before 1508), Melchior von Osse, Saxony (North, 1541 – 1555), Gebhard Dacher (South, before 1471), Öheim von Reichenau (South, 1600) and Georg von Ehingen (South, 1457 – 1508). The most remarkable case is von Osse's preterite report on the bishop elections included in his diary – von Osse's diary otherwise practically only uses the perfect.

Autobiography written by clerical and gentry authors are rendered in the preterite. This we find in the autobiographic introduction by Öheim von Reichenau (clerus, South), in the self-report by Georg von Ehingen (gentry, South), Götz von Berlichingen (gentry, South, before 1562, we may suspect that Götz employed a ghostwriter), Rathsmester

¹⁴ Vlad III is better known as *Dracul / Dracula*; the episodes are in the year 1455, pp.654-662, in 1460, p.673 and in 1462, p.685-690.

¹⁵ This finding agrees with Frei's assumption that the preterite loss in centers of trade was accomplished long before it is evidenced in official chronicles (Frei 1970: 368).

¹⁶ Students chose one text and evaluated a fixed number of pages in their source. They were asked to aim for a diagnosis whether their author was "more perfect-using" or "more preterite using". This required them to scan the source for tense forms before deciding on their pages, in order to avoid unbalanced diagnoses on basis of special sections (e.g. only chronicles or only lists). "Form X predominates" means that in this evaluation, the contrasting form Y occurred at most once every 6-8 paragraphs (exact number of paragraphs depending, again, on the text structuring patterns in the respective source.)

¹⁷ Saxony was classed as part of the preterite-retaining North in the 16th century. See (Rowley 1983, Bergemann 1965, 1986:226-233) for a survey of preterite retainment in middle and low Germany.

Spittendorf (educated official), and Lupold von Wedel (gentry, 1544 – 1612) in his warfare passages.

Book-keeping triggers the perfect. The pattern was reliably confirmed in the merchant books of Erhard Ratdolt (Augsburg, ca. 1500), Lucas Rem (Augsburg, ca. 1500 – 1550) and Hans Ulrich Krafft (Ulm, 1614 – 1616), in addition to Albrecht Dürer, Ludwig Kilchmann and Stefan Maignow above.

The text type **diary** is susceptible to perfect expansion, notwithstanding geographical or educational background. Several writers consistently use the perfect in diaries. In the South we found Adolf Echter von Mespelbrunn (Bavaria), Erhard Ratdolt (Augsburg) and Hans Ulrich Krafft (Ulm). In the North, the perfect predominates in diaries by Lupold von Wedel and Melchior von Osse. The latter, a government official in Saxony, even called his diary *Handelsbuch* (merchant's diary), which shows that by the 16th century, the writing of diaries was perceived as an instance of book-keeping.

Autobiographic writings have not been explored yet in diachronic research on German. Jancke et al. provide an excellent online survey of edited autobiographic texts between 1400 – 1600 that we used as a resource and that could be an ideal starting point for systematic study.¹⁸

4.4 Areal evidence

Drinka (2017, 2004) proposes that many properties of the perfect can best be understood as a pan-European areal phenomenon. She points out that the semantic shift of perfect *forms* towards a preterite *meaning* (henceforth perfect > preterite shift for short) affected a contiguous area, spanning from Île-de-France via the west and south of Germany and the Alpes into the north of Italy. Based on earlier research, she surveys that Northern Italian vernacular (NorthI) has practically lost the former preterite forms; for French she likewise diagnoses a use of the passé composé that coextends with preterite in earlier stages.¹⁹ Drinka argues that the areal distribution stands against Bybee et al.'s (1994) claim that perfect aspect has a natural trend to bleach into preterite meanings, as Bybee's trend should result in random pockets of perfect > preterite shift. Based on few data points, Drinka claims that the shift was initiated in the Paris area and spread into Northern Italy, following the routes of historical expansion that she dates back to the policy of Charlemagne in the 9th century.

While I agree that the best explanation for the preterite loss in SouthG should be open to cover the shifts in French and Northern Italian, the actual data record contradicts Drinka's argument in several respects (Sapp 2009, quoted after Fischer 2018: 358). I first discuss the France-First hypothesis and then suggest an alternative explanation.

A first criticism concerns Drinka's OF examples. While she locates the beginning of perfect expansion in the 13th century, her own 13th century examples are fully consistent with the perfect semantics in Section 3.1. As Drinka herself notes, they support the semantic distinction between perfect/preterite (Drinka 2016:178-79). Her first early find from early 14th century (her ex. 1, p. 258) shows perfect in direct speech. Moreover,

¹⁸ <https://www.geschkult.fu-berlin.de/e/jancke-quellenkunde/index.html>, accessed August 2021

¹⁹ Problematic is the register driven use of passé simple that was maintained by standardization. If counted as compatible with „preterite loss“ then Standard German is also susceptible to show preterite loss (as Drinka's fig. 10.2 actually suggests) – contrary to grammatical classification (Thieroff 2000). It seems fair to diagnose that NorthI and SouthG implemented preterite loss more radically.

the passage reports on an event with consequences for the present. If we assume that Lindgren's diagnosed preference for perfect in direct speech also applies to French (Lindgren 1957), then her examples corroborate this preference, rather than being an indication of preterite loss. Finally, Drinka's best example of perfect extension, dating from after 1350, has also invited other explanations: Foulet views it as an early instance of historical present (Foulet 1920: 278). While I can not exclude the existence of further examples of early perfect extension, Drinka (2016) fails to show conclusively that French was a forerunner.

The second critical aspect concerns the supposed spread of perfect expansion into German. Drinka suggests that it happened through cultural influence like those we find in architecture, fashion, literature and administrative writing (Drinka 2017: 259f.) If this indeed were the case, we would expect to see perfect expansion first in texts reached by this influence: literature and administration. However, we saw in sections 4.2 and 4.3 that the supposed transfer genres – literary writing and administration – are in fact immune against preterite loss. Administrative writing was standardized and preterite persisted (as evidenced by professional chronicles, but also legal testimony protocols), thus fostering the newly forming distinction between Standard German and dialect. Literary writing likewise shows no perfect expansion, and preterite remains stable until today. In literature we can include the narration of biblical events by Luther, but also local Southern translators of the bible. Neither of these expanded the use of perfect. Perfect expansion flourished in in-house writings beyond the reach of cultural influence. Thus, the affected text types are incompatible with Drinka's route of grammar transfer.

Finally, cultural contact effects mostly the lexicon of content words, and indeed the reported French-German influence has left many traces in the lexicon. It is less likely that speakers adopt novel grammatical features — in fact, the grammars of Italian, Southern German and French retained their characteristics in spite of contact. Allusion to general cultural contact thus doesn't explain why the perfect expansion should be adopted, while other features, for instance SVO syntax or *pro-drop*, didn't spread.

The present data record in SouthG supports different link between areas and speakers. Massive rise of perfect shows first in the business writings of merchants and craftsmen, and intense economic contact is well-documented between southern Germany and northern Italy, as well as western Germany (Frankfurt, Cologne) and Paris. The change from the travelling salesman to sedentary merchants led to a change in practices and skills necessary for economic success. Bec (1967) was the first to highlight the new type of “writing merchant” in the history of economics, and his diagnoses remain valid today (Le Goff 1993).

Contacts between German and Italian trade centers are documented to great detail (Pfothner 2016). The best-known case is the *fondaco dei Tedeschi*, linking Nuremberg and Venice, but close links are also documented between Konstanz, Ravensburg, Ulm, Basel or Zurich north of the Alpes and Milan, Florence, Venice and Genua in the south (Penndorf 1913, 1930, Schulte 1930, Pfothner 2016). The strongest translingual bond between merchants in Paris, Cologne, Basel, Nuremberg and Venice, however, was their profession which entailed shared practices (accounting, correspondence, book-keeping) to overcome shared problems (such as keeping track of goods, prices and payments) that led to very similar pragmatic intentions in writing: It was all about recording events that were of consequence for the merchant's later *now*. One of Drinka's early German example nicely illustrates this point (Drinka 2017: 264,

see her ex. (9) for full passage). The quoted Cologne document from 1270 closes by listing the contracting parties.

- (10) *so haint unse zwene meistere her Diederich (...) inde her*
so have our two masters Herr Diederich and Herr
Cunrait (...) iere ingesiegele an diesen brief gehangin
Cunrat their seals to this brief hanged

‘the masters Diederich and Cunrait **have attached** (hanged) their seals to the document’

This wording suits all later readers who will find at their respective *now* that the parties have sealed and thus *agreed and continue to agree* to the document’s content.²⁰ Transactions of that kind thus coined standard wordings in the perfect, and the remaining documents from the relevant subpart of the population shows that motivated uses of perfect spilled over into genres where its use was not originally justified.

If we assume that the language of merchants and craftsmen was characterized by an over-use of perfect, what can be said about the spread of this habit into the remaining population? Sociolinguists have argued that linguistic patterns of powerful groups in society are likely to be imitated by other speakers (Labov 2001). The hypothesized first speakers of perfect-only varieties, merchants and craftsmen, indeed were a powerful and prominent part of urban society, and plausibly a role model also for farmers, servants and handsmen. Merchants were a relevant peer group for everyone, as a career in trade was open to everyone. Becoming a merchant was a highly attractive choice of profession (Denzel 2002), and adopting the language of peers is a common first step in entering a profession. Even beyond apprenticeship, imitating the language of the rich, at the crucial time, would boost the use of perfect. I thus agree with Drinka, who diagnoses that the perfect > preterite shift does not come about “through the simple operation of typological pressures alone” but in fact “spread from variety to variety, across western and central Europe, spurred by sociolinguistic and sociohistorical motivations” (p. 173). Yet, we now know better who imitated whom.

In sum, I propose that the semantics and pragmatics of the perfect made it fit for a specific cultural practice (keeping a merchant diary). By extending the “merchant” frame of mind to everyday life, a specific group of speakers over-used the perfect (e.g., in letters, family chronicles). This first cohort served as language model both for L1 acquisition as well as for imitation by other speakers (who did *not* share the same cultural practices). As there are no records of language acquisition or oral language of the illiterate population, we can only speculate about the actual course of the spread. However, we know that perfect overuse and preterite loss eventually did spread all over the South of Germany.

Which brings us to the last open issue: The preterite loss is restricted to southern Germany (Thieroff 2000). If accounting is indeed the key factor in the development then why did the Hanse merchants – equally powerful, rich and part of international networks – never give up the preterite? Without aiming at a comprehensive study, the

²⁰ Drinka’s comments on example (8) from 1264 rest on a translation error: The German text uses the formula *alse id van aldirz her kumen is* ‘as it has come (onto us) from ancient times’ – i.e. stressing the present relevance of traditions for the issue at hand. The translation erroneously construes *unse herre* ‘our lord’ as the subject of *kumen* and therefore diagnoses a preterite-like meaning for *is kumen* ‘has come’.

last section offers first evidence that trade and accounting in South and North Germany indeed may have differed.

5. The North-South divide

The present section draws on Tophinke's in-depth study of the remaining Hanse writings (Tophinke 1999). Maritime trade posed special challenges, as traders not only had to finance merchandise but also pay and man a vessel. The Hanse trade trips were typically collaborative and all partners held their share in the gains or losses of the expedition. It was therefore mandatory to document the contracts between cooperating parties, which was done by public administrative writers (Irsigler 1973, Afflerbach 1993). Regular communication with the expedition was impracticable, because the messenger ship would face the same challenges as the main vessel. As a consequence, the Hanse cities still host extensive archives of official town accounting books, while merchant diaries or letters from private persons are sparse (Tophinke 1999).

In the South of Germany, in contrast, trading routes proceeded over land towards the Mediterranean as well as to the west towards Lyon, Frankfurt and the Netherlands. As the transport of goods proceeded slower than a messenger could ride, communication was possible. The Ravensburger *Rekordanzen* offer an impressive example of this kind of communication (Schulte 1931, vol. 4). Pfothenhauer's (2016) study of the Augsburg-Venice connection documents not only that letter writing was part of the professional practice of merchants, but also that writing was considered the crucial key skill of any aspiring merchant, as trading necessitated detailed day to day book-keeping in order to match goods and payments. Trade companies held regular *Rechnung* (accountings) with all partners to take stock. These were based on the notes of the *Faktor* (deputy), and careful book-keeping was therefore of great importance (Pfothenhauer 2016: 86).

Penndorf's (1913) comprehensive survey of remaining merchant diaries in the 14th and 15th century, together with further sources that Penndorf did not know at the time, yields the following comparison: Four Hanse documents remain from the 14th century, two of which are written in Latin. From the 15th century remain six Hanse documents, and the 16th century counts 3 remaining Hanse documents. In the South (in archives in Augsburg, Nürnberg, Munich and Basel) Penndorf traced two merchant documents from the 14th century, there are 11 remaining documents from the 15th century (of which Penndorf listed 8) and in the 16th century there are 15 accounting books (13 listed in Penndorf). The comparison is listed in Appendix 3. In short, Hanse merchants wrote little, Southern merchants wrote more.

The samples given in (Penndorf 1913) suggest that every author developed their own language patterns. Some prefer the preterite and only occasionally use the perfect, others stick to perfect, and some vary following patterns that are not easy to decipher. Yet, from the 15th century on the majority of Southern authors show a preference for the perfect, sometimes up to 100%. Penndorf also comments on the quality and sophistication of book-keeping in each document. While only two of the Hanse books aim at more than just taking basic notes (one of which is written in Latin), the Southern documents get more and more sophisticated over time. Transfer of Southern expertise is also relevant in classifying remaining documents. One source, the *Einkaufsbüchlein Mulich* (1495), was written by two hired chief clerks from Nuremberg for a widow at Lübeck – hence we should class this source as “Southern” by linguistic background although it contributes to Hanse trade in economic terms. In sum, less merchant diaries

remain in the North, more in the South. Those in the South achieve higher sophistication (Penndorf 1913: 46-61) even though basic note-keeping was practiced in all areas. In 15th and 16th century, Southern writers almost consistently use the perfect in their book-keeping. While we have long-term evidence that preterite was retained in the Hanse area²¹, a detailed quantitative evaluation of Hanse sources would be highly desirable in order to confirm or modify the present picture of the North-South divide.

A detailed study of education between 1200 and 1500 would likewise be desirable, but current descriptions draw a picture consistent with the assumption of a North-South divide. For the Hanse area, historical studies argue that schooling by clerical institutions pervaded with a curriculum lightly reformed, moving focus away from classical scholastics towards writing and elementary mathematics (with Latin as a remaining challenge). Apprentices in trade received their education “on the job” in Bergen, Brügge, London and Nowgorod in daily interaction with senior partners (Penndorf 1913, Afflerbach 1993, Tophinke 1999). Accounting was never taught systematically, and is never mentioned in (parental) correspondences as an important skill.

In Southern Germany, private institutions offered instruction in writing and mathematics as an alternative to education by clerical schools (Denzel 2002:427, Pfothenauer 2016:85, Signori t.a./2023). After their basic school training, apprentices in trade were systematically instructed in accounting, be it as trainees in northern Italy, be it by their seniors at home (Pfothenauer 2016: 85ff). Letters by seniors to junior staff abroad include frequent appeals to “practice their writing”, i.e. regular records of trades. In particularly high esteem was *Venetian accounting*, double-entry accounting for which the first textbook, written by Pascioli, appeared in 1494. The textbook was also available in German, though its distribution in Germany is not documented (Penndorf 1933). Educational routines in the South developed in the 15th century, and organized instruction was open to everybody in the 16th century (Denzel 2002, Pfothenauer 2016).

The comparison between North and South Germany thus suggests a gradient between better formal education and more writing practices in the South as opposed to less formal education and sparsely practiced writing in the North. The differences in education are also mirrored in the fact that only Southern Germany and Italian publishers published systematic teaching materials and textbooks to educate merchants (Hock & Jeannin 1991, Hock 1998). Paradoxically, one might say that South German lost the preterite because speakers were so literate.

While detailed studies are still lacking at points, it seems plausible to assume that gradual differences in practices may have led to categorical distinctions between a SouthG grammar with preterite loss, as opposed to LowG grammars that include the perfect/preterite opposition, as outlined in 3.1. Categorical changes happen when children lack sufficient input for a given form in L1 acquisition. If we assume that more children were born into a perfect-dominant household in the South than in the North, which can lead to more cases of perfect-only L1 acquisition (Labov 2001, Yang 2016). The registers of the clerus, in contrast, resisted the innovation and incidentally led the basis for standard ModHG.

²¹ Contemporary Low German dialects retain the preterite, see Rowley (1983). Modern Platt tense uses still match the MHG distribution of preterite/perfect.

6. Summary

The present paper argues for a new triggering factor to explain the SouthG preterite loss between 1450 and 1550. I propose that the rise of merchant book-keeping and new accounting techniques in the 15th century played a major role in this change. Section 3 recapitulated the semantics of the perfect-preterite distinction in the languages of Europe today, which is also applicable to Early Modern German. I argued that the perfect, on semantic grounds, should be a possible and even preferred form in book-keeping and merchants' notes. This is warranted by the data (sections 4.1 and 5). I propose a four-stage process that leads from increased use of perfects (stage 1) to perfect extension (stage 2), reanalysis (stage 3) and preterite loss due to insufficient L1 input in acquisition (stage 4). Evidence in support of this development was provided by evaluation of merchants' diaries, note books, administrative writing and autobiography. We can account for the German timeline (1450 – 1550) and the areal distribution in Germany (South – North). We moreover can potentially explain the areal distribution in Europe, defined as the area in which accounting techniques were first developed and established as a day-to-day practice.

Appendix 1

Table of content of the writings of Lukas Rem (1494 – 1541) as of edition Greiff (1861), annotated with dominant tense form (perfect/preterite)

1. Birth, marriage and life of Rem's parents (p.1 – 4, pret.)
2. Rem's birth, parts of life and major journeys (p.5 – 30, pret.)
3. Rem's possessions and earnings, accounts of his company (p. 31 – 42, perf.)
4. Rem's marriage and gains and expenses then (p.43 – 52, perf.)
5. What Rem gave as presents on other marriages (p. 53 – 55, perf.)
6. Landloans, gains and purchases of land (p. 56 – 63, perf.)
7. Birth of Rem's children outside marriage (p. 64 – 65, pret.)
8. Birth of Rem's legal children and heirs (p. 66 – 70, pret.)
9. List of former servants (p. 71 – 72, no tenses)
10. How Rem calculated and paid his legal taxes (p. 73 – 76, mixed)

Appendix 2: Education/profession and tense choice

	Author info	Bio background	Tenses	Text / Topic
1.	Lucas Rem <i>Augsburg</i> 1494 - 1540	merchant, education in Italy	preterite perfect	autobiography book-keeping
2.	Georg von Ehingen, <i>Swabia</i> 1457 - 1508	gentry, pilgrimage	perfect preterite	fam. chronicle travel to Jerusalem, war reports
3.	Dr. Johann Freymann v. Oberhausen <i>Bavaria</i>	lawyer, judge with academic education	free variation	autobiography

1580 – 1600				
4.	Dr Melchior Osse, <i>Sachsen</i> „Handelsbuch“ 1541 - 1555	administrative at court, Leipzig	perfect dominates preterite narratives	regular dairy of events reports to duke e.g., election of bishop
5.	Hans Ulrich Krafft, <i>Ulm</i> 1614 – 1616	mechant educ. in Augsburg, Italy, France; travels to orient	mainly perfect, stative verbs, modals in preterite;	Travel and education reports
6.	Lupold von Wedel, <i>Pommern</i> 1544 - 1612	life and travel	perfect preterite	daily diary entries war reports; with temporal distance
7.	Adolf Echter v. Mespelbrunn <i>bei Würzburg</i> 1543 – 1600	gentry, no connection to merchants, craft- men	perfect, schematic listing of events	daily diary entries
8.	Täufer Georg Frell, <i>Chur</i> 1571 - 1574	clerus	free variation	life and travel
9.	Kaspar Frey, <i>Aargau</i> ≈1500	professional town writer, chronist	preterite	chronicle
10.	Götz von Berlichingen <i>Suebia</i> before 1562	gentry, no connection to merchants, assisted writing?	perfect preterite predo-minates	introduction autobiography with temporal distance
11.	Erhard Ratdolt <i>Augsburg</i> 1462 - 1528	master printer at Augsburg, educated Venice, father craftsman	perfect predo- minates	autobiography
12.	Rathsmeister Spittendorf <i>Halle (Thür.)</i> 1474 – 1480	professional town writer, chronist	preterite	chronicle reports diary

Appendix 3: List of sources from Penndorf (1913)

14/15th c. include use of preterite/perfect in the (short) illustrating passages provided in Penndorf. Sources with ? remain to be inspected.

South		North	
14 th century			
Runtinger Kress	mixed mixed	Wittenborg Tölner Geldersen Warendorp/Clingenbeck	Latin, LowG Latin perfect dom. ?
15 th century			
Starck Handlungsbuch München Ruland Blum Ehinger-Verber Stützensberg Maltinger Maigenow* Kilchberg* Ravensburg* Mulich Lübeck/Nürmbg.	mixed perfect perfect perfect ? perfect preterite perfect perfect ? perfect	Grossschäffner Marienburg Grossschäffner Königsberg Johan Plige Veckinghusen Pisz Dunkelgud	present ? preterite mixed ? mixed
16 th century			
Fugger (Augsburg) Haug (Augsburg) Hartbrunner (Augsburg) Brunnel&Co. (Bozen) Neidhart Erben Ganger Elsässer Rechnungsbuch Schwäbischer Bund Ebner Imhoff Kress Behaim Sitzunger Rem* Ratdolt*		Hamburger Rechnungen Bremer Rechnungen (4) Ernst Küle	

*Sources not in Penndorf are referenced in the source section. I excluded two sources (Cologne), as the development in the West of Germany remains to be investigated.

References

- Abraham, Werner, and Conradie, J. 2001. *Präteritumschwund und Diskursgrammatik*. Amsterdam: John Benjamins.
- Afflerbach, Th. 1993. *Der berufliche Alltag eines spätmittelalterlichen Hansekaufmanns*. Frankfurt: Peter Lang.
- Alexiadou, Artemis, Rathert, Monika, & Stechow, Arnim von. 2003. Introduction: the modules of perfect constructions. In A. Alexiadou, M. Rathert, & A. v. Stechow (Eds.): *Perfect Explorations* (pp. vii–xxxviii). Berlin: Mouton de Gruyter.
- Bec, Christian. 1967. *Les Marchands Écrivains de Venise (1375–1434)*. Berlin: Mouton.
- Becker, M., and Egetenmeyer, J. (2018). A prominence based account of discourse structure. *Lingua* 214: 28–58.
- Bergemann, Gunter. 1965. *Das Vorerzegebirgische. Mundart und Umgangssprache im Industriegebiet um Karl-Marx-Stadt – Zwickau*. Mitteldeutsche Studien, Halle.
- Bergemann, Gunter. 1986. *Kleines sächsisches Wörterbuch*. München: Beck.
- Blythe, R.A., and William Croft. 2012. S-curves and the mechanisms of propagation in language change. *Language* 88(2): 269–304.
- Brandner, Ellen, Salzmann, Martin and Gerhard Schaden. 2012. Zur Syntax und Semantik des doppelten Perfekts aus alemannischer Sicht. In *Proceedings der IGDD Kiel 2012* (pp. 1 – 37).
- Bybee, Joan, Revere Perkins, and W. Pagliuca. 1994. *The Evolution of Grammar. Tense, Aspect, and Modality in the Languages of the World*. Chicago: Chicago University Press.
- Dal, I. 1960. Zur Frage des deutschen Präteritumschwundes. In Hartmann, H., Neumann, H. (eds.) *Indogermanica. Festschrift für Woldgang Krause*. Heidelberg: Winter, 1–7.
- Denzel, Markus. 2002. Professionalisierung und sozialer Aufstieg bei oberdeutschen Kaufleuten und Faktoren im 16. Jahrhundert. In: Schulz, G. (ed.) *Sozialer Aufstieg. Funktionselemente im Spätmittelalter und der frühen Neuzeit*. Berlin: DeGruyter, 413–442.
- Diewald, Gabriele. 2002. A model for relevant types of contexts in grammaticalization. In Wischer, Ilse, and Gabriele Diewald (eds.), *New Reflections on grammaticalization*. Amsterdam: John Benjamins, 103 – 120.
- Diewald, Gabriele. 2006. *Context types in grammaticalization as constructions. Constructions SVI–9*. Available at: <http://www.constructions-online.de/articles/specvol1/686> (accessed online March 2020).
- Drinka, Bridget. 2003. Areal factors in the development of the European periphrastic perfect. *Word* 54, 1–38.
- Drinka, Bridget. 2004. Präteritumschwund: Evidence for areal diffusion. In W. Abraham (ed.), *Focus on Germanic Typology*. Berlin: Akademie Verlag, 211 – 240.
- Drinka, Bridget. 2017. *Language Contact in Europe. The periphrastic perfect through history*. Cambridge: Cambridge University Press.
- Eckardt, R.egine. 2006. *Meaning Change in Grammaticalization*. Oxford: Oxford University Press.
- Eckardt, Regine. 2009. APO: Avoid Pragmatic Overload. In J. Visconti, M.-B. Mosegard Hansen (eds.), *Current Trends in Diachronic Semantics and Pragmatics*. Emerald, 21 – 42.

- Eckardt, Regine (2020/accepted). The perfect expression. Why the preterite was lost in Southern German. T.a. in Robin Hörnig (ed.) *Proceedings of Linguistic Evidence 2020, Tübingen*.
- Fischer, Hanna. 2017. Präteritum/Perfekt-Distribution. In J. Fleischer, A. N. Lenz, & H. Weiß (Eds.), *SyHD-Atlas. Konzipiert von Ludwig M. Breuer. Unter Mitarbeit von Katrin Kuhmichel, Stephanie Leser-Cronau, Johanna Schwalm und Thomas Strobel*. pp. 25-45, dx.doi.org/10.17192/es2017.0003.
- Fischer, Hanna. 2018. *Präteritumschwund im Deutschen*. Berlin: deGruyter.
- Fischer, Hanna. 2019. How to get lost. The Präteritumschwund in German Dialects. In A. Dammal & O. Schallert (eds.): *Morphological Variation. Theoretical and empirical perspectives*. Amsterdam: John Benjamins, 197–222.
- Frei, Gertrud. 1970. Walsersdeutsch in Saley. Stuttgart/Bern: Paul Haupt Verlag.
- Gleeson-White, Jane. 2012. *Double entry. How mearchants of Venice shaped the modern world – and how their invention could make or break the planet*. London: Allen Lane.
- Heine, Bernd. 2002. On the role of context in grammaticalization. In Gabriele Diewald, and Ilse Wischer (eds.), *New reflections on grammaticalization*. Amsterdam: John Benjamins, 83 – 101.
- Hinrichs, Erhard. 1986. Temporal Anaphora in Discourse of English. *Linguistics and Philosophy*, 9(1), 63–82.
- Hook, Jochen and Jeannin, Pierre. (eds.). 1991. *Ars Mercatoria. Handbücher und Traktate für den Gebrauch des Kaufmanns, 1470-1820 / Manuels et traités à l'usage des marchands, 1470-1820. Eine analytische Bibliographie in 6 Bänden. Bd. 1: 1470-1600*. Osnabrück: Schöningh.
- Hook, Jochen. 1998. Theorie und Praxis kaufmännischen Handelns, 16. – 18. Jahrhundert. Vornehmlich am Beispiel Westfalens. In Trude Ehlert, & R. Nelles (eds.), *Haushalt und Familie in Mittelalter und früherer Neuzeit*. Stuttgart: Thorbecke, 107–118.
- Irsigler, Franz. 1973. Hansekaufleute. Die Lübecker Veckinghusen und die Kölner Rinck. In *Hanse in Europa. Brücke zwischen den Märkten, 12. – 17. Jahrhundert*. Kölner Stadtmuseum, 301 – 312.
- Jancke, Gabriele. 2002. *Autobiographie als soziale Praxis. Beziehungskonzepte in Selbstzeugnissen des 15. und 16. Jahrhunderts im deutschsprachigen Raum*. (Selbstzeugnisse der Neuzeit 10). Köln/Weimar/Wien.
- Jörg, R. 1976. *Untersuchungen zum Schwund des Präteritums im Schweizer-deutschen*. (Basler Studien zur deutschen Sprache und Literatur, 52). Bern: Francke.
- Kamp, Hans, and Christian Rohrer. 1983. Tense in texts. In: Rainer Bäuerle, Christoph Schwarze, and Arnim von Stechow (eds.), *Meaning, Use, and Interpretation of Language*, Berlin/New York: de Gruyter: 250 – 269.
- Kamp, Hans and Reyle, Uwe. 1991. *From Discourse to Logic*. Dordrecht: Kluwer.
- Klein, Wolfgang. 1994. *Time in Language*. Malden: Routledge.
- Labov, William. 1994. *Principles of linguistic change: Internal factors*. Malden: Blackwell.
- Labov, William. 2001. *Principles of linguistic change: Social factors*. Malden: Blackwell.
- Larsson, Ingrid, and Brandner, Ellen. 2014. *Perfect doubling and the grammaticalization of auxiliaries*. DiGS 16, 3–5 July 2014 Budapest.
- Le Goff, Jacques. 1993. *Kaufleute und Bankiers im Mittelalter*. Frankfurt: Campus.

- Lindgren, Kai. 1957. *Über den oberdeutschen Präteritumschwund*. *Annales Academiae Scientiarum Fennicae*.
- Lindstedt, Jouko. 2000. The perfect — aspectual, temporal and evidential. In Ö. Dahl (ed.) *Tense and Aspect in the Languages of Europe*. Berlin & New York, Mouton de Gruyter.
- McCawley James D. 1981. Notes on the English Present Perfect. *Australian Journal of Linguistics* 1: 81–90.
- Musan, Renate. 2001. The present perfect in German: Outline of its semantic composition. *Natural Language and Linguistic Theory* 19: 355–401.
- Nagl, H. W. 1886. *Da Roanad. (...) Grammatische Analyse des niederösterreichischen Dialektes*. Carl Gerold's Sohn.
- Obschonka, M., Wyrwich, M., Fritsch, M., Gosling, S. D., Rentfrow, P. J., and Potter, J. 2019. Von unterkühlten Norddeutschen, gemütlichen Süddeutschen und aufgeschlossenen Großstädtern: Regionale Persönlichkeitsunterschiede in Deutschland. *Psychologische Rundschau*, 70(3), 173–194.
- Oubouzar, Erika. 1997. Zur Ausbildung der zusammengesetzten Verbform haben + Partizip II vom Althochdeutschen bis zum Frühneuhochdeutschen. In: H. Quintin, M. Najjar, & S. Genz (Eds.), *Temporale Bedeutungen, temporale Relationen*. Tübingen: Stauffenberg Verlag, 69 – 81.
- Penndorf, Balduin. 1913. *Geschichte der Buchhaltung in Deutschland*. Leipzig: Glöckner. Online at <http://digi.econbiz.de/viewer/resolver?urn=urn:nbn:de:zbw-retromon-9734>
- Penndorf, Balduin. 1933. Die italienische Buchhaltung im 14. und 15. Jahrhundert und Pacioli's Leben und Werk. In B. Penndorf (Ed. + transl.), *Luca Paglioli: Abhandlung über die Buchhaltung* (pp. 1–82). Stuttgart: Poeschel.
- Pfotenhauer, Brigitte. 2016. *Nürnberg und Venedig im Austausch. Menschen, Güter und Wissen an der Wende vom Mittelalter zur Neuzeit*. Regensburg: Schnell & Steiner.
- Reichenbach, Hans. 1947. The Tenses of Verbs. In *Elements of Symbolic Logic*. The Macmillan Company, 287 – 298.
- Reis, Hans. 1894. Das Präteritum in den süddeutschen Mundarten. *Beiträge zur Geschichte der Deutschen Sprache und Literatur* 19, 334–337.
- Reis, Hans. 1891. *Beiträge zur Syntax der mainzer Mundart*. Dissertation.
- Ringe, Don & Charles Young. 2022. The threshold of productivity and the “irregularization” of verbs in Early Modern English. In Los et al. (eds.), *English Historical Linguistics*, Chapter 4 (no page.) DOI:[10.1075/cilt.358.04rin](https://doi.org/10.1075/cilt.358.04rin)
- Rowley, A. R. 1983. Das Präteritum in den heutigen deutschen Dialekten. *Zeitschrift für Dialektologie und Linguistik* 50(2), 161–182.
- Rothstein, Björn. 2006. *The Perfect Time Span*. Amsterdam: John Benjamins.
- Sapp, C. D. 2009. Syncope as the cause of Präteritumschwund. New data from an Early NHG corpus. *Journal of Germanic Linguistics* 21(4), 419–450.
- Schwenter, Scott. 1994. “Hot news” and the grammaticalization of perfects. *Linguistics* 32(6), 995–1028.
- Signori, Gabriela. t.a./2023. *Vom ABC zur Stadt der Frauen. Einführung in die Geschichte der Mädchen- und Frauenbildung im europäischen Mittelalter* (to appear with WBG Darmstadt 2023).

- Spuffort, Peter. 1991. Spätmittelalterliche Kaufmannsnotizbücher als Quelle zur Bankengeschichte. In: North, M. (ed.) *Kredit in spätmittelalterlichen und frühneuzeitlichen Europa*. (Quellen und Darstellungen zur Hansischen Geschichte. NF 37). Köln: Böhlau, 103–120.
- Stromer, W. 1973. Konkurrenten der Hanse: Die Oberdeutschen. In *Hanse in Europa. Brücke zwischen den Märkten, 12. – 17. Jahrhundert* (pp. 331–340). Kölner Stadtmuseum.
- Swart, Henriette de. 2007. A cross-linguistic discourse analysis of the Perfect. *Journal of Pragmatics* 39, 2273–2307.
- Tophinke, Doris. 1999. *Handelstexte. Zur Textualität und Typik kaufmännischer Rechnungsbücher im Hanseraum des 14 und 15. Jahrhunderts (ScriptOralia 144)*. Tübingen: Gunther Narr Verlag.
- Trier, J. 1965. Stilistische Fagen der deutschen Gebrauchsprosa. Perfekt und Imperfekt. In R. Henß et al. (eds.), *Germanistik in Forschung und Lehre. Vorträge und Diskussionen des Germanistentages in Essen 1964* (195–208). Berlin: Schmidt Verlag.
- Yang, Charles. 2016. *The price of linguistic productivity: how children learn to break the rules of language*. Cambridge, MA: MIT Press.
- Yao, Xinyue. 2017. The evolution of the ‘hot news’ perfect in English. A study of register-specific language change. *Journal of Historical Pragmatics*. DOI: 10.1075/jhp.17.1.06yao
- Zeman, Sonja. 2010. *Tempus und “Mündlichkeit“ im Mittelhochdeutschen*. Berlin: Walter De Gruyter.
- Zybatov, Tanja, and Thomas Weskott. 2018. Das Doppelperfekt: Theorie und Empirie. *Zeitschrift für Sprachwissenschaft* 37(1), 83–124.

Source texts

- Götz v. Berlichingen*. Ulmschneider, H. (ed.). 1981. *Götz v. Berlichingen. Mein Fehd und Handlungen*. Forschungen aus Württembergisch Franken 17. Sigmaringen.
- Gebhard Dacher*. Wolff, S. (ed.). 2008. *Die „Konstanzer Chronik“ Gebhart Dachers*. Jan Thorbecke Verlag.
- Albrecht Dürer*. Ullmann, E. (ed.). 1978. *Albrecht Dürer. Schriften und Briefe*. Second, unrevised edition 1993. Reclam Verlag.
- Adolf Echter von Mespelbrunn*. Hüttner, F. 1905. Aus dem Tagebuche eines Echter von Mespelbrunn. Mitgeteilt v. Franz Hüttner. *Archiv für Kulturgeschichte*, 3, pp. 440–468.
- Georg von Ehingen*. Pfeiffer, F. 1842. *Des schwäbischen Ritters Georg von Ehingen Reisen nach der Ritterschaft*. (digital version at http://dl.ub.uni-freiburg.de/diglit/georg_von_ehingen1842)
- Georg von Ehingen*. Ehrmann, G. (ed.). 1979. *Reisen nach der Ritterschaft*. Ed., Untersuchung, Komm. v. G. Ehrmann. 2 Bde. (= Göppinger Arbeiten zur Germanistik 262, I+II). Göppingen. (Text in Bd. 1).
- Georg Frell von Chur*. Rageth, S. (ed.). 1943. *Die Autobiographie des Georg Frell von Chur*. *Zwngliana* 7 (1939-1943), pp. 457–469.
- Kaspar Frey*. Gutmann, A. (ed.) 2010. *Die Schwabenkriegschronik des Kaspar Frey und ihre Stellung in der eidgenössischen Historiographie des 16. Jahrhunderts* (= Veröffentlichungen der Kommission für geschichtliche Landeskunde in Baden-Württemberg, Reihe B:

- Forschungen, Bd. 176, Teil 1 und 2), Stuttgart. [complete edition of the *Schwabenkriegschronik*].
- Dr. Johann Wolffen Freymanns von Obernhausen Haus-Chronica. Lipowsky, F. J. (ed.). 1815. *Urgeschichten von München. 2 Theil*. München, 623–650.
- Ludwig Kilchmann. Signori, G. (ed.). 2014. *Das Schuldbuch des Basler Kaufmanns Ludwig Kilchmann (gest. 1518)* Franz Steiner Verlag.
- Hans Ulrich Krafft. Haßler, K. (ed.). 1861. *Reisen und Gefangenschaft Hans Ulrich Kraffts*. Bibliothek des Literarischen Vereins Stuttgart 61.
- Stefan Maignow. Signori, G. & Münz, M. (eds.). 2012. *Das Geschäftsbuch des Konstanzer Goldschmiedes Stefan Maignow*. (= Konstanzer Geschichts- und Rechtsquellen 42).
- Einkaufsbüchlein Mulich. Rörig, Fritz (ed.). 1931. *Das Einkaufsbüchlein der Nürnberg-Lübecker Mulich's auf der Frankfurter Fastenmesse des Jahres 1495*. Breslau: Ferdinand Hirth. (= Veröffentlichungen der Schleswig-Holsteinischen Universitätsgesellschaft Nr. 36)
- Gallus Öhem von Reichenau. Brandi, K. (ed.). 1983. *Die Chronik des Gallus Öhem*. (= *Quellen und Forschungen zur Geschichte der Abtei Reichenau*). Heidelberg: Winter.
- Melchior von Osse, Handelsbuch. Hecker, O. (ed.). 1922. *Schriften Dr. Melchiors v. Osse. Mit einem Lebensabriß und einem Anhang v. Briefen und Akten* (= Schriften der Sächs Komm f Gesch 26). pp. 1–267.
- Erhard Ratdolt. Diehl, R. (ed.). 1933. *Erhard Ratdolt, ein Meisterdrucker des XV. und XVI. Jahrhunderts*. Mit 56 Abbildungen und einer Beilage (Die autobiographischen Aufzeichnungen Erhard Ratdolts 1462-1523. Nachwort v. Herbert Reichner).
- Ravensburger Handelsgesellschaft. Schulte, A. 1923. *Die Geschichte der großen Ravensburger Handelsgesellschaft 1380 – 1530*. Bd. 1 – 4. Stuttgart: DVA.
- Tagebuch des Lucas Rem aus den Jahren 1494-1541. Greiff, B. (ed.). 1861. *Ein Beitrag zur Handelsgeschichte der Stadt Augsburg. 26. Jahres-Bericht des historischen Kreis-Vereins im Regierungsbezirke von Schwaben und Nürnberg f. das Jahr 1860*. pp. 1–76.
- Rathmeisters Spittendorff. Opel, J. 1880. *Denkwürdigkeiten des hallischen Rathmeisters Spittendorff (Geschichtsquellen der Provinz Sachsen und des Freistaates Anhalt, 11)*. pp. 1-464 (<https://archive.org/details/denkwaerdigkeite00spit>, <http://archive.org>)
- Lupold von Wedel. Bär, M. (ed.): *Lupold von Wedel's Beschreibung seiner Reisen und Kriegserlebnisse*. nach der Urhandschrift herausgegeben und bearbeitet. Stettin 1895. Digitalisat available at ULB Düsseldorf: <https://digital.ub.uni-duesseldorf.de/ihd/content/structure/2250839>