

The perfect expression Why the preterite was lost in Southern German

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Abstract: The paper draws attention to the dominance of perfect in commercial books between 1400 and 1500. We find use of perfects up to 100% in merchants' account books in the South, and perfect expansion into personal diaries, family chronicles and other self-documents. These findings offer the basis of a new pragmatic explanation of the preterite loss in Southern German varieties. I argue that new accounting techniques were trained at and transferred from Northern Italy, which led to perfect expansion among speakers in trade. After reanalysis, the new perfect morphology with a preterite meaning spread in the speaker community. The analysis not only can explain the perfect dominance in merchants' writings, it is also supported by extralinguistic facts about Medieval trade in Germany and Central Europe.

1 The case

In Old High German (OHG) and other Germanic languages, the preterite was the only grammatical form to refer to the past. The earliest sources show how the perfect emerged after 800 (Oubouzar, 1997). Gaining ground in Germanic and Romance languages, the perfect today offers a second verb form for events in the past, where the delineation between preterite and perfect is drawn slightly differently in different Germanic and Romance languages (de Swart, 2007). Southern German varieties however draw the lines radically differently. In Bavarian, Alemanic and Swabian the extension of the perfect has reached a new extreme and is today the only grammatical form to report events in the past.¹ The mental grammars of native dialect speakers no longer include morphological forms for the preterite, to the exception of preterite of *sein*. The preterite has gone extinct.

The present paper investigates how and why the Southern Germans lost the preterite. I defend the hypothesis that a specific purpose of writing, namely 'writing as book-keeping', boosted the use of the perfect and could be the triggering factor for the preterite extinction. The hypothesis rests on the pragmatic structure of text for book-keeping and is supported by areal distribution and the timeline of the preterite loss. Most importantly, it can explain how the tense use in sources correlates with writers' backgrounds and text types.

The written record suggests that here was a time when all speakers of German, North or South, rich or poor, educated or lay, used the preterite exclusively. Early sources show how writers around AD 800 experimented with the newly emerging perfect. This is an early example.

- (1) *Phigboum* *habeta* *sum* *giflanzotan* *in* *sinemo* *uuingarten*
Figtree had some planted in his winyard

¹ I include compound forms such as plusquamperfect, double perfect and future perfects.

(Tatian: 102,2)

The participle *giflanzot.an* ('planted' + *an_{ACC}*) agrees in case with the object DP *phighboum* ('figtree' + \emptyset_{ACC}), indicating that (1) was a modifying construction rather than a complex verb (Oubouzar, 1997). Likewise, writers experiment with different verbs with the sense 'to own, possess' to serve as an auxiliary. Otfrid's *Evangelienharmonie* (830) and later authors up to Notker (c.1000) alternately use *haben* ('have') and *eigan* ('own') in emerging perfect constructions. Finally the notion of 'possession, ownership' is gradually lost.

(2) *uuir eigun gesundot sament unseren forderen*
 we own sinned with our forfathers

(Notker Labeo, ca. 1000)

The intransitive verb 'to sin' in (2) entails no potential object of ownership, which shows us that *eigun* in (2) is used in a bleached sense. According to Oubouzar, the perfect of ModHG was established by Luther's time in 1500. In essence, the perfect originated in scholarly language and educated register.

Lindgren (1959) tentatively locates the time of preterite loss in South German between 1500 and 1530. However, there is evidence that in some areas the loss was already completed by 1470 (4.1.1). While the loss is intensely discussed in the literature (Dal, 1960; Jörg, 1976; Dentler, 1997; Fischer, 2015 a.o.), all proposed explanations face serious criticisms (Fischer 2017, 2018). The present paper defends a new triggering factor.

The paper is structured as follows: Section 2 reviews earlier explanations of the preterite loss, focusing on the *oral/psychological* explanation (defended in the 1950ies), the *information structure* based account (Abraham & Conradie, 2001), and the *areal analysis* (Drinka, 2017). Section 3 presents the use of perfect vs. preterite of one particular author, Albrecht Dürer, and discusses the correlation between the use of perfect and the purpose 'writing as book-keeping'. Taking this as our model case, section 4.1 hypothesizes that (a) perfect use should correlate with certain text types, (b) perfect use should correlate with writers of a specific social background, profession and education. Further evidence comes from chronicles and merchants' books (4.2) and the results of a pilot study (4.3). Extralinguistic evidence is provided in 4.4. which explains the areal distribution of preterite loss (Drinka, 2017), as well as the German South/North divide. Section 5 offers a formal account for the preterite loss. Section 6 summarizes.

2 Earlier Literature

2.1 Lindgren 1959: The WHEN

Kai Lindgren was the first to undertake a large scale corpus study on the preterite loss, and his findings were corroborated by more recent studies (Zeman, 2010; Fischer, 2018, 2019). Starting from a large corpus of texts between 1300 – 1600, and ModHG sources for comparison, he counted the first 2000 verb forms in each source that refer to the past (i.e., preterite, perfect, plusquamperfect). The corpus includes authors from South and other areas and covers diverse text types including novels, plays, sermons, chronicles, diaries and other. For all texts he computed the ratio of preterites, perfects and plusquamperfects per verb forms referring to the past. He reports three main correlations.

The oral-written divide

Sources at all times up to the Modern High German show that the perfect dominates in oral language whereas the preterite prevails in written language. Lindgren reports the following numbers: In non-oral text (i.e. text not representing an oral utterance of someone) the ratio

preterite : perfect is about 95% : 1%.² In passages or texts that reflect oral speech (e.g., sermons or direct speech in novels), the preterite/perfect ratio is about 50% : 50%. Numbers are the same in all texts before 1500 as well as in all texts in Standard German after 1500 up to the present. We can therefore conclude that the preterite was the most common form in MHD written text and remained so in Standard and Northern varieties. Oral communication, in contrast, always invited and invites speakers to choose the perfect.

The timeline of Augsburg Chronicles

Lindgren's count in the Chronicles of the city of Augsburg yield the following.

In the years before 1500, the preterite dominates by 95%. The counts between 1500 – 1530 yield varied language use and tend towards a 50% : 50% ratio for preterite vs. perfect. In the Chronicles after 1535, Lindgren reports almost exclusively perfect tenses of verbs.

Southern novels, diaries and travel reports

Between 1460 – 1530, the preterite dominates by 95% in texts by authors from South Germany. In late Southern texts between 1530 – 1600 Lindgren reports variable uses, in part almost exclusively perfect but in part also exclusively preterite. Hence, there is no consistent correlation between an author's provenience and preterite loss. Lindgren hypothesizes that scholarly/clerical education of the author may influence language use, as in the (preterite) chronicle written by a nun in Villingen by 1637. A similar instance is the Reichenau chronicle by Öheim of Reichenau*³ written around 1600. Both clerical authors, although geographically rooted in the South, consistently use the preterite.

2.2 The oral/psychological explanation

One popular explanation assumes that the decline of preterite spreads from oral communication into written text as writers carelessly write as they speak. Lindgren (1959) hypothesizes that southern writers extended the "Redeweise des intimen Familienkreises und der ungezwungenen Unterhaltung" ('register of intimate family circles and easy conversation') to written text, ignoring the more formal registers of writing. Two facts, however, stand against this claim. First, even in oral language of the intimate family circle, we'd expect a 50% : 50% distribution of preterite/perfect rather than the complete loss of one form. Second, it is unclear why speakers in the South should fall victim to this temptation whereas Middle and Northern Germans resist.

A slightly different version of the explanation starts from the observation that the perfect relates past events to the present whereas the preterite conveys a distanced view on the past (see also §3.1). Speakers who over-use the perfect thus show a „Tendenz zum Haften an oder zur Beziehung auf die augenblickliche Gegenwart“ ('tendency to stick with the momentary present') and are disinclined to take a distanced view with "little affective involvement" (Wunderlich 1901; Trier 1965; quoted after Fischer, 2018: 349). In other words, Southerners live in the here and now whereas Northern speakers take a more distanced view on history.

Again, there are objections. For one, the oral-to-written hypothesis assumes what it aims to explain. MHG and ModHG speakers wouldn't associate the perfect with intimate family conversation simply because there is no register correlation. In fact, the further we go back in time, the more the perfect must have signaled the scholarly register of Otfrid or Notker. Thus, the claim that perfect *per se* indicates spoken language is unbacked.⁴

² Percentages missing to 100% are due to occasional occurrences of preterite forms.

³ Sources marked by * are novel, i.e. not covered by Lindgren or any other literature on the preterite loss as far as I know. These are also marked in the references, to facilitate readers' follow-up studies.

⁴ The uses of perfect in written sources between 800 and 1000 show a typical grammaticalization record with different potential auxiliaries (*haben, eigan*), bridging contexts (see (1)) and actualization (the spread of the construction from potential possession use to clear tense use). This could either show that the entire speaker community (in the South? or everywhere?) was about to grammaticize a new perfect tense, or it could indicate that specifically scholarly writers bended OHG possessive constructions toward the Latin *habere* perfect. While either course of events is possible in principle, I maintain that the latter is more plausible. But even the first hypothesis

How about the North-South divide? We may suspect that the hypothesis gains plausibility from tacit stereotypes of southern and northern speakers. Whereas southern speakers are often perceived as rustic, joyful but childish and not caring much about formality or manner, northerners are described as stiff, formal, thoughtful and distanced (Obschonka et al. 2019). The oral/psychological explanation seems to corroborate the stereotype. Yet, there is no scientific study that would prove any psychological differences between Germans living in the North or South. Taking away the unbacked stereotype, we find that the oral/psychological explanation has nothing to say about the areal distribution of the preterite loss.

2.3 Information structure

The only pragmatic explanation to date was proposed by Abraham and Conradie (2001). Linguists working on German agree there are two verbal positions in the German clause, one at or near the beginning, the other at the end. The clause-final position of the verb is the basic position, whereas main clauses have a finite verb moved to the initial position. These two positions form the so-called “sentence bracket” typical for the syntax of German sentences. Abraham and Conradie propose that constructions that highlight the two verbal positions will facilitate processing and the expression of information structure. According to their view, the perfect is superior to the preterite, as the perfect uses both auxiliary and lexical verb and thus marks both early and late verbal position. The authors maintain that for some (though not all) areas in Germany this was sufficient for speakers to prefer the perfect, which led to the preterite loss.

We may however doubt whether sentence structures facilitate processing where a central element of the clause, the finite verb, is encountered relatively late. Psycholinguistic studies show that German speakers’ short term memory is better trained to parse head-final structures in comparison to speakers of other languages (Vasisht et al., 2010; Frank & Ernst, 2019). While German speakers can still process sentence with a late main verb, speakers with English as L1 have more difficulties in parsing head-final structures of comparable complexity. This shows that, if anything, verb-final clauses are harder to process, hence the training effect. The psycholinguistic results match learners’ intuitions as voiced in Mark Twain’s famous essay *The Awful German Language*.

As a second objection, the processing hypothesis can not account for why only Germans in the South saw the supposed benefit of the structure. Neither can it explain why other European varieties also suffered preterite loss, even though their languages do not show similar syntactic structures. This leads us to the *language contact hypothesis*.

2.4 The language contact hypothesis

Southern Germany is only part of a larger area spanning over central France, West and South Germany to Northern Italy where we see preterite loss. Drinka (2003, 2004, 2017) aims to establish a timeline according to which French in the Île-de-France area was the first to show preterite reduction, closely followed by South-West Germany and Northern Italy. She also argues that micro patterns in the perfects of Southern Germany and Northern Italy coincide. Drinka moreover proposes that Northern Germany, having less contact with Romance languages, retained the preterite. While later studies have challenged Drinka’s *France to Italy* expansion scenario (Sapp, 2009; Fischer, 2018: 358) the areal distribution of preterite loss is another fact that the best explanation should account for.

While the areal distribution will be crucial for my hypothesis, it does not in itself explain the preterite loss. For one, language contact usually leads to transfer of content vocabulary

presupposes what it is supposed to explain, namely that oral OHG for some unknown reason preferred the newly emerging perfect.

whereas the borrowing of grammatical structures is much rarer. But even if we assume that German borrowed the over-use of the perfect from some neighboring Romance language, why not did Germans imitate other prominent features as, e.g., pro-drop, negative concord or SVO syntax? Finally, the language contact hypothesis defers the question from German to Italian / French: Why did those speakers over-use the perfect at cost of the preterite? To conclude, the areal extension offers a further important piece in the puzzle, but it is not in itself an explanation.

2.5 Other explanations

The comprehensive survey in Fischer (2018) recapitulates the documented spread of the preterite loss in Germany. Fischer also discusses and criticizes further explanations for the loss, based on phonology (*e*-apocope, syncope, overlap between preterite and subjunctive forms), morphology (overcomplexity of preterite, general restructuring of verb paradigms) and prosody. While she argues in favor of perfect expansion as cause for preterite loss, she doesn't identify new text types or a new kind of *Schreibanlass*⁵ that would explain the perfect expansion. I want to draw attention to a trigger of perfect use that has not so far been identified in the literature. The next section argues that book-keeping played a special role in 15th century language and thought.

3 A pragmatic approach to preterite loss

The perfect and preterite each contribute in specific ways to the meaning of a sentence. Speakers choose the form that fits their intended message. In the 15th century, rising global trade generally required literate merchants, but also increased the numbers of merchants' diaries and book-keeping (*Handelsbücher*, *Schuldbücher*, *Rekordanzen* etc.) These text types arguably require the use of perfect tense. In a next step, merchant writers started to extend the book-keeping frame to texts that could alternatively allow a narrative mode (i.e. preterite). This specific distribution of preterite/perfect will be illustrated in the writings of Albrecht Dürer in 3.2., after a brief introduction of the Reichenbach account of preterite and (present) perfect in section 3.1. Section 3.3. spells out a new hypothesis for the preterite loss.

3.1 The Reichenbach-type analysis of *preterite* and *perfect*

This section recapitulates the Reichenbach account of tense and aspect, which assumes that the temporal structure of an utterance is encoded by E (event time), S (speech time) and R (reference time, also sometimes called topic 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 having in mind the present ($R = S$). This is coded by the (present) perfect. In summary:⁶

- (3) *perfect*: $E < R$ and $R = S$ 'the speaker is concerned with the present. Earlier events E are reported as how they relate to the present S.'

preterite: E in R and $R < S$ 'the speaker is concerned with a time R in the past. In this time R, the reported event E happened.'

I maintain the German tense system with plusquamperfect (English *past perfect*), preterite (English *past tense*), perfect (English *present perfect*) and present. While the Reichenbach analysis was first proposed for English (Reichenbach, 1947; Hinrichs, 1986; Kamp & Reyle,

⁵ English scholars adopt the German *Schreibanlass* to denote "the specific impetus or catalyst for writing a diary, chronicle or similar accounts" (LEO, comment Feb 05, 2010). I assume that the impetus in part defines the form of text, as we see in section 3.2, and will use the term in the extended sense 'language use produced by a specific impetus'.

⁶ Other tenses/aspects will be disregarded. Likewise, I will continue to use *perfect* instead of *present perfect*, as the past perfect ('Plusquamperfekt') is not involved in the present study.

1991; Klein, 1994), the analysis also offers the baseline for the perfect in ModHG as well as MHG (Trier, 1965; Zeman, 2010; Fischer, 2018). While each Germanic variety shows different patterns in detail, most authors assume that these build on the same basic distinction between perfect and preterite (Rothstein, 2006; Musan, 2001; Rathert, 2004; Alexiadou, Rathert & von Stechow, 2003), an assumption that de Swart (2007) extends to Romance languages. I therefore adopt (3) as a basic analysis for the German preterite and perfect. Let us next see how they play out in the writings of craftsmen and merchants.

3.2 *Schreibanlass* and tense: Reading Albrecht Dürer

My core cases are the private writings of Albrecht Dürer between 1500 – 1525, which include travel reports, diary and chronicle.⁷ The present section surveys the distribution of preterite/perfect, section 3.3. offers a quantitative evaluation. I follow the order in the Reclam edition (Ullmann, 1978: 1–67); translated examples with annotated tenses are given in appendix II.

Dürer's short notes on the history of his family (pp. 13 – 16) show perfect and preterite in free variation (appendix (1)). Notably, the same type of event can be reported in different tenses. The death of AD's mother (p.16) is phrased in the perfect (*ist verschieden*), the death of his mother in law in the next paragraph in the preterite (*verschied*), and the death of the father in law (next paragraph) in the perfect again (*ist verschieden*). Dürer reports on relatives' life and sickness in both tenses in variation. We can hence assess that the choice of tense in this family chronicle does not follow any discernible patterns. The ratio of perfect : preterite is 38% : 62% (n=41:66).

The section *Gedenkbuch* (pp. 17-20) adds to the chronicle, in part overlapping with the events reported there. The ratio of perfect : preterite stays at 38% : 62% (n=31:50). The dominance of preterites in these parts shows that the author was in full command of both past tense forms.

Another major writing is the *Diary of a journey to the Netherlands* (pp. 21 – 65) written around 1520/1521. The initial part narrates how the party left Nuremberg towards Erlangen, overnight stays, side trips, meals and visits of prominent people on the way (pp. 21 – 26). Dürer almost consistently uses the preterite, which confirms that the author was in command of preterite in narration, as Standard German has it. We find rare uses of the perfect in reports on expenses for food or accommodation (see appendix II).

As Dürer settles for his first *Stay in Antwerp* (pp. 25 - 31) the perfect starts to predominate. In the entries he records his daily activities, where 'selling and producing sketches, etchings and paintings', 'receiving gifts' and 'being invited to meals' are the dominant topics. Dürer reports his gains and expenses, and being invited meant saving money for food. He had tally sheets for regular hosts to count the number of invitations. While he never comments on the food he was served, he mentions that he wanted to pay but the host would not have it (e.g. p. 33). Dürer's financial situation was precarious⁸ and he frustratedly comments at the end of the journey: "Ich hab in allen meinen Machen, Zehrungen, Verkäufen und andrer Handlung Nachteil gehabt im Niederland" ('all my doings, spending, sales and other activities were to my disadvantage in the Netherlands', p. 62). His notes on expenses, on the other hand, not only dutifully list losses in gambling, they lavishly include several spectacles (pp. 38, 42), parakeets cages (p. 32), *Meerkätzlein* ('monkeys', p. 45) and a tortoise (p. 49).

⁷ Page numbers refer to the 1978 Reclam edition. I omit Dürer's scholarly writings, in which the present tense predominates. The letters likewise are mostly in the present tense and confirm Lindgren's diagnosis that near-oral writings show little use of the preterite.

⁸ In the *Gedenkbüchlein* he laments several severe financial losses during his lifetime, and his earlier Venice letters to sponsors (1506) abound with apologies for his being unable to earn money.

The preterite re-appears when Dürer reports on smaller trips and the diary summarizes several days of travelling. His use of tenses comes close to ModHG in reports like *Der Ausflug nach Seeland* ('The excursion to Seeland') with a near capsizing of his ship (see appendix II). Here, Dürer's *Schreibanlass* visibly was the recollection and narration of events on the journey.

Some trips, however, were more memorable for sightseeing than for eventfulness. The *Visit in Mecheln and Brussels* (p.31/32) starts as a narrative in the preterite. However, when Dürer reports on 'what I saw' he consistently uses the perfect *was ich gesehen habe* ('what I have seen') over extended passages. This suggests that he conceptualized these impressions as immaterial gains in experience (appendix II).

Such outliers notwithstanding, the diary promises a systematic correlation between text type and tense (perfect/preterite). The next section shows that this impression is justified.

3.3 Quantitative analysis

The editor divided Dürer's travel diary in subsections which align roughly with *travel* parts and settled *stays*. The first reading impression suggest that these should align with the text types *narration* and *book-keeping* and thus use of preterite vs. present. The first count of PAST verb forms confirms this trend, but will need to be refined.

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

section (page numbers)	content	perfect	preterite
1 <i>Journey to Antwerp</i> (21 – 25)	travel	34 (13,7%)	214 (86,3%)
2 <i>In Antwerp</i> (25 – 31)	settled	74 (56%)	57 (44%)
3 <i>Visit to Mecheln and Brussels</i> (31 – 33)	see below	73 (89%)	9 (11%)
4 <i>In Antwerp again</i> (33 – 37)	settled	119 (98%)	3 (2%)
5 <i>Journey to Aachen ...</i> (37 – 41)	travel	114 (68%)	54 (32%)
6 <i>Third stay in Antwerp</i> (41 – 42)	settled	38 (93%)	3 (7%)
7 <i>The trip to Seeland</i> (42 – 44)	travel	28 (37%)	48 (63%)
8 <i>Fourth stay in Anwerp</i> (44 – 50)	settled	215 (96%)	10 (4%)
9 <i>Visit to Brugge and Gent</i> (51/52)	travel	12 (16%)	62 (84%)
10 <i>Fifth stay in Antwerp</i> (52 – 59) <i>excluding lamentation of Luther's death</i> (54 – 57)	settled	136 (92%)	12 (8%)
11 <i>To Mecheln again</i> (59/60)	travel	17 (68%)	8 (32%)
12 <i>Last stay at Antwerp</i> (60 – 64)	settled	154 (96%)	7 (4%)
13 <i>Journey back via Brussels and Cologne</i> (64 / 65)	mixed/travel	38 (48%)	42 (52%)

Sections 1, 7, 9 and 13 describe travels, and the preterite dominates. Checking the text, the high numbers of preterites indeed correspond to travel reports in a narrative mode. The Antwerp sections 4, 6, 8, 10 and 12 report on sedentary times, and the perfect dominates.⁹ The high numbers of perfects are due to book-keeping of gains and expenses as described above. However there are also mixed sections of either type (2, 3, 5 and 11), which require a closer look.

In sections 2 and 5 as well as the trip to Seeland (7), we see topic changes within the section. I categorized the sections by passages which I classed as "travel" and "gains and expenses" depending on the dominant topic. The two travel sections (5 and 7) include notes on gains and

⁹ I exclude a subsection that laments Luther's death and is predominantly written in the present tense, optative and subjunctive mood.

expenses on the way; the sedentary time in Antwerp (2) includes two extended narrative passages that report on a banquet in honor of Dürer, and the Antwerp procession on Ascension day. The subcategorization yields the following counts.

Table 2. Internal differentiations

section (pages)	perfect	preterite
2 <i>In Antwerp (25 – 31)</i>	74 total	57 total
<i>travel/events</i>	8	52
<i>gains and expenses</i>	66	5
5 <i>Journey to Aachen ... (37 – 41)</i>	114 total	54 total
<i>travel/events</i>	23	45
<i>gains and expenses</i>	91	9
7 <i>The trip to Seeland (42 – 44)</i>	28 total	48 total
<i>travel/events</i>	6	48
<i>gains and expenses</i>	22	0

The count confirms the trend that travels / events are reported in the preterite, whereas gains and losses typically trigger the perfect. The fine count also reveals that the correlation can be violated in both directions: Gains and losses in the preterite, and travel events in the perfect.

Outliers are the two journeys 3, 11 to Mecheln with surprisingly high ratios of perfect. A closer look reveals that these are not due to book-keeping. In these sections we find a high number of perfects that seem experiential, where Dürer notes impressive pieces of art and other curiosities he saw. This *Schreibanlass* is particularly prominent in the first journey, which led him to Brussels also (appendix II offers an example).

In order to compute the overall result counts, I sum up all *travel* parts and *gains/losses* parts, and exclude section 3 (“Trip to Mecheln and Brussels”) as a text type in its own right. The overall numbers confirm the high correlation between text type (*Schreibanlass*) and pre-dominating tense form.

Table 3. 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

3.4 Discussion

Dürer’s travel diary in part exhibits surprisingly regular uses of tenses that are in match with the semantic contribution of the preterite and perfect as described in 3.1. The travel passages witness that he was in full command of the preterite and perceived narration as looking back on a past reference time $R < S$. The perfect, on the other hand, dominates in the gains-and-losses sections, which is appropriate: Book-keeping is concerned with the effect of events (of spending, earning, producing) on one’s present stock of goods, hence $R = S$. The high numbers of perfect uses in itself is not an indication for a deteriorating system or preterite loss. They are due to a specific *Schreibanlass* that requires the perfect, and Dürer simply experienced this *Schreibanlass* very often.

Occasionally, we find verbs that are used, irregularly, in a form that patterns with the surrounding paragraph. For instance, expenses can be reported in the preterite in a travel passage, as on p. 65: *darnach fuhren_{pret} wir durch 2 Dörfer und kamen_{pret} gen Löwen, aßen_{pret} zu Morgen und verzehrten_{pret} 13 Stüber* (‘afterwards we drove through 2 villages and came to Leuven, ate

breakfast and **consumed** 13 Stüber’). Such uses could be classed as spill-over performance errors. As overuse occurs in both directions (too many preterites / too many perfects), spill-over cases do not establish a trend towards perfect over-use.

What stands out are the trips to Mecheln with a high number of perfects in travel report. Text type and tense choice seem in mismatch. The simple equation of type and tense, however, is inadequate. If we apply Reichenbach’s analyses in 3.1., we diagnose that R is the speaker’s subjective view on the events reported and Dürer seems to feel that his experiences were of lasting influence. Hence Dürer’s language is warranted by the rule and a hearer/reader of the passage must accommodate the perspective. However, a naïve listener may well have been unable to understand this. Following the principle of avoiding pragmatic overload (APO, Eckardt, 2009) such a listener could alternatively believe that the perfect, for this specific speaker, could be used as synonymous to the preterite. In terms of grammaticalization theory, the Mecheln section in particular shows an extended bridging context towards the reanalysis of perfect as a second simple past tense form (Diewald, 1991).

A note of clarification: I do *not* propose that Dürer’s diary triggered the perfect expansion or preterite loss. The diary was written around 1520 when, according to Lindgren’s survey, the preterite loss was well on its way. The next section moreover provides evidence that the loss had been completed in some parts as early as 1470. Dürer’s diary, however, exemplifies how he and his peers perceived and wrote about events in their world. His peer group were craftsmen, artists and merchants in the South of Germany. One major topic of his life was keeping track of expenses and earnings, a topic shared by his peers. This specific topic regularly triggered the use of the present perfect. And we may speculate that the topic invited speakers to conceive past events and states as immaterial assets.

4 Further Evidence

4.1 Hypotheses

We have assessed the use of perfect/preterite of one writer, Albrecht Dürer. How do his habits generalize, and what would we expect to find in further data? Certainly, not all documents from the South of Germany will show the same patterns. But his writings suggest that ‘many perfects’ in one passage may not be the same as ‘many perfects’ in another. We must hence distinguish between *perfect dominance* and *perfect expansion*. Perfect dominance we find in texts that regularly require the perfect. We saw that book-keeping is an important text type of this kind. An author shows perfect-dominance if s/he has left us a lot of book-keeping but could routinely use the preterite in other writings. Perfect expansion we find in texts that would allow or even require the preterite, but are nevertheless written in the perfect.¹⁰ The present paper defends the hypothesis that the preterite loss was due to perfect expansion in three phases.

- perfect dominance in text type produced with high frequency, due to new book-keeping practices in commerce
- perfect expansion by extending the frame of thought “book-keeping” to other texts
- reanalysis of perfects to preterite meanings, followed by preterite loss

This hypothesis predicts that we should find the following correlations.

First, we expect a strong correlation between the text type *book-keeping* and perfect dominance. This correlation follows from the standard semantics of the perfect and the nature of book-keeping and should hold without areal restrictions.

¹⁰ Dürer’s Mecheln journey thus shows perfect expansion. I don’t aim to speculate whether specific instances of perfect expansion are deliberate or not.

Second, persons who are engaged in book-keeping should be more likely to extend the use of perfect to other kinds of *Schreibanlass*. We therefore expect a correlation between perfect expansion and writers who are merchants and craftsmen as opposed to clerics, scholars, or writers in administration.

Third, we know that *education* diversified in the 15th century, with new schools geared at the needs of trade. Moreover, apprentices in trade were sent to Italy to be trained in new book-keeping techniques (Bec, 1967; le Goff, 1993; Pfothenauer, 2016; see 4.4). Traditional schools, run by the church, stressed the study of ancient languages and were more likely to raise pupils' awareness of grammatical forms in German. We therefore expect a correlation between conservative preterite use and clerical schooling.

Finally, what about the observed *North/South* divide? There should be a correlation between writers from the South and perfect expansion, but also between writers from the North and traditional preterite use. Given that global trade networks were ruled by the Hanes in the North of Germany as well as the southern centers in Augsburg, Nuremberg, Ravensburg or Strasbourg, the expected correlation conflicts with the fact that there are merchant centers in North and South. The areal perfect expansion in Southern German and Romance varieties (Northern Italy, Île de France), on the other hand, makes sense as these were closely connected by trade. We still need to explain why merchants in the North resisted the perfect expansion, and section 4.4. reports on extra-linguistic facts that could have blocked the preterite loss in the North.

4.2 Opportunistic finds

This section reports on opportunistic finds that support the present account but fall short of a comprehensive picture. One interesting source is the *Dacherchronik**, a chronicle of Konstanz written by *Gebhard Dacher* (1425 - 1471). While it is written predominantly in the preterite (nearing 100%) we see an abrupt change in the use of tenses when a second writer, Conrad Albrecht, takes over after Dacher's death in 1471. The parts written by Albrecht, spanning approx. 6 years, are practically exclusively written in the perfect. This shows that professional chronicle writers do not reflect the oral language in their community, but also that chronicles were a type of text with strictly regulated language use. Conrad Albrecht, like Dacher, was an administrative town writer but obviously untrained in the art of writing chronicles. Second, the chronicle includes three passages that report on Vlad III and are exclusively written in the perfect. Editors argue that these were copied from a *Flugschrift* that had originally been distributed among merchants in Eastern Europe (*Gebhard Dacher/Wolff*, 2008, introduction).¹¹ This confirms the correlation between preterite expansion and the profession of merchants.

Another interesting kind of source are the merchant diaries *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. Example (4), a habitual statement taken from a narrative passage (eminent visitors from Switzerland were taken out for meals), is rendered in the perfect even though it offers background information for an episode at a past reference time.

(4) *Doselb* het *man* *erlich* kocht.

¹¹ Interestingly the editors, being historians, do not even notice the abrupt change in grammar in these passages.

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.

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

Hence clear cases of perfect expansions occur, and it is to be expected that other remaining documents by merchants and craftsmen in the Basel-Konstanz area look the same.

4.3 A pilot study

The present account of the perfect expansion draws attention to merchants and craftsmen’s writings and diaries, i.e., sources that have not been included in research of the topic. Gabriele Janke (FU Berlin) in a project on “Selbstzeugnisse im deutschsprachigen Raum“ surveyed all edited autobiographic writings between 1400 and 1600. Her website lists 234 autobiographic sources by 178 authors. In a student project, we inspected texts by 12 authors, mostly from the South of Germany (1450 – 1600; the full list of authors and biodata is given in appendix III). As a result of this exploration, four patterns emerge.

1. When administrative writers write a chronicle, they use the preterite as the predominant or almost exclusive tense form.¹⁴ The list of relevant sources shows that preterites were pertinacious over times, not only in the North but also in the South: Kaspar Frey, Aargau (South, 1500), Rathmeister Spittendorf, Halle (North, 1474-1480), Georg von Ehingen (South, before 1508), Melchior von Osse, Saxony (North, 1541 – 1555, bishop elections), Gebhard Dacher (South, before 1471), Öheim von Reichenau (South, 1600), Georg von Ehingen (South, 1457 – 1508). The most notable instance is von Osse’s report of the bishop elections because von Osse’s diary almost exclusively uses the perfect otherwise.
2. Clerical and gentry authors perceive autobiography as a narrative mode requiring 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 ghost-writer), Rathmeister Spittendorf (educated official), and Lupold von Wedel (gentry, 1544 – 1612) in his warfare passages. None of these authors was a merchant or craftsman. Innovation indeed seems to spread from a specific social group.
3. 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.
4. The text type diary is susceptible to perfect expansion. Several writers consistently use the perfect in diaries. In the South, we found this for Lucas Rem (Augsburg), Adolf Echter von Mespelbrunn (Bavaria), Erhard Ratdolt (Augsburg) and Hans Ulrich Krafft (Ulm). In addition, two Northern authors left diaries written in the perfect: Lupold von Wedel and Melchior Osse. Osse, a government official in Saxony, even called his diary *Handelsbuch* (merchant’s diary). This shows that by the 16th century, the writing of diaries was perceived as an instance of book-keeping.

In this small-scale survey, authors were chosen randomly by students (mainly driven by the availability of online resources). Also, one student decided to choose the Swiss chronicle by Kaspar Frey. While a comprehensive survey should rest on a strategic selection of authors, we got nice chance finds such as Osse’s *Handelsbuch*.

¹⁴ “Form X predominates” means that we had to read on for several paragraphs before we found the contrasting form Y.

4.4 Extralinguistic evidence

This section reports on extralinguistic factors in support of the present analysis. Of particular interest are the time of preterite loss, the cultural links between Southern Germany and North Italy, and the social group where perfect rise and expansion started according to my hypothesis.

A first important development was the *rising literacy* among merchants from the late 14th century on (Bec, 1967). Writing was the new key skill in international trade as it allowed the protagonists to not only keep track of transactions, but also to communicate reliably and precisely over long distances. The *marchant écrivain* ('writing merchant') is an important topic in Italian history (Bec, 1967; le Goff, 1993) but we know that literacy also increased in other centers of commerce in Europe. This laid the basis for following developments.

While merchants all over Europe took notes of their transactions, trading houses in Northern Italy saw the benefit of *improving and standardizing techniques of accounting* in order to base their actions on solid data. Double-entry accounting was made widely accessible 1494 in a textbook on arithmetic by Luca Pacioli, but this is but the culmination point of more than a century of progress: The earliest known sample of modern book-keeping can be found in a diary written in 1340 in Genua (Penndorf, 1933: 47). Extant sources with advanced accounting can also be found elsewhere, as in the Tölner account book (1345 – 1350, Penndorf, 1933: 11). While these seem to be chance achievements by individual merchants, only Italian scholars aimed to systematize, develop and teach these techniques.

Technology transfer from Northern Italy to South Germany: Northern Italy was the Silicon Valley of the 15th century, and apprenticeship in trade included extended stays at Venice and other Italian towns for education. Penndorf observes that for South Germany at the time, Venice was the High School of trade. The presence of German students is documented as early as 1308 when sons of merchants were sent to the *fondaco dei Tedeschi* in order to learn grammar and arithmetic.¹⁵ Letters from Senior merchants to apprentices reiterate the imperative to practice writing (i.e., accounting) regularly and comprehensively (see appendix). The famous connections between Nuremberg and Venice were but one of many networks that linked Ravensburg, Augsburg, Konstanz, Basel and other centers in South Germany to Venice, Genua, Milano and Florence in Italy (Pfothenhauer, 2016; Tophinke, 1999; a.o.).

The *Northern networks for education* were organized very differently. The Hanse merchants cooperated more closely with Bergen, London, Brügge, Nowgorod and other places in northern Europe, and accounting apparently never was a topic in education.¹⁶ Tophinke (1999:78) affirms that "Northern cities oriented to Flanders and England, whereas Southern German cities followed Italy, South Western cities Burgundy." The different educational practices are also reflected in the fact that only Southern Germany and Italian publishers issued systematic teaching materials and textbooks to educate merchants (Hooek & Jeannin, 1991; Hooek, 1991)

The *number and quality of extant books* offers another indicator of the different status of accounting. Penndorf (1933) undertakes a comprehensive North-South comparison of documents (known at his time) and reports that the remaining sources between 1300 and 1600 in the North are fewer and often of poor quality. The Italian double entry accounting was never widely

¹⁵ „Für Süddeutschland bildete damals Venedig die hohe Schule der Kaufmannschaft. Schon durch eine Urkunde vom 1. August 1308 weist Simonsfeld die Anwesenheit deutscher Kaufmannsöhne, welche die Grammatik und das Rechnen lernen wollten, auf dem *fondaco dei Tedeschi*, dem deutschen Kaufhause in Venedig, nach.“ (Penndorf 1933; 47).

¹⁶ Der hanseatische Kaufmann des Mittelalters erlangte seine Ausbildung vielfach in den Kontoren der Hansa zu Bergen, Brügge, London und Nowgorod; besondere Hinweise auf den Unterricht in Buchhaltung habe ich jedoch nicht ermitteln können. (Penndorf 1933, 40) 'The medieval Hanse merchant was trained in the Hanse contors in Bergen, Brügge, London and Nowgorod; I couldn't find any references to instructions on book-keeping.'

adopted, to the long-term disadvantage of the Hanse (Irsigler, 1973: 312; Stromer, 1973: 336). In the South, more accounting books remain, and many of higher professional standards.

While Northern documents have not so far been analyzed in their use of tenses, historians diagnose that these often read more like experience narratives than accounts. The Lubeck tradesman Hinrich Dunkelgud starts his account book in 1479 with the report on a pilgrimage to Santiago de Compostella. Afflerbach (1993) finds that Hanse merchants simply were not very inclined to write things up. Their disinclination may have been encouraged by the Hanse practice to have important transactions professionally recorded in the *Stadtbuch* ('town book'), a public service provided for all merchants.

Finally, if the perfect expansion and preterite loss originated in the language of merchants and craftsmen, *sociolinguistic factors* would support its spread. Merchants and craftsmen were a highly prestigious and influential social group in town society (le Goff, 1993; Tophinke, 1999). In this respect, North and South of Germany, as well as other town societies in Europe all were alike. Hence talking and writing like merchants would mean imitating a prestige variety, a well-established driving force in language change.

In summary, rising literacy, standardized techniques of accounting, education and technology transfer, the high importance ascribed to accounting, and social facts together support the hypothesis that the perfect rise and expansion, and the ensuing preterite reduction and loss were initiated in the language of Southern German merchants and craftsmen. The next section retells the development in terms of grammaticalization.

5 Analysis

At **stage 1** of the development was a grammatical system where two forms to express past events, perfect and preterite, coexisted and were used in different contexts as described in 3.1. Let us call this the stage 1 grammar. According to this grammar, some texts and types of *Schreibanlass* clearly required the preterite, some the perfect, and some (or even many) would allow both forms.

In **phase 1**, a specific kind of text gained more and more importance for part of the speaker community, let us call them 'the merchants' for simplicity's sake. The *Schreibanlass* – taking notes about transactions – can be perceived as a kind of narration or as a report on events that are relevant for the merchant's *now*. However, as more and more merchants understood that book-keeping is a way to account for one's present economic situation (with R=S), the choice of perfect became more and more mandatory. Historical sources show how book-keeping was more and more written in the perfect tense. At the same time, book-keeping was becoming an ever more central activity in merchants' lives. Both trends together establish what we called *perfect dominance* above. Within the group of merchants, more and more text was written in the perfect. Oral communication, where the perfect predominates anyway, may have mirrored the dominance. Nevertheless, these speakers' grammar was still in stage 1.

In **phase 2**, merchant speakers would extend the book-keeping frame to other reports of events in the past, and use the present perfect.¹⁷ The use of perfect is licensed when the speaker is thinking about the present, and how a past event relates to *now* or is of relevance for *now*. The study of Dürer's notes show the experiential perfect as a way of expansion. Births and deaths in families could be viewed as gains and losses, as opposed to the earlier perception as "events at past times R". Studies of the present perfect today illustrate that there are many more ways in which the perfect scheme (3.1) can be instantiated (see for instance Schwenter's *hot news* use of the English perfect [Schwenter, 1994]). Overall, such occasions further increased

¹⁷ The term *phase* should, of course, not be misread as non-overlapping intervals. Perfect dominance remains even when speakers extend the use of perfect. There could also be early extending speakers and late conservative speakers. The term *phase* refers to the long-term trend.

the number of uses of the perfect. In all these cases the speaker had a viable alternative option, the preterite. I therefore call such uses *perfect expansion*. A hearer needed a certain amount of mind reading in order to find out why the use of the perfect was justified. In other words, he encountered a pragmatic overload (Eckardt, 2009). Let us recall that expansion and dominance can be told apart cleanly. For a listener who believed that an accounting book was telling adventures of the past, the perfect use would need extra justification even there. What is important is that the frequency of perfect uses was rising that were potentially unjustified.

This led to **phase 3** where bridging contexts occurred (Heine, 2002; Diewald, 2002, 2006). In a bridging context, a listener/reader witnesses a sentence *T* in the perfect and can interpret it either conservatively or innovative. *T* can be either part of stage 1 grammar with unexpected motifs for the speaker to set $R=S$. Or the listener can hypothesize that *T* is part of a stage 2 grammar of this particular speaker, where the perfect is synonymous to the preterite (i.e., $R<S$ and E in R). Bridging contexts are important for grammaticalization as they explain how grammar can change in a language shared by all speakers.

Perfect dominance and expansion was most frequent in the group of merchants. We hence expect that bridging contexts occurred when outsiders listened to merchants talking. The newly hypothesized rules for perfect were thus seen and imitated as part of merchants' language, which is sociolinguistically plausible and leads to a spread of stage 2 uses of the perfect. Another, slow but reliable way to spread the new perfect meaning went via first language acquisition in a household where adult language was shaped by perfect dominance and expansion. Both processes conspire to lead to the spread of **stage 2 grammar**.

At stage 2, the meaning of perfect and preterite are identical, but the perfect is much more popular – to the exception of a few verbs (modals and *sein* were particularly resistant to preterite loss, see Fischer, 2018). Preterite forms are no longer acquired into the lexicon of language learners. The new grammar marks verbs in a way that still *looks* like the perfect but has acquired the meaning of the preterite. In addition, the system retains the perfect in its old sense (3.1). We expect further semantic developments in consequence. Synchronic investigations of the perfect in Southern German show new forms like the double perfect which inspire much ongoing research (Koenemann et al., 2011; Brandner et al., 2012; Larsson & Brandner, 2014; Zibatov & Weskott, 2018). The exclusion of synonymous forms led to an overall simplification of the tense system, which is however beyond the limits of the present study.

The present analysis suggests that language internal and sociolinguistic factors conspire in bringing about the preterite loss (Labov, 1994; 2001). While language external developments (trade, development of accounting techniques) change the frequencies of text types and *Schreibanlass*, the choice of forms is still in accord with traditional grammar in phases 1 and 2. Reanalysis took place when speakers of other social classes attributed a new grammar to the group of merchants. The supposedly *novel* variety that, in fact, only existed in the eyes of the perceivers, then was imitated as a prestige variety by more and more speakers.

The grammaticalization cline predicts that merchant language in other languages could trigger similar developments, given that the central factors are given: The language must have the perfect-preterite opposition; merchants should have a similar concern for accounting and similarly high prestige. This plausibly could have happened in Northern Italy. Italian varieties in the North also lost the preterite forms in the 15th century (Drinka, 2017) and turned into perfect-only languages. Southern Italy didn't host major centers of trade, and Southern Italian varieties have maintained the preterite till today.¹⁸ It would be fascinating to evaluate Italian merchants' documents for their use of tenses in order to see whether Italy indeed exhibits the mirror case of Germany. It is open, though, how the account extends to the developments that Drinka attests for French in the Île-de-France area and the Ripuaric area on the German side.

¹⁸ According to Italian colleagues, the preterite is being slowly lost in a North-to-South wave, with rural areas in the South showing the richest tense/aspect systems.

6 Summary and Outlook

The proposed analysis of the preterite loss in Southern German varieties improves upon earlier accounts in the following points: It offers an explanation for the areal distribution in Germany (the North-South divide) as well as between Northern Italy and South Germany. It can also explain why cultural contact to Italy led to this particular shared grammatical feature rather than to general grammatical alignment. The orality theory (2.2), the information structure theory (2.3) and accounts based on paradigm regularization and restructuring (2.5) have nothing to say about this.

The proposed analysis also naturally transfers to the Italian North-South divide with preterite loss in the (mercantile) North and preterite retention in the (rural) South. The orality theory would lead us to expect that the preterite loss takes its start in the South (with lower education) and progresses towards the North. This is not the case.

Like earlier pragmatic explanations (Fischer, 2018), the present account assumes that a group of speakers were more concerned with the *now* and less inclined to take a distanced perspective on past events (Trier, 1965; quoted after Fischer). However, this preoccupation with the present is no longer presented as an unexplained ethnological trait of people in the South. It can be explained as a specific world view of specific speakers triggered by specific professions, supported by historical facts. Sociolinguistic dynamics support the spread of perfect expansion from a prestigious group of speakers.

Finally, we identified a specific text type that shows preterite reduction and perfect dominance, earlier than any other source. Documents for accounting do not normally attract the interest of linguists, or philologists. They certainly are a dry read. But in this case, they may tell us more about people's thoughts and interests than most other sources.

The present study is but the first step of a comprehensive investigation which should include a systematic evaluation of tenses in Hanse documents between 1300 and 1550, as well as systematic probing of self-documents in the German speaking world before 1550. In the Romance area, the use of perfects and preterites in merchant books in Italy could confirm, modify or challenge the present proposal. The preterite loss around the Western centers of trade in Paris and Cologne remains to be investigated.

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Appendix I. Examples from Dürer

Family chronicle (pp. 13 – 16)

about the death of AD's mother (p.16)

[*extended temp. modifier*] *im 1514 Jahr, nach Empfahung des h. Sakraments, ist_{perf} sie christlich verschieden, zwo Stund vor nachts, der ich selbst vorgebet hab.*

'...in the 1514 year, after reception of the hl. sacraments, she died in God, two hours before night, who I myself spoke the prayers.'

about the death of mother in law (p.16):

Darnach im 1521 Jahr am Sonntag vor Bartholomäi (...) war mein liebe Schwieger, die Hanns Freyin, krank. Darnach am 29. Tag des Herbstmonats, nach Empfahung der h. Sakrament, verschied_{pret} sie in der Nacht zu der neunten Stund nach der Nürnberger Uhr.

'Afterwards in the 1521 year on Sunday before Bartholomew, was my dear mother-in-law, Hanns Freyin, ill. Afterwards on the 29th day of the harvest month, after reception of the hl. sacraments, she died in the 9th hour according to Nuremburg time.'

about the death of brother-in-law (p.16):

Darnach als man zählt 1523 Jahr, an Unser Lieben Frauen Tag (...) ist verschieden_{perf} Hanns Frey, mein lieber Schwäher, der bei sechs Jahren krank was_{pret} und der auch in der Welt gleich unmüglich Widerwärtigkeit erduldet hat_{perf} (...).

'Afterwards, as one counted 1523 years, on Our Blessed Lady's day, died Hanns Frey, my dear father in law, who was almost six years ill and who also suffered severe difficulties in the world ...'

Trip to the Netherlands (pp. 21 – 67)

The journey begins (p. 21, preterite dominates)

Und do wir desselben Tags auszogen_{pret} durch Erlang, do behauseten_{pret} wir zu nachts zu Baiersdorf und verzehren_{pret} daselbst 3 Pfund minder 6 Pfennig. ... Von dannen führ_{pret} ich geng Bamberg und schenkte_{pret} dem Bischof ein gemalt Marienbild (...). Der lud_{pret} mich zu Gast, gab_{pret} mir ein Zoll- und drei Fürderbrief und löset_{pret} mich aus der Herberg, do ich bei einen Gulden verzehret hab_{perf}.

'And as we went off via Erlangen on this day, we stayed at Baiersdorf at night and spent 3 *Pfund* less than 6 *Pfennig* there. ... From thence I went to Bamberg and gave the bishop a painted picture of Maria (...). He intived me as a guest, gave me a toll letter and three letters of recommendation and met my bill at the hostel, where I consumed almost one *Gulden*'s worth.'

Being settled at Antwerp (p. 27):

Item hab_{perf} abermal mit den Portugales gessen. ... Item Sebald Fischer hat_{perf} mir zu Andorff abkaufft 16 kleiner Passion pro 4 Gulden. ... Item zum andernmal hab_{perf} ich den Felix, Lautenschläger, konterfeit. ... Ich hab_{perf} ein Visierung (Zeichnung) mit halben Farben den Malern gemacht. ... So oft hab_{perf} ich mit dem Tomasin gessen: jjjjjjjjjj. ...

'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. I made a painting with half-colours for the painters. ... So many times have I eaten with Tomasin: jjjjjjjjjj.'

Trip to Seeland (p. 43)

Aber zu Armuyd, do ich anfuhr_{pret}, do geschah_{pret} mir ein großer Unrat. Do wir am Lande stießen_{pret} und unser Seil anwurfen_{pret}, da driing_{pret} ein großer Schiff neben uns so kräftig, und was_{pret} eben in Aussteigen, also daß niemand dann ich, Görg Kóczler, zwei alte Weiber und der Schiffmann mit einen kleinen Buben in Schiff blieben_{pret}. ...

‘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 Kóczler, two old women, and the skipper with a small boy stayed on board. ...’ (The three men, two of whom had never sailed, had to raise sails to stabilize the ship.)

Visit at Mecheln and Brussels: Gains in experience (pp. 31–32)

Ich hab gesehen_{perf} zu Prüssel im Rathaus in der gülden Kammer die 4 gemalten Materien (...) . Auch hab ich gesehen_{perf} die Ding, die man dem König aus dem neuen güldnen Land hat gebracht_{perf}; (follows a list of objects). Diese Ding sind_{perf} alle köstlich gewesen, daß man sie beschätzt um hunderttausend Gulden wert. Und ich hab_{perf} aber all mein Lebtage nichts gesehen, das mein Herz also erfreuet hat_{perf} als diese Ding. Dann (= denn) ich hab darin gesehen_{perf} wunderliche künstliche Ding und hab mich verwundert_{perf} der subtilen Ingenia der Menschen in fremden Landen.

‘At the town hall in Brussels, I saw the four painted Martyrs in the golden chamber. I also saw things that one brought to the king from the new golden country; (follows a list of objects). These things all were excellent, that one estimates their value at 100.000 *Gulden*. And I have never in all my life seen anything that delighted my heart as much as these things. Because I saw in them wonderful artful things and marvelled at the impressive ingenuity of men in foreign lands.’

Appendix II: From the Chronicle of Ludwig Kilchmann (p. 104)

Item uf samstag vor sant Matheus tag im 1508(sten) jor sind_{perf} min herren von Luczern und Wnderwalden kommen, un by 18 von Zwirig, und einer von Schicz und einer von Wury, und hend_{perf} brueder Friczen widern hengefert (...) und hend_{perf} dieselben gessen zu^om Brunen und uf der Schniden hu^oß und zu^o dem Saffren. Doseib het_{perf} man erlich kocht. (...)

,Item on Saturday before St Matthew’s in 1508 my masters came from Luzern und Unterwalden, and eighteen from Zürich, and one from Schwyz and one from Uri, and led home brother Fritz again (...) and these same ate (at) “Zum Brunnen” and “Auf der Schniden Huß” and “Zu dem Saffran”. There one used to cook fair food.’

Appendix III: List of authors and results of the pilot study (4.3)

	Author, written	Bio background	Tenses	Text type / Topic
1.	Lucas Rem <i>Augsburg</i> 1494 - 1540	mechant, education in Italy	perfect	autobiography (life as book-keep- ing)
2.	Georg von Ehingen, <i>Swabia</i> 1457 - 1508	knight, pilgrimage	perfect preterite	fam. chronicle travel to Jerusalem, war reports
3.	Dr. Johann Freymann v. Oberhausen <i>Bavaria</i> 1580 – 1600	lawyer, judge with aca- demic education	free variation	autobiography

4.	Dr Melchior Osse, <i>Sachsen</i> „Handelsbuch“ 1541 - 1555	administrative at court, Leipzig	perfect dominates occasional preterite narrative	regular dairy of events reports to duke e.g., election of bishop
5.	Hans Ulrich Krafft, <i>Ulm</i> 1614 – 1616	mechant educ. in Augspurg, 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	nobility, no connection to mer- chants, crafts	perfect, schematic listing of events	daily diary entires
8.	Täufer Georg Frell, <i>Chur</i> 1571 - 1574	cleric	free variation	life and travel
9.	Kaspar Frey, <i>Aargau</i> ≈1500	professional town wri- ter, chronist	preterite	chronicle
10.	Götz von Berlichingen <i>Suebia</i> before 1562	nobility, no connection to mer- chants, used ghostwriter	perfect preterite predo-mi- nates	introduction autobiography with temporal distance
11.	Erhard Ratdolt <i>Augsburg</i> 1462 - 1528	master printer at Augs- burg, educated Venice, father craftsman	perfect predo-mina- tes	autobiography
12.	Rathsmeister Spittendorf <i>Halle (Thür.)</i> 1474 – 1480	professional town wri- ter, chronist	preterite	chronicle reports diary

Appendix IV. Accounting as a focal skill for apprentices

From the letters of a senior Ravensburg merchant to their junior Leibfried in Barcelona (1478)

Luepffrid, da tenk und lauß dich merkenn und bisß woll emsig mit schriben und mit alla dinga, (...)
(Schulte 1923, vol. 3, 60)

‘Leibfrid, think and make yourself useful, and be industrious with writing and with all things...’

Report on a letter in 1448, in Penndorf

Und als der Nürnberger Kaufmann Christoph Scheurl im Jahre 1448 seinen Lehrling Hieronymus Haller (...) zur weiteren Ausbildung nach Venedig schickte, gab er ihm allerlei Verhaltensregeln mit. So sollte sich Haller u.a. nicht über Nacht auf sein Gedächtnis verlassen, sondern alles, was er handele, es sei mit Kaufen oder Verkaufen, mit den Banken, Bezahlungen oder anderen, von Stund an in sein Täfelein aufschreiben; was er nicht Muße finde, in sein Kapus (Warenbuch) oder Schuldbuch zu schreiben, wenigstens in sein Journal eintragen; wenn er so seinen Kopf geräumt habe, werden ihm der Schlaf und andere Dinge desto sanfter sein. (Penndorf 1933: 40)

‘When the Nuremberg merchant C. Scheurl in 1448 sent his apprentice H. Haller to Venice for further education, he didn’t leave him without good advice. Haller was not to rely on his memory over night, but to write everything he undertook, be it with buying or selling, with banks, payments or other, immediately on his notepad; whatever he lacked time to put down to the Kapus (register)

or Schuldbuch (accounts), he should at least write into his journal. Clearing his mind in this way, sleep and other things would then come all the sweeter.’