

The diachronic development of German *Irgend*-Indefinites

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Abstract The article investigates the diachronic development of *irgend*-indefinites in the German language. Most scholars assume that the particle *irgend* emerged from the Old High German form *io-wergin* with a locative meaning similar to *anywhere/somewhere*. We present the result of corpus studies covering Middle High German, Early New High German and Present Day German. In view of our findings, we conjecture four stages in the development of *irgend* from a locative particle to a modifier of an indefinite: (Phase 1) in Old High German till Early Middle High German the particle *irgend* is a non-specific existential expression with a locative meaning; (Phase 2) in Classical Middle High German the particle is still a non-specific existential, but is no longer necessarily locative; (Phase 3) in Early New High German the first indefinite modifier uses emerge expressing semantic variation; in this process the particle loses its existential force and keeps only non-specificity (semantic variation) as its lexical contribution; (Phase 4) the indefinite modifier acquires new functions and establishes its current wide distribution, which includes semantic variation (non-specificity) as well as pragmatic variation (ignorance effect). The article aims to offer some insights on how an indefinite emerges and extends its use to new functions and which steps might be necessary for such an extension of use. We conjecture that some bleaching in the lexical contribution of *irgend* took place during this development.

Keywords indefinites · diachronic development · semantic bleaching · corpus study

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1 Introduction

The article reports on a number of diachronic corpus studies we conducted to investigate the emergence and diachronic development of German *irgend-*indefinites. The point of departure of this research was Haspelmath’s (1997) typological survey of indefinite pronouns. Haspelmath identified 9 main functions for indefinite forms across languages. The English examples in Table 1 illustrate Haspelmath’s functions for indefinite forms (Haspelmath, 1997b).

Table 1: Haspelmath’s functions on the map

	Label	Example
SK	specific known	<i>Somebody</i> called: Guess who!
SU	specific unknown	I heard <i>something</i> , but I couldn’t tell what it was.
IR	irrealis	You must try <i>somewhere</i> else.
Q	question	Did <i>anybody</i> tell you anything about it?
CA	conditional antecedents	If you see <i>anybody</i> , tell me immediately.
CO	comparative	John is taller than <i>anybody</i> .
IN	indirect negation	John doubts that <i>anybody</i> knows the answer.
DN	direct negation	John didn’t eat <i>anything</i> .
FC	free choice	You may kiss <i>anybody</i> .

A function in this framework can be identified with a pair consisting of a syntactic context and a semantic interpretation. In order for an indefinite to qualify for a function, it must (i) be grammatical in the syntactic context the function specifies; and (ii) have the semantics that the function specifies. For example, *anybody* does not qualify for the specific functions SK and SU because it is ungrammatical in episodic sentences (see (1)), while *somebody* does not qualify for the comparative function, CO, or the free choice function, FC, because it does not have the universal meaning these functions specify (see (2)):

- (1) a. Somebody/#anybody called. Guess who? [SK]
 b. I heard something/#anybody, but I couldn’t tell what. [SU]
- (2) a. You may kiss anybody/# somebody. [FC]
 ‘For every individual x it holds that you may kiss x .’
 b. John is taller than anybody/# somebody. [CO]
 ‘For every individual x it holds that John is taller than x .’

Haspelmath organized the 9 identified functions in the implicational map as displayed in Fig. 1.

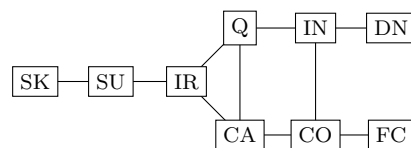


Fig. 1: Haspelmath's implicational map

A prediction of Haspelmath's map is that an indefinite form which has more than one function will always cover a continuous area. This adjacency requirement excludes for example indefinites which exhibit the free choice function [FC] and the conditional antecedents function [CA] but not the comparative function [CO]. The adjacency requirement makes not only predictions about possible indefinites in any language, but also about their diachronic development. Indefinites which acquire new functions will acquire those functions first which are adjacent to their original contiguous area (Haspelmath, 1997b, p. 63).

Haspelmath (1997b) identifies several constructions which give rise to indefinite forms in his diachronic research. He subsumes four cases under the label of grammaticalization: (i) The 'dunno'-type which has as source construction *I don't know wh-*, leading to specific indefinites, for example Middle High German *neizwer* 'somebody' based on *ne weiz wer* '(I) don't know who';¹ (ii) The 'want-please'-type which has as source construction *wh- you want*, appearing in free relative clauses leading to free choice indefinites, for example Latin *qui-vis* 'anybody' based on *vis* 'you want';² (iii) the 'it may be'-type like French *qui que ce soit* 'anyone' based on 'whoever it may be' leading to free choice indefinites;³ and (iv) the 'no matter'-type like French *n'importe qui* 'anyone' based on *il n'importe (pas)* 'it does not matter' also leading to free choice indefinites as original meaning.⁴ Further sources for indefinite pronouns which are not subsumed under the process of grammaticalization in Haspelmath (1997b) are: indefinite pronouns which combine with focus particles with the meaning 'even/also', primarily used in negative functions, and indefinites from the numeral 'one' or generic nouns, which are also restricted to negative functions.⁵

From Haspelmath's observations we can hypothesize that indefinites typically arise either in the specific area on the implicational map, or in the negative upright corner or in the free choice corner, but not in the middle of the map:

¹ (Haspelmath, 1997b, p.131)

² (Haspelmath, 1997b, p. 134)

³ (Haspelmath, 1997b, p.135)

⁴ (Haspelmath, 1997b, p. 140). For more details see (Haspelmath, 1997b, p.129–141).

⁵ We do not present a complete list, for more details, see (Haspelmath, 1997b, chapter 7).

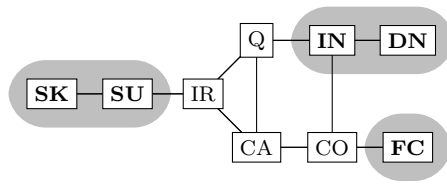


Fig. 2: Possible origins of new indefinite forms

In this article we investigate the diachronic development of German *irgend*-indefinites building on previous work of Fobbe (2004) and Jäger (2010). Fig. 3 illustrates the distribution of *irgend*-indefinites in Present Day German, as described by Haspelmath (1997b):

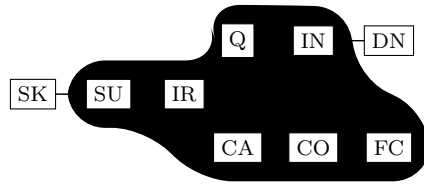


Fig. 3: *Irgend*-indefinites - synchronic distribution

As confirmed by recent synchronic corpus studies (Aguilar-Guevara et al., 2010, 2011; Aloni and Port, 2014), *irgend*-indefinites cover a wide area of Haspelmath's implicational map, including negative (IN) and free choice (FC) functions, and exhibit the SU function, but not the SK function and therefore are normally classified as *epistemic indefinites*, i.e. indefinites that obligatorily trigger speaker ignorance inferences (Alonso-Ovalle and Menéndez-Benito, 2003; Jayez and Toven, 2006, 2007; Aloni and Port, 2013; Aloni, 2012). Examples (4)-(7) from Haspelmath illustrate some of these uses:

- (3) Ich habe *niemanden* (*irgend*) *etwas* gesagt.
 I have *nobody* (*irgend*) *something* said.
 'I didn't tell anything to anybody.' (IN)
- (4) Dieses Problem kann IRGEND JEMAND⁶ lösen.
 This problem can *irgend somebody* solve.
 'This problem can be solved by anyone.' (FC)
- (5) Ich habe *etwas/irgendetwas* verloren, aber ich weiss nicht,
 I have *something/irgend-something* lost, but I know not,
 was.
 what.

⁶ SMALL CAPS indicate stress.

- 'I lost something, but I don't know what.' (SU)
- (6) Ich habe *etwas* (**irgend etwas*) verloren. Rate mal, was!
 I have *something* (*irgend-something*) lost. Guess PRT⁷, what!
 'I lost something. Guess what!' (SK)

Morphologically the emergence of *irgend*-indefinites cannot be directly subsumed under any of the cases of 'grammaticalization' previously classified by Haspelmath (1997b). Furthermore, given their wide distribution, *irgend*-indefinites could have originated in any of the three areas highlighted in Fig. 2, but also in the middle of the map. According to most scholars, the particle *irgend* emerged from the Old High German form *io-wergin* with a locative meaning similar to *anywhere/somewhere*.⁸ But how did this happen and in which area of Haspelmath's map did *irgend*-indefinites originate?

To answer these and other questions we conducted a number of diachronic corpus studies. The aim of this article is to report on these studies. All the collected data are accessible through an online interface that allows users to search for items annotated with particular functions and to download the data-set and/or the annotations.⁹

The article is structured as follows: Section 2 reports on previous diachronic studies and identifies four research questions. Section 3 and 4 describe the corpora used for the two diachronic periods Middle High German and Early New High German and the methodology adopted for the analysis of the data. Section 5 and 6 report on the results of our corpus study for each period respectively. Section 7 discusses the development of *irgend*-indefinites answering the four questions identified in section 2. Section 8 discusses the results taking competing indefinite forms into account and conjectures four stages in the development of *irgend*-indefinites until the current distribution in Present Day German was set. Finally, Section 9 concludes.

2 Previous research and outstanding questions

The German language has undergone a number of changes in history. The separation of different stages of German is still a matter of debate. Most of the diachronic literature entertains a structuring in three or four periods, where the period of Middle High German is further divided in three sub-stages, see Paul (2007). We will adopt a division into four periods.

⁷ The abbreviation PRT stands for 'particle'.

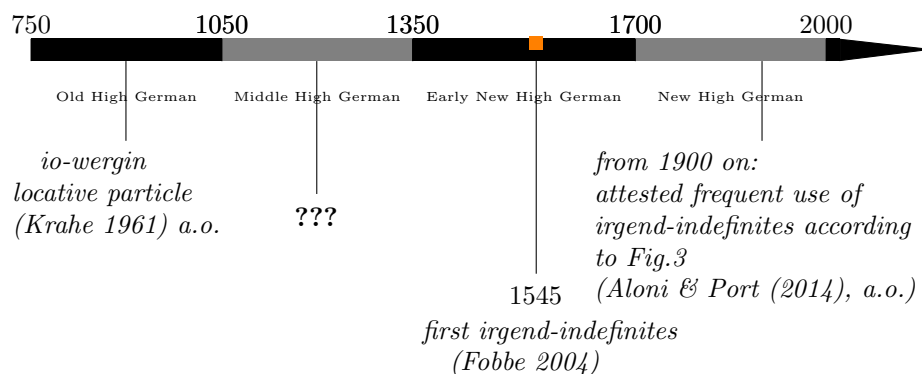
⁸ See for example Grimm and Grimm (1885), Lexer (1993) and Krahe (1961). Fobbe (2004) assumes the form *io-hwar-gin* as the Old High German form. Irrespective to the form, all authors assume that the Old High German form for *irgend* had a locative meaning, cf. Grimm and Grimm (1885), Ebert et al. (1993).

⁹ The online interface is accessible from <https://osf.io/z2j9e/>

Table 2: Assumed stages in the development of German

three periods		four periods	
Old High German	750 -1050	Old High German	750 -1050
Middle High German	1050 -1500	Middle High German	1050 -1350
– Early Middle High German	1050 -1170	– Early Middle High German	1050 -1170
– Classical Middle High German	1170 -1250	– Classical Middle High German	1170 -1250
– Late Middle High German	1250 -1500	– Late Middle High German	1250 -1350
New High German	1500 - present	Early New High German	1350 -1700
		New High German	1700 - present

As stated in the previous section, most scholars assume that the particle *irgend* emerged from the Old High German form *io-wergin* with a locative meaning similar to *anywhere/somewhere*. In our studies we will look at Middle High German and Early New High German to investigate the transition of *irgend*¹⁰ from a locative particle to an indefinite form. Given the few sources available from Old High German, we excluded this period from our investigation. The following time axis depicts what was known before we started the diachronic research:



2.1 Particle phase

Fobbe (2004) reports that during the period of Early New High German *irgend* loses its locative meaning and acquires a modal meaning.

Irgend, mainly modifies the determiner *ein*, most of all in non-specific contexts, and loses in this process its original locative meaning in favor of a modal one. (Fobbe, 2004, p. 256) (author's translation)

It is not entirely clear to us what exactly is meant by the term 'modal' in Fobbe's statement.¹¹ Furthermore, her statement implies that the particle lost its locative meaning after it was already possible to combine it with the

¹⁰ In the following we will refer to the particle as *irgend*, disregarding the variant spellings.

¹¹ The data were not accessible.

determiner. An alternative hypothesis would be that the ‘loss’ of the locative meaning preceded and was necessary/instrumental to the development of *irgend* to become a modifier of indefinites.¹² This leads us to our first two research questions: (1) When did the particle *irgend* start losing its original locative meaning allowing for non-locative interpretations and what are these non-locative interpretations? (2) How did *irgend* develop from a particle into a modifier of an indefinite form and is the process of losing its locative meaning connected to the development as a modifier of indefinites?

2.2 Indefinite phase

Fobbe’s study covers the whole range of German indefinites starting from Old High German. Her corpus is composed of German Bible translations from Greek and Latin from all four periods. As we said, the first occurrences she found for *irgendein* and *irgend etwas* are from the period of Early New High German, the source is the Bible translation by Luther. Fobbe found more than 100 occurrences in the whole Luther Bible and observed that *irgend* is used mainly to mark non-specificity. According to her study *irgendein* and *irgend etwas* showed the following distribution in Early New High German:

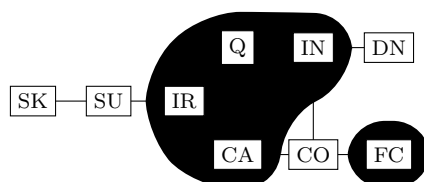


Fig. 4: *Irgendein* in Early New High German (Fobbe 2004)

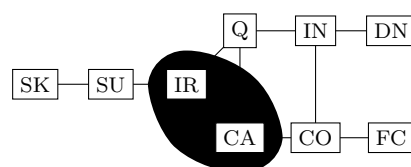


Fig. 5: *Irgend etwas* in Early New High German (Fobbe 2004)

As Fig. 4 illustrates, Fobbe’s attested distribution of *irgendein* does not cover a continuous area contrary to the predictions of Haspelmath’s implicational map. The indefinite exhibits the CA, IN and FC functions but not the CO function.

¹² As we will see, our data will support the second hypothesis.

It is clear that from the absence of such data nothing can be concluded. There are several possible explanations for it, for example the restriction to only one sort of text or the limited access to data as such. This leads us to our third question: (3) What kind of distribution do we find for *irgend*-indefinites in Early New High German if we extend our research to texts different from Bible translations?

Finally, Fobbe (2004) does not say anything about the original function where the *irgend*-indefinites emerged, which leads us to our last question: (4) In which area of Haspelmath's map did *irgend*-indefinites start their life?

To summarize, in this section we have identified four questions for the diachronic research:

1. When and how did the original particle *irgend* lose its locative meaning and acquired a new meaning?
2. When and how did the particle *irgend* become a modifier of indefinite forms? Are the loss of the locative meaning and the development of the indefinite use connected?
3. What does the distribution of *irgend*-indefinites in Early New High German look like? Does it cover a continuous area on the implicational map of Haspelmath (1997b)?
4. In which area of Haspelmath's map did *irgend*-indefinites start their life?

To answer these questions we conducted a number of corpus studies covering the two periods of Middle High and Early New High German. In the next two sections, we will provide information about the database and the methodology used in these corpus studies.

3 The corpora

3.1 Middle High German

For Middle High German, we collected data from two corpora.¹³ One is the Bochumer Middle High German Corpus (BC) which was not open to the public.¹⁴ The other source was the Middle High German Conceptual Database (MB).¹⁵ The BC includes 102 texts and contains about 1.000.000 word forms.

¹³ We started with the Bochumer Middle High German Corpus, unfortunately only 24 examples were found. To retrieve more, we decided to include the occurrences of the Middle High German Conceptual Database. Thus the corpus is not balanced with respect to register or dialects, because the latter corpus is not. In the following we report on some quantity results which are only presenting the distribution according to our corpus selection. This corpus study is understood rather as a qualitative than a quantitative study.

¹⁴ We thank Hans Joachim Solms, Aletta Leipold, Sylwia Kösser and Juliane Berger for giving us access to the database and helping with the query. The query had to be carried out manually which raises the possibility that we might have missed some occurrences for *irgend*. A description (in German) of the project can be found under http://www.germanistik.uni-halle.de/forschung/altgermanistik/mittelhochdeutsche_grammatik/.

¹⁵ The database can be found under <http://mhdadb.sbg.ac.at:8000/index.html>.

The MB includes 420 texts, containing 8.598.568 words. We found 109 occurrences¹⁶ in total for *irgend* in variant spellings,¹⁷ the distribution over the two corpora is displayed in table 3.

Table 3: Absolute occurrences in the corpora

corpora	occurrences	percentage
MB	85	77,90 %
BC	24	22,01 %
total	109	100,00 %

The oldest example for *irgend* came from the text *Hoheliedparaphrase* by Williram von Ebersberg and dates back to approximately 1060, the period of Early Middle High German. The context is a question:

- (7) “Sahet ir *ergen* m(Enen uune?”
 saw you *irgend* my paramour
 ‘Did you see my paramour somewhere?’

The next table displays the distribution of the occurrences according to the 3 periods of Middle High German.

Table 4: Total amount of occurrences over the 3 periods in MHG

period	MB	BC	in total (percentage)
Early MHG (1050-1170)	1	5	5,5 %
Classical MHG (1170-1250)	66	9	68,8 %
Late MHG (1250-1350)	18	10	25,7 %
	85	24	100,0 %

3.2 Early New High German

For Early New High German, we used the Bonner Early New High German Corpus (BNHG), which contains data from 1350-1700.¹⁸ Only 17 occurrences for *irgend* were found in this corpus. Further queries included the text corpus of Thomas Gloning¹⁹, several other available texts provided by Mediaevum²⁰

¹⁶ One identical example from the same source was found in both which counted only as one occurrence in the BC.

¹⁷ In both corpora *irgend* was subsumed under one lemma which had the advantage being able to find various spellings like: *irne*, *jergendt*, *irgen*, *yrgend* etc.

¹⁸ The corpus can be found under <http://www.korpora.org/Fnhd/>.

¹⁹ The electronic texts can be found under <http://www.uni-giessen.de/gloning/etexte.htm>.

²⁰ <http://www.mediaevum.de/haupt2.htm>

and other electronic resources provided by wikisource²¹. Table 5 summarizes the constitution of the sources we have used for Early New High German.

Table 5: Sources of the Early New High German Corpus

sources	occurrences	percentage
BNHG	17	28,3 %
other sources	44	71,6%
total	61	100,0 %

We turn now to the methodology we have used for annotating the diachronic data. We will employ three different levels for the annotation process as explained in the next section.

4 Methodology

In the following we explain the methodology adopted for the diachronic corpus studies of the two periods. As mentioned above, *irgend* started as a particle with a locative meaning, developing later into an indefinite form. Therefore, at our first level of annotation we labeled the status of *irgend* being a particle or an indefinite modifier. As an illustration, consider example (8) and (9). Example (8) illustrates the particle use of *irgend*, example (9) illustrates the indefinite use.

– particle:

- (8) Die schult ich vf jne selbs lege, Tritt er *irgent* unszer dem wege.²²
 the fault I on him self put, steps he *irgend* our the way.
 ‘It is his own fault if he gets in our way somewhere.’

– indefinite:

- (9) und sollen sie deßwegen nicht zu Rede gestellet/ noch
 and should they therefore not to self-justification asked/ nor
 unter *irgend einen* Vorwand beschweret werden.²³
 under *irgend a* pretence burdened become.
 ‘and therefore they shouldn’t be asked to justify themselves nor be burdened by any pretence’

Cases where it was not clear whether *irgend* was used as a particle or as an indefinite modifier were labeled as intermediate cases [IM]. The following example is a case in question, where the use of *irgend* is ambiguous:

²¹ Only examples where we were able to verify that the text in question is an original script from the period of Early New High German were included.

²² Diu Crone, approx. 1325, MB

²³ Käyserl. und Frantzösischer Friedensschluß, 1679

– intermediate case [IM]:

- (10) sahent ir *irgend* eynen ritter hie für ryten,²⁴
 saw you *irgend* a knight here for ride,
 ‘did you see a knight **somewhere** here riding’ [particle]
 ‘did you see **some** knight riding here’ [indefinite]

As the two paraphrases show, the use of *irgend* as a particle with a locative meaning and the use as modifying the determiner *eynen* are both reasonable interpretations.

Furthermore, whenever a particle use was found, it was annotated whether the particle had a locative meaning. Notice that we annotated the data in a conservative fashion meaning that as long as a locative meaning for the particle was possible, it was annotated as such. Example (8), repeated here as (11), illustrates a case in which a locative meaning for *irgend* is possible, though other readings are also available:

– particle, locative:

- (11) Die schult ich vf jne selbs lege, Tritt er *irgend* unszer dem wege.
 the debt I on him self put, steps he *irgend* our the way.
 ‘It is his own fault if he gets in our way somewhere/at some point in time/ever/?somehow’

A locative interpretation for the particle in (12) instead is highly implausible. Only in such cases was the use of the particle annotated as non-locative:

– particle, non-locative:

- (12) ich sung im das allerpeste das ich *yergent* kan...²⁵
 I sang him the very-best that I *irgend* could ...
 ‘I sang the best I /ever/somehow /# somewhere could for him ...’

Additionally, we annotated every sentence according to the functional labels from Haspelmath’s implicational map using a simplified version of the logico-semantic tests provided by Aguilar-Guevara et al. (2011). This annotation step brought us in the position to compare our results with the results of Fobbe (2004), who used Haspelmath’s functions for her research.

To summarize, we adopted 3 levels of annotation:

- Level 1: The status of *irgend*: particle vs. intermediate [IM] vs. indefinite
- Level 2: Meaning of the particle: locative vs. non-locative
- Level 3: Classification according to Haspelmath’s original functions

²⁴ Prose-Lancelot, approx. 1250, MB

²⁵ Neidhardt Lieder, approx. 1210-1240, MB

Finally, we used the label ‘unclear’ for cases like (13), which we were unable to decipher:

– unclear

- (13) Daz erzurnte Achille Er liez aber Dare gan Ez was allez en dan
 that enraged Achille He let but Dare go that was all and then
 Swaz sin swert irgen berein ²⁶
 was his sword irgend berein
 ‘That enraged Achille but he let Dare go. That was all and then his
 sword was irgend ?polished/?free of fishiness/?verged on ’

Having introduced the adopted methodology we present data for each period, starting with Middle High German.

5 Middle High German

5.1 Middle High German - the data

In most of the examples found for MHG, *irgend* is used as a particle with a locative meaning. In the first example given here the context is the restriction of a universal (restr) and the reading can be paraphrased as *anywhere*.

– particle, locative, CA (restr):²⁷

- (14) da bekarte sich allez daz lut,, daz *irgen* in deme
 Then proselytized themselves all the people that irgend at the
 lande was,, zu unserme herren ihu xϕ(.)²⁸
 country was to our Lord Jesus Christ.
 ‘At this time all the people who were anywhere in the country, prose-
 lytized themselves to our Lord Jesus Christ.’

Example (15) shows an occurrence of the particle *irgend* in the antecedent of a conditional, again with a locative meaning:

– particle, locative, CA:

²⁶ Liet von Troye, between 1200-1217, MB

²⁷ See Aguilar-Guevara et al. (2011) for a complete procedure for the annotation of functional labels. According to Aguilar-Guevara’s decision tree, restrictor contexts were classified as (logically) equivalent to CA contexts.

²⁸ Frankfurter Predigtfragmente, end of 12th century, BC. All diachronic examples are given as we have found them in the corpus, if not stated otherwise. That includes the spelling as well as the punctuation. In this specific example, there are double commas meaning that the annotator of this text who converted it into a digital format confirms the comma which appeared in the original manuscript; the full stop in brackets means that there is a full stop missing in the original manuscript according to her and the sentence ends there. Here, nothing hinges on this.

- (15) ich biete dich durh dine gute., Swer mit dicheinen
 I ask-for you through your goodness, if-somebody with some
 note *ierge* werd-e beuange., in wage od' in lande., also her
 distress *irgend* become embraced in waves or in country as he
 miner helfe gere., daz ich in des muoze gewere. mit dineme
 my help desires that I him it must allow with your
 troste.(.)²⁹
 trust.
 'I ask you through your goodness, if anybody with any distress *any-*
where becomes embraced, in waves or in the country, if he desires my
 help, then I must allow it with your trust.'

The particle use can also be found in questions and in the irrealis function, see (16) and (17):

– particle, locative, Q:

- (16) Hiltebrant sach umbe sich, Ob er sîn hêrren Dieterich *Iergen*
 Hiltebant saw around him whether he his master Dietrich *irgend*
 tôt ligen sæhe³⁰
 dead lying see
 'Hildebrant looked around, whether he would see his master Dietrich
 lying dead somewhere'

– particle, locative, IR:

- (17) ...Er begonde umb sich grijffen und tasten ob er doch *ergent*
 He started around him feel and grope if he PRT *irgend*
 stege oder leyter fonde...³¹
 stairs or ladder could-find
 'He started to feel and grope around him if he could not find a ladder
 or stairs somewhere'

Another frequent construction found in the corpus can be analysed as *irgend* appearing in a context with a superlative, as illustrated by (18):

– particle, locative, CA (superlative)

- (18) er ist ein recke uzerwelt und ist zu den besten gezelt, die
 he is a knight chosen and is among the best rank who
iergen in dem lande sîn³²
irgend in this country are
 'He is a chosen knight and he ranks among the best who are anywhere
 in this country'

²⁹ Trierer Aegidius, end of 12th century, BC

³⁰ Der Jüngere Sigenot, first quarter of 14th century, BC

³¹ Prose Lancelot, part 2, approx. 1250, MB

We subsumed these superlative constructions under the label CA using the decision tree developed in Aguilar-Guevara et al. (2011).³³

Consider now the following example:

– particle, locative, IR:

- (19) Geliche buzze solle sie lyden,, wylge *irgo* gedar
 Same penance should they suffer who *irgend* attempted
 gan uzzet de clost'e,, ob it gedut ane der ebdissen
 to-leave outside the nunnery if it happened without the abbess's
 gebot.(.)³⁴
 permission
 'Who attempts to leave the nunnery *anywhere/at any point in time*
 without the permission of the abbess must do the same penance.'

This example seems to favor a temporal interpretation for the particle *irgend* rather than a locative interpretation. It states that nuns who leave the nunnery without the permission of the abbess should do penance. Less of relevance is *where* they might leave the nunnery corresponding to the locative reading of the particle than whether they *sometime/ever* do it without permission. Nevertheless, since this sentence is still compatible with a locative interpretation due to the predicate 'to leave' we labeled it as such according to our conservative way of annotation.

In contrast, the following example clearly blocks a locative reading. Here the most natural reading seems to be a temporal one. Another possibility is a manner reading paraphrased as *somehow*:

– particle, non-locative, CA (superlative):

- (20) ich sung im das allerpeste das ich *yergent* kan ...³⁵
 I sang him the very-best that I *irgend* could ...
 'I sang the best I *ever/somehow* could for him...'

This example contains an individual level predicate, namely *being able to sing*, which are in general not easy to combine with locative modifiers.³⁶ Such a context seems to force the hearer to find a suitable interpretation for the particle *irgend* different from the locative one. In section 7 we will describe

³² Die Heidin, 1300-1325, MB

³³ Of the 60 cases which were labeled as CA in the corpus, 28 were cases of superlatives and 5 were cases of *irgend* appearing in the restrictor (see footnote 27).

³⁴ Oxford Benedictines Rules, first half 14th century, BC

³⁵ Neidhardt Lieder, approx. 1210-1240, MB

³⁶ Individual level predicates (ILP) are normally understood as expressing permanent properties whereas stage level predicates (SLP) express temporary properties and thus can be located in space. ILPs in contrast are space-independent. For a semantic implementation of this conceptual difference between SLP and ILP, see Chierchia (1995), Kratzer (1995) among others. For a pragmatic account, cf. Maienborn (2004).

these contexts in which the old use of an item is blocked as switch contexts in the sense of Heine (2002).

Another example which seems to block the locative interpretation is (21). The most natural interpretation is the manner reading (the abbreviation REFL stands for ‘reflexive’):

- (21) Und da er sich sahe so nacket, da schampt er sich
 And because he himself saw so naked, then feel-ashamed he REFL
 vor imselber und bat sie das sie im *irgent* geben ein
 of himself and asked they that they him *irgent* give one
 cleyt,...³⁷
 tunic,...
 ‘And because he saw himself naked, he was embarrassed and asked, if
 they *somehow* give him a tunic, ...’

On this interpretation, example (21) would be annotated as a particle, non-locative, irrealis (IR). But there is also the possibility that *irgent* modifies the determiner phrase (DP) *ein clyt* ‘a tunic’ though *irgent* is not directly adjacent to the DP. Then sentence (21) could be paraphrased as in (22):

- (22) Und da er sich sahe so nacket, da schampt er sich vor imselber und
 bat sie das sie im *irgent* geben ein cleyt,...
 ‘And because he saw himself naked, he was embarrassed and asked, if
 they give him *some* tunic, ...’

On this interpretation the use would be labeled as an indefinite in an IR context. As this example allows both interpretations, it was labeled as an intermediate case [IM], more specifically as [IM], IR.

The same ambiguity can be found in example (23), even if the particle is directly adjacent to the DP *ein ritter* ‘one knight’:

– intermediate [IM], CA:

- (23) Der siebend sprach und gerett siner mynnen, ob yme *irgent* ein
 the seventh spoke and promised his love, if him *irgend* a
 ritter begegnet der ...³⁸
 knight encounters who
 ‘The seventh spoke and promised his love, if he **irgend** one knight
 encounters who...’
 ‘The seventh spoke and promised his love, if he (**ever**) encounters a
 knight (**somewhere**) who...’ [particle]
 ‘The seventh spoke and promised his love, if he encounters **any one**
 knight who ...’ [indefinite]

³⁷ Prose Lancelot (part 3), approx. 1250, MB

³⁸ Prose Lancelot (part 2), approx. 1250, MB

In the next sentence a prepositional phrase (PP) is possibly modified by the particle. Again, *irgend* is not directly adjacent to the PP and shows an intermediate stage [IM] with two possible readings:

– intermediate [IM], Irrealis [IR]:

- (24) ”eya herre, durch gott, nit laßent mich sterben hie in diesem
oh master, through God, not let me die here in this
wald, sunder fürent mich irgent in ein closter, da mir mög
forest but lead me *irgend* in a monastery there me may
geschehen myn recht und das ich daselbst sterb als ein guote
happen my right and that I there die as a good
Cristen. ³⁹
Christian.
‘Oh master, through God, don’t let me die in this forest, but lead me
irgend in a monastery, there it may serves me right and I die there as
a good Christian’
(i) ‘Oh master, through god, don’t let me die in this forest, but lead
me to *some* monastery, where it may serve me right and I can die
there as a good Christian.’ [indefinite]
(ii) ‘Oh master, through god, don’t let me die in this forest, but lead
me to a monastery *somewhere*, where it may serve me right and I can
die there as a good Christian.’ [particle]’

In the next section we summarize the main results of our research on Middle High German.

5.2 Middle High German - summary of the results

The main result of the corpus study in Middle High German is that *irgend* was mostly used as a particle with a locative meaning. The first non-locative interpretation emerged in Classical Middle High German. No indefinite uses were attested in the whole period but there are some intermediate cases in Classical Middle High German. Table 6 shows the distribution of the particle, the intermediate uses [IM] and the use as an indefinite in our corpus according to Level 1 of our annotation procedure:

³⁹ Prose Lancelot (part 3), approx. 1250, MB

Table 6: *Irgend* and its status in Middle High German

period	total	particle	IM	indefinite	unclear
Early MHG	6	6 (100,0%)	0	0	0
Classical MHG	75	60 (80,0%)	13 (17,3%)	0	2 (02,7%)
Late MHG	28	22 (78,6%)	3 (10,7%)	0	3 (10,7%)
in total	109	88 (80,7%)	16 (14,7%)	0	5 (04,6%)

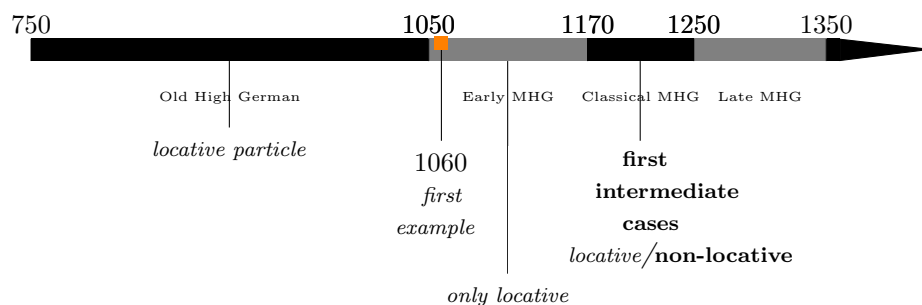
At Level 2, the 88 occurrences of the particle were annotated with respect to their locative or non-locative meaning in the context. The following table displays the results of this annotation process:

Table 7: Particle: locative vs. non-locative readings in Middle High German

period	particle	locative	non-locative
Early MHG	6	6 (100,0%)	0
Classical MHG	60	57 (95,0%)	3 (05,0%)
Late MHG	22	19 (86,4%)	3 (13,6%)

As table 7 shows, the locative reading is the most common one for *irgend* in Middle High German, the first non-locative readings of the particle emerged in Classical Middle High German. There are no data which support whether the temporal or the manner reading of the particle *irgend* emerged one after the other, both meanings appear in Classical Middle High German.

The following time axis depicts the results so far:



At Level 3 we annotated all occurrences according to the functions of Haspelmath's implicational map. Fig. 6 displays the distribution of the particle in Middle High German:

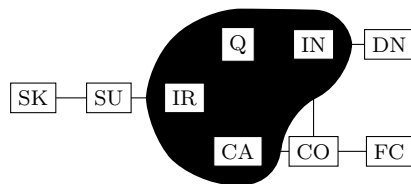


Fig. 6: Functional distribution of *irgend* in Middle High German

As the following table shows, the particle had a restricted distribution with CA uses as the most frequent uses including superlatives, the antecedent of conditional, and the restriction of universal quantifiers as explained above.

Table 8: Functional distribution of the particle in Middle High German

functions	occurrences	percentage
IR	13	14,8%
Q	17	19,3%
CA	55	62,5%
IN	3	03,4%
in total	88	100 %

In contrast to the particle, the attested intermediate cases [IM] are limited to the IR, Q and CA functions, see table 9.

Table 9: [IM]-distribution over functions in Middle High German

functions	occurrences	percentage
IR	5	31,2%
Q	6	03,8%
CA	5	31,2%
in total	16	100,0%

All intermediate cases showed up in combination with the determiner *ein*, there are no cases where *irgend* possibly modifies another indefinite like *iemand* ‘somebody’ or *ichts* ‘something’. The next section presents the results of our research on Early New High German using the same annotation procedure.

6 Early New High German

6.1 Early New High German - the data

The first example provided here from Early New High German clearly exhibits the particle reading we are already familiar with from the previous period of German. Since a locative reading is possible, it was again labeled as such:

– particle, locative, CA (superlative):

- (25) ...gegen dem Abent da wir bey Salamine in Hafen eingelauffen an
 about the evening as we at Salamine at harbour arrived at
 welchem ort das beste Mohrsaltz so *irgend* zu finden
 which place the best salt so *irgend* to find produced
 gemacht wirt⁴⁰
 is
 ‘... in the evening, when we arrived in the harbour of Salamine, where
 the best salt, you find *anywhere*, is produced’

Example (26) shows the same intermediate stage we saw in the phase of Middle High German, *irgend* could be interpreted as a particle and paraphrased as *somewhere* or it could be interpreted as modifying the determiner *ein* ‘one’.

– IM, IR:

- (26) So nhu der tzan aus gebrochen ist sall man fleissigklich
 When PRT the tooth out broken is should one carefully
 fuehen ab sich auch *irgent* ein beynelein von dem kinpacken
 feel if REFL too *irgend* a bone of the jaw
 abgescheldert hat...⁴¹
 splintered off
 (i) ‘When the tooth is lost one should carefully feel if *any part of the*
jawbone has splintered off ...’ [indefinite]
 (ii) ‘When the tooth is lost one should carefully feel if a part of the
 jawbone has splintered off *somewhere*...’ [particle]

In the next example a locative interpretation for the particle seems to be less likely, but still possible. The most natural reading seems to be that *irgend* modifies *ein Schmerz*, but due to our conservative annotation, this example was still annotated as an intermediate case:

– IM, Q:

⁴⁰ Leonhart Rauwolf: Beschreibung, Lauingen 1582

⁴¹ Artzney Buchlein wider allerlei kranckeyten vnd gebrechen der tzeen, 1530

- (27) Ach? bedenket doch nur/ ob *irgend ein* Schmerz sei/ als mein
 Oh deliberate PRT PRT/ if *irgend one* pain is/ as my
 Schmerz/ und ein Jammer/ als der Jammer/ der mich getroffen
 pain/ and a sorrow/ as the sorrow/ which me hit
 hat.⁴²
 has
 (i) ‘Oh, deliberate, if there is somewhere a pain as my pain , and a
 sorrow as the sorrow which has hit me’ [particle]
 (ii) ‘Oh, deliberate, if there is *any one* pain as my pain, and a sorrow
 as the sorrow which has hit me’ [indefinite]

Example (28) represents a new instance of use as it clearly shows that *irgend* is used as an indefinite:

– indefinite, Q:

- (28) ...vnd sprachen zu jm / Jsts auch recht / Das sich ein Man
 ...and spoke to him / is also right / that REFL a man
 scheidet von seinem Weibe / vmb *jrgend eine* vrsache?⁴³
 divorced from his wife / for *irgend-one* reason?
 ‘...and ask him/ Is it right/ that a man gets divorced from his wife/
 for *any* reason?’

In the same period, we also find the first cases where *irgend* does not modify the determiner, but other indefinites. The following example is a partitive construction with the pronoun *einer* ‘someone’:

– indefinite, indirect negation (IN):

- (29) / weil er niemals in einiger Geschichtbeschreibung der
 / because he never in any history of
 wallenden Ritter gelesen / daß *jrgend* der Ritter *einer* Geld
 errant knights read / that *irgend* the knights ones money
 bey sich geführt hette.⁴⁴
 with REFL have had.
 ‘and that because he had never read in any history about knights
 errant, that *anyone* of the knights carried money with him.’

In the following example *was* ‘what’ is modified by *irgend*:⁴⁵

– indefinite, IN:

⁴² Georg Göz: Leich-Abdankungen, Jena 1664

⁴³ Luther letzte Hand, 1545. This is one of the 5 examples for *irgend* Fobbe (2004) represents in her diachronic research.

⁴⁴ Miguel de Cervantes : Don Kichote de la Mantzscha, Franckfurt, 1648

⁴⁵ Fobbe (2004) mentioned only examples with *etwas* ‘something’.

- (30) Viel können schwerlich leiden, daß von anderen Leutten
 Most people can hardly bear that of other people
 auch *irgend was* löbliches geredet oder gerühmet werde, es
 also *irgend what* worthy said or praised will, it
 verdreißt sie ...⁴⁶
 mortifies them ...
 ‘Most of people cant bear that *something* good is also said about other
 people or that they are praised, it angers them...’

The following example shows that the use of *irgend* is also extended to the wh-pronoun *where* in Early New High German. Interestingly, the function exhibited in this case by *irgendwo* ‘*somewhere/anywhere*’ seems to be the universal comparative function CO, see (31):

– indefinite, CO:

- (31) Auff der kleinen Seyten zu Prag wird so gut Teutsch geredet /
 At the small sites to Prague is as good German spoken /
 als *irgendwo* in gantz Teutschland; das macht / daß die
 as *irgendwo* in whole Germany: that is / that the
 Teutschredende keine baurische Nachbarn auff den umbligenden
 German-speakers no peasants at the close
 Dörffern haben / die ihnen ihre Sprach verderben;⁴⁷
 villages have / who them their language ruin;
 ‘In the small villages close to Prague one speaks the same good Ger-
 man as *anywhere* in the whole of Germany: that is because the German
 speakers have no peasants in the small villages close by who could ruin
 their language;’

It seems to be clear that *irgendwo* gets a universal reading in (31). The speaker says that the German spoken in this particular area is as good as *anywhere* in Germany, because there are no peasants who could ruin the language. This example is also interesting because we find that the particle modifies an indefinite with a locative meaning. This seems to indicate that the original locative meaning of *irgend* was not transparent anymore for the author at this stage, otherwise the addition of *wo* ‘*where*’ would be redundant.

Example (32) is another case where *irgend* seems to exhibit the comparative function [CO]. The modified indefinite is here the pronoun *einer* ‘*anyone*’:

– indefinite, CO:

- (32) Denn er ist grewlicher vnd heßlicher als *irgend* der
 Because he is more-dreadful and nasty than *irgend* the
 aller geringsten oder ergsten vnd Gottlosesten *einer* zugerichtet.⁴⁸
 most-inferior or worst and godless *ones* mangled.

⁴⁶ Hans Michael Moscherosch: *Gesichte*, Straßburg 1650

⁴⁷ Hans Jakob Christoffel von Grimmelshausen: *Deß Weltberuffenen Simplicissimi Pralerey und Gepräng mit seinem Teutschen Michel*, 1673

‘Because he (Jesus Christ) is more dreadfully and unsightlier mangled than *anyone* of the most inferior, worst or most godless ones (are).

If our analyses of (31) and (32) are correct, we can conclude that the development of *irgend*-indefinites did not violate the adjacency requirement according to Haspelmath’s implicational map and assume that the reason why Fobbe (2004) did not find any instance for the CO function was due to the restricted sort of text she analyzed, see Fig. 4.

Finally, example (33) seems to be an early case of *irgendein* in the specific-unknown function, a typical use in Present Day German which lead to the classification of *irgend*-indefinites as Epistemic Indefinites:

– indefinite, SU:

- (33) ...also wurden wir getrieben in die Flache deß Meerbusems
 ...PRT were we driven in the shallow-water of-the gulf
 bey Guanipa, von dannen den Mundt *irgendt* eines Flusses die
 of Guanipa, from there the mouth *irgend* one river which
 Johan Dowglaß zuvor hatte erkundigt (zu erreychen). Wir hatten
 Johan Dowglaß before had explored (to reach). We had
 auch einen Jndianischen Pilot bey vns...⁴⁹
 also an Indian pilot with us...
 ‘then we were driven into the gulf by Guanipa, from there to the mouth
 of *some* river which Johan Dowglaß had explored before (to reach).
 We had also an Indian pilot with us...’

The example reports on a travel in America. The writer reports that there is a river they reached which was previously explored by Johan Dowglaß. This context is compatible with a specific unknown reading (SU).

We turn now to the summary of our results for Early New High German according to the annotation procedure employed in this study.

6.2 Early New High German: summary of the results

The main result of the corpus study in Early New High German is that *irgend* appears as a modifier of an indefinite form. At the same time we still find *irgend* used as a particle and in intermediate constructions. The following table displays the distribution of *irgend* according to our annotation at Level 1:

⁴⁸ Johannes Mathesius: *Passionale*, Leipzig, 1587

⁴⁹ Walter Raleigh: *Amerika*, Frankfurt/Main, 1599

Table 10: Status of *irgend* in Early New High German

total	particle	IM	indefinite	other	unclear
61	16	20	19	2	4
100%	26,2%	32,8%	31,1%	3,3%	6,6 %

Under the label ‘other’ we subsumed the following cases: one case where *irgend* seems to exhibit an approximate reading [approx] and one case of a reading similar to *perhaps*. The instance of an approximate reading is provided in (34) coming from an early cooking book.

– approx:

- (34) .../ wickel es vberinander/ vnd stecks an kleine ho:eltzerne
 .../ wrap it one-upon-the-other/ and put on little wooden
 Spießlein/ die *jergendt* eines Fingers lang seindt/⁵⁰
 spits/ which *irgend* one finger’s length have/
 ‘.../ wrap it up/ and put it on little wooden spits/ which are approx-
 imately about one finger’s length/ ’

In the next example the particle expresses something like *perhaps*.⁵¹

– perhaps:

- (35) / so haltens das auch wol so hoch vnd gesund sein/ alß wir bey
 / so deem that PRT PRT as high and healthy is/ as we by
 vns *jrgend* den Wermu:otwein/ oder noch andere Kreüterwein etc.⁵²
 us *irgend* the vermouthe/ or also other herbal wine etc.
 ‘They (the Turkish) think it is of high value and healthy as we *perhaps*
 think of vermouthe or other herbal wine etc is.’

⁵⁰ Vom Kalb seindt neun vnd fu:enfftzigerley Speiß vnd Trachten zu machen. [ABB], 1581

⁵¹ Both readings are listed in Adelung’s Dictionary and in Grimm and Grimm (1885). Adelung (1811) reports that *irgend* with the meaning of *vielleicht* ‘*perhaps*’ is especially used in question. The clearest example he provided is (i):

- (i) Ist es *irgend* verloren?
 Is it *irgend* lost?
 ‘I wonder if it is lost’.

Other examples of questions provided by Adelung (1811) and Grimm and Grimm (1885) are ambiguous. A clear case where *irgend* can be interpreted as having a meaning like ‘perhaps’/ ‘maybe’ is the following one given by Grimm and Grimm (1885), though neither a locative, a temporal or a modal interpretation of the particle is excluded:

- (ii) *irgend* werde ich auch noch reich.
irgend become I PRT PRT rich
 ‘Perhaps/somewhere/some time/ somehow I will become rich too’

⁵² Von grossen gewerben vnd handlungen der Statt Halepo, Das VIII. Capitel, 1582

In Early New High German the use of the particle in intermediate constructions and modifying an indefinite are more frequent than the use as a plain particle.

At Level 2 of our annotation we get the following result: the particle *irgend* is still mostly used with a locative meaning. This might be a reflection of our conservative annotation:

Table 11: Particle: locative vs. non-locative readings in Early New High German

total occurrences	locative	non-locative
16	14 (87,5%)	2 (12,5%)

The annotation at Level 3 leads to the following distribution over the functions on Haspelmath's implicational map, displayed according to the status of *irgend* as particle, IM or indefinite respectively:

Table 12: Distribution of the particle in Early New High German

functions	occurrences	percentage
IR	6	37,5%
CA	7	43,7%
IN	3	18,7%
total	16	100%

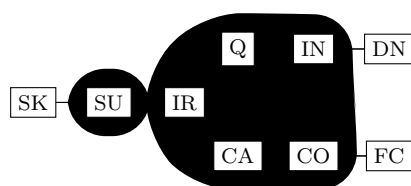
Table 13: Distribution of IM in Early New High German

functions	occurrences	percentage
IR	13	65%
CA	4	20,0%
Q	1	05,0%
IN	2	10,0%
total	20	100%

Table 14: Distribution of the *irgend*-indefinites in Early New High German

functions	occurrences	percentage
IR	4	21,0%
CA	4	21,0%
Q	1	05,3%
IN	5	26,4%
CO	4	21,0%
SU	1	05,3%
total	19	100%

As can be seen from table 14, *irgend*-indefinites show up on a wide area of the implicational map:

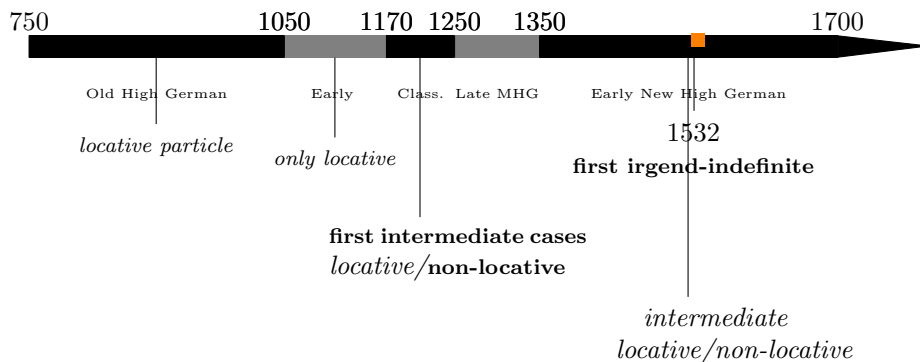
Fig. 7: The distribution of *irgendein* in Early New High German

Finally, the following table presents the various forms of *irgend*-indefinites found in this corpus study. In half of the cases *irgend* modifies the determiner *ein*:

Table 15: The various forms of *irgend* in Early New High German

form	occurrences	percentage
irgendein NP	9	47,3%
irgend einer	5	26,3%
irgend was	1	05,3%
irgend etwas	1	05,3%
irgend(s) wo	3	15,8%
total	19	100 %

The following time axis depicts the main results for the two periods we investigated:



In the next section we will discuss the main findings and answer the four research question we have formulated in section 2.

7 Discussion

Now we turn to the questions formulated at the beginning of this article, starting with the first two questions we formulated in section 2. There we ask how and when the original particle *irgend* lost its locative meaning to acquire new meanings and how and when the particle became a modifier of indefinite forms. First we look at the emergence of non-locative readings of the particle *irgend*.

7.1 From locative meaning to non-locative meanings

The corpus study has shown that when *irgend* is used as a particle, the most frequent reading is a locative one. In Early Middle High German (1050-1170) the reading of the particle was exclusively restricted to a locative interpretation. In Classical Middle High German (1070-1250), the first non-locative readings of the particle were found. The locative reading equals 95% in that period and decreases to 86,4% in Late Middle High German (1250-1350). In Early New High German (1350-1700) we found a similar distribution of the locative reading covering 87,5% of the cases.

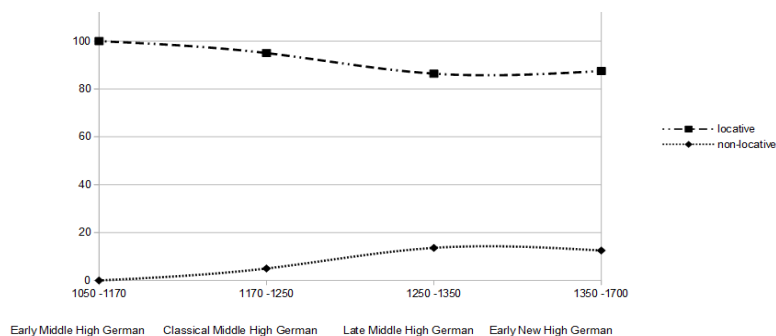


Fig. 8: Locative meaning of the particle from 1050-1700

Example (36) is a typical example where the particle exhibits the original locative meaning:

- (36) da fragten sie den fleischman, obe er *irgent* hette gesehen den
 then asked they the bailiff, if he *irgend* has seen the
 vil stolzen spielman⁵³
 very proud bandsman
 ‘then they asked the bailiff, if he has seen the very proud spielman
 somewhere’

Contexts in which a new reading is favoured are called bridging contexts and play an important role for an item under change.⁵⁴ Heine (2002) for example assumes two kinds of contexts in which an item under change (from a source meaning to a target meaning) typically appears before the target meaning is conventionalised:

- (i) Bridging contexts: due to inferential mechanism the target meaning rather than the source meaning is triggered
- (ii) Switch contexts: they are incompatible, or in conflict, with some salient property of the source meaning, hence the target meaning now provides the only possible interpretation.
- (iii) Conventionalization: the target meaning no longer needs to be supported by the context and may be used in new contexts.⁵⁵

⁵³ Salman and Morolf, Stanza 702, 1180-1190

⁵⁴ See for example Hopper and Traugott (2006), Diewald (2002) Eckardt (2006). All cited authors here are using this kind of model of contexts (with minor differences) in cases of grammaticalization. However, it seems natural to assume that contexts in general play an important role for triggering semantic changes, no matter whether the process leads to a more grammatical status of the item in question or not.

⁵⁵ See Heine (2002). Note that an item does not have to reach the final state. It is also possible that the original meaning is preserved, leading to a polysemous item. This phenomenon is called layering by Hopper and Traugott (2006).

Our corpus contains several examples favouring the emergence of non-locative interpretations of *irgend* and therefore qualifying as bridging contexts for the transition from locative to non-locative meaning for the particle.

Consider first example (37):

- (37) Die schult ich vf jne selbs lege, tritt er irgent unszer wege.
 the fault I on him self put, steps he irgend our the way.
 ‘It is his fault, if he steps in our way somewhere/at some point in time/ever’

The locative reading and the temporal reading of the particle do not lead to any differences in the truth conditions of the whole sentence, so we have a semantic entailment from the locative source interpretation to the temporal target interpretation. Furthermore, while in the previous example (36) the context clearly favoured a locative interpretation, here a temporal interpretation is compatible with the context or even slightly preferred. Thus, the given example might qualify as a bridging context (the truth of the temporal interpretation can be inferred from the context).

Example (19), here repeated as (38), is another maybe clearer case of a bridging context. While in the previous example a locative interpretation could still lead to a sensible interpretation, in (38) the context clearly favours a temporal interpretation:

- (38) Geliche buzze solle sie lyden,, wylge *irgo* gedar
 Same penance should they suffer, who *irgend* attempted
 gan uzzet de clost’e,, ob it gedut ane der
 to-leave outside the monastery,, when it happened without the
 ebdissen gebot.(.)
 abbess’s commandment.(.)
 ‘Same penance should they suffer, who *ever/somewhere* attempted to leave the monastery, if it happened without the commandment of the abbess’

In Classical Middle High German we also find the first cases of switch contexts, where a locative reading of the particle is no longer possible. Take example (20), repeated here as (39):

- (39) ich sung im das allerpeste das ich *yergent* kan...
 I sang him the very-best that I *irgend* could ...
 ‘I sang for him the best I *ever* could ...’

As observed above, this example contains an individual level predicate, *being able to sing*, which is hard to combine with locative modifiers. Assuming that this incompatibility is not due to a grammatical restriction (idiosyncratic to German languages) but rather due to a conceptual/pragmatic one which applies therefore to languages in general, we can hypothesize that this example shows a new use of the particle *irgend* in Middle High German.

Cross-linguistically, temporal expressions are very often based on spatial ones.⁵⁶ It is natural to assume that in language change we go from more concrete concepts (space) to more abstract ones (time). Heine and Claudi (1986) assume the following universal grammaticalization path illustrating this tendency:

- (40) Person > Object > Activity > Space > Time > Quality

The case of the development of the particle *irgend* demonstrated by the examples in our corpus seems to match this general tendency at least with respect to the temporal precedence of Space over Time.

The manner interpretations of *irgend* we found in examples like (41) could be seen as exemplifying the quality category in (40) even though we did not observe any temporal precedence of temporal interpretation over manner interpretations in our data.

- (41) Han ich uch *irgent* erzúrnt, das sagent mir!⁵⁷
 Have I you *irgend* enraged, that say to-me!
 'If I have enraged you (*at some time/ever/somehow#somewhere*),
 please say so!'

The extension from locative to non-locative readings we discussed in this section can be viewed as an instance of under-specification or bleaching. In our data, the particle started as an existential expression with a locative meaning and a restricted distribution (see Fig. 9). We can hypothesize that in later non-locative uses, only the existential meaning and the restricted distribution, which we may label as *non-specificity*, was maintained as part of the lexical contribution of the particle. We can further speculate that this semantic bleaching made it possible for the particle to start acting as a modifier of plain indefinite forms and later became part of the paradigm of indefinites as we see it in Present Day German (*contra* what Fobbe (2004) seems to suggest).

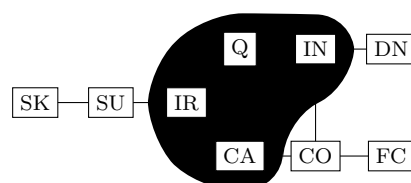


Fig. 9: Distribution of the particle *irgend* in Classical- and Late Middle High German (1170 -1350)

⁵⁶ See for example Haspelmath (1997a) for a typological overview of temporal adverbials.

⁵⁷ Prose Lancelot (part 1), approx. 1250, MB

7.2 From particle to indefinite

In Middle High German *irgend* was mainly used as a particle (84.6%) but we found also the first intermediate cases (15.4%), where *irgend* could possibly modify an indefinite noun phrase. The first clear cases of indefinite uses of *irgend* are from Early New High German. In this period the use of *irgend* as a particle decreases (29.1%) in favour of intermediate constructions (36.4%) and indefinite uses (34.5%) as illustrated in Fig. 10:

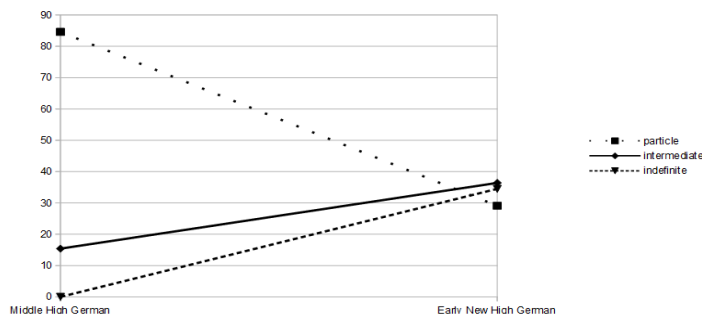


Fig. 10: particle - intermediate - indefinite 1050-1700

After the appearance with the determiner *ein*, the use of *irgend* as indefinite modifier was extended to other indefinite forms like *einer* ‘someone’ or *etwas* ‘something’ by analogy.⁵⁸ It is interesting to note that only later, when the particle already modified indefinite forms, instances could be found where *irgend* modifies a *wh*-pronoun *was* ‘what’ and *wo* ‘where’. Taking together the data of Fobbe (2004) and our results, the extension of *irgend* over indefinite forms looks as follows:

(42) *ein* (determiner) > *einer/etwas* (pronoun) > *was/wo* (*wh*-pronoun)

Though it is common in formal semantics to analyze *wh*-pronouns as indefinites, the data seem to suggest that *irgend* could only modify *wh*-pronouns when the **use** of them as indefinites became possible, for example in cases like (43), where *was* behaves like a plain existential quantifier:

(43) Ich habe *was* vergessen.
 I have what forget
 ‘I forgot something.’

⁵⁸ The most frequent form of the indefinite is *irgendein* ‘*irgend one*’ in both periods, where the particle (possibly) modifies the determiner *ein*, followed by *irgend einer* ‘*irgend someone*’, see table10

In Middle High German it is assumed that *wh*-pronouns were not used as indefinites, see Paul (2007), which might explain why we did not find any intermediate cases in which the particle modifies a *wh*-pronoun. Assuming that the generalization or extension of *irgend* happened through analogy might further support that *wh*-indefinites must first allow a use as an indefinite as in (43) before the particle *irgend* can be extended to these expressions.

In the previous section we have stated that with the emergence of temporal uses the particle maintained only the existential meaning restricted to non-specific contexts while the locative meaning was lost. This claim is supported by the observation that *irgend* appears as a modifier of the *wh*-pronoun *wo*, ‘where’ which has a locative meaning, otherwise the combination *irgend + wo* would be redundant. This line of reasoning brings us further to the hypothesis that as soon as *irgend* became an indefinite modifier, it lost also its existential meaning so that only non-specificity was left as part of its lexical contribution. This conjectured bleaching can be schematically represented as follows:

- (44) Conjectured bleaching in lexical contribution of *irgend*
- a. Locative particle: locative + existential + non-specificity
 - b. Loss of locative meaning: existential + non-specificity
 - c. Indefinite modifier: non-specificity

We conjecture that the particle *irgend* first needed to lose its locative meaning before it could modify other indefinite forms. The extension to non-locative meanings took place already in Classical Middle High German where the particle started appearing in switching and bridging contexts. The first clear cases in which the particle modifies an indefinite are from Early New High German. We will return to these conjectures in the last section. We turn now to the other two questions we formulated at the beginning of this article.

7.3 Distribution of *irgend*-indefinites in Early New High German

Our third and fourth research questions were related to the distribution of *irgend*-indefinites in Early New High German according to Haspelmath’s implicational map, especially whether the indefinites covered a continuous area and where these indefinites started their life. To answer these two questions we will look first at the distribution of the particle in Middle High German and Early New High German. The following figures show the distribution of the first occurrences of the particle in Early Middle High German, Classical and Late Middle High German and Early New High German respectively.

The distribution of the particle *irgend* is restricted according to our data. While the use of the particle in Early Middle High German only covers the function CA and Q, further uses are attested during Classical- and Late Middle High German. The particle is used also in the IR and the IN function. The same distribution was found in Early New High German.

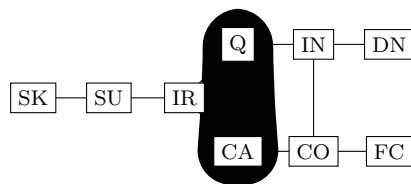


Fig. 11: Particle *irgend* in Early Middle High German (1050 -1170)

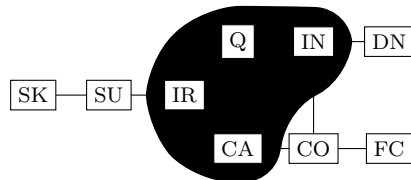


Fig. 12: Distribution of the particle *irgend* in Classical- and Late Middle High German (1170 -1350)

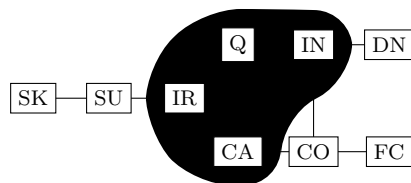


Fig. 13: Distribution of the particle *irgend* in Early New High German (1350-1700)

Compare now the attested distribution of the particle with the distribution of the *irgend*-indefinites in Early New High German, cf. Fig. 14.

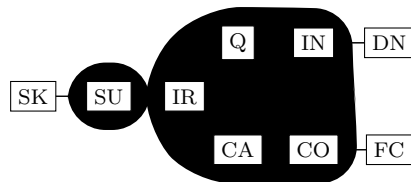


Fig. 14: Distribution of *irgend*-indefinites in Early New High German - our corpus

According to our data, the use of the particle was restricted to the non-specific existential area. We conjecture that the extension to the universal area (CO and FC) as well as the extension to the specific area (SU) happened during the indefinite phase. Comparing our attested distribution with the indefinite data from Fobbe (2004), see Fig.15, shows that our data differ in three ways.

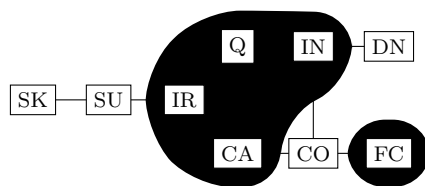


Fig. 15: *Irgendein* in Early New High German (Fobbe 2004)

First, our data include a possible early use of the indefinites in the SU function contrary to Fobbe. There was however only one possible instance in Early New High German, namely example (33), here repeated as (45):

- (45) ...also wurden wir getrieben in die Flache deß Meerbusems
 ...PRT were we driven in the shallow-water of-the gulf
 bey Guanipa, von dannen den Mundt *irgendt* eines Flusses die
 of Guanipa, from there the mouth *irgend* one river which
 Johan Dowglaß zuvor hatte erkundigt (zu erreychen). Wir hatten
 Johan Dowglaß before had explored (to reach). We had
 auch einen Indianischen Pilot bey vns...⁵⁹
 also an Indian pilot with us...
 ‘then we were driven into the gulf by Guanipa, from there to the mouth
 of *some* river which Johan Dowglaß had explored before (to reach).
 We had also an Indian pilot with us...’

Second, while Fobbe found FC uses of *irgend*-indefinites, our data did not attest such a use. The dictionaries of Grimm and Adelung do not list any SU or FC use for the *irgend*-indefinites in Early New High German.⁶⁰ That these functions do not appear there seems at least to indicate that both these uses were not fully established at the time.

Third, as discussed in section 6, we found various examples of universal CO uses for *irgend*-indefinites in Early New High German. For instance example (31), here repeated as (46), exhibits a universal reading of the indefinite in a CO function:

- (46) Auff der kleinen Seyten zu Prag wird so gut Teutsch geredet /
 At the small sites to Prague is as good German spoken /
 als *irgendsw*o in gantz Teutschland; das macht / daß die
 as *irgendsw*o in whole Germany: that is / that the
 Teutschredende keine baurische Nachbarn auff den umbligenden
 German-speakers no peasants at the close
 Dörffern haben / die ihnen ihre Sprach verderben;⁶¹
 villages have / who them their language ruin;

⁵⁹ Walter Raleigh: Amerika, Frankfurt/Main 1599

⁶⁰ The reference to these dictionaries is justified because the author’s intention was to list as much uses as possible.

‘In the small villages close to Prague one speaks the same good German as *anywhere* in the whole of Germany: that is because the German speakers have no peasants in the small villages close by who could ruin their language;’

Our data are not conclusive here.⁶² Nevertheless, given example (46) attesting the CO function, no matter what is the case with respect to the emergence of the FC function, our data show that there is no violation of the adjacency requirement in this phase of the development of *irgend*-indefinites (contrary to what Fobbe’s data seemed to suggest).

Turning to the last of our research questions, our data suggest that *irgend*-indefinites did not start their life in any of the three typical areas identified by Haspelmath (1997b), namely the specific area on the implicational map, the negative upright corner or the free choice corner, but rather they first emerged in the non-specific area covered by the *irgend* particle in Early New High German, an area which includes the IR, Q, CA, and IN functions, but excludes the SU and CO functions, which we conjecture were acquired later after *irgend* developed into an indefinite modifier. It is not surprising that the first ambiguous, intermediate uses show up in exactly the same restricted area where the particle is used making it very likely that *irgend*-indefinites started their life indeed in the very same area.

To summarize, the distribution of *irgend*-indefinites does not violate the adjacency principle stated by Haspelmath. Furthermore, according to our data, the first *irgend*-indefinites seem to have inherited their restricted distribution from the particle, which only covered the non-specific area in Haspelmath’s map. The *irgend*-indefinites later extended their use to the universal CO and FC functions, as well as to the specific SU function.

So far we have only looked at the diachronic development of *irgend* in isolation neglecting other alternative, possibly competing, expressions. To get a more complete picture, our final section will also take other particles and indefinite expressions into account.

8 The final picture

In the final section we further discuss the distribution of *irgend* in relation to other German competing (indefinite) forms. As expected, the repertoire of different alternative forms in one language can influence the development of a particular form. To get a more complete picture we will take the particle *nirgend*, the plain indefinite determiner *ein* and also the negative indefinite determiner *kein* into our consideration. Combining the results of our diachronic

⁶¹ Hans Jakob Christoffel von Grimmelshausen: Deß Weltberuffenen Simplicissimi Pralerey und Gepräng mit seinem Teutschen Michel, 1673

⁶² As mentioned before, data used by Fobbe (2004) were not accessible. However, we consulted Luther’s *Letzte Hand* online and checked 46 available examples, none of them exhibited a free choice use according to our annotation of functional labels, see Aguilar-Guevara et al. (2011).

corpus studies with (i) results from Fobbe and others on the development of other competing forms and (ii) the results of synchronic corpus studies on *irgend*-indefinites in Present Day German, we conjecture four stages in the development of *irgend* from a particle with locative meanings in Old High German to a modifier of an indefinite in Present Day German:

- Phase 1: Locative particle in Old High German till Early Middle High German
- Phase 2: Loss of locative meanings in Classical Middle High German
- Phase 3: Indefinite modifier in Early New High German
- Phase 4: The current state – Present Day German

In what follows we sketch an account of the meaning and distribution of *irgend* in each phase.

8.1 Phase 1: Locative particle

According to most scholars *irgend* started its life as a locative particle in Old High German. Our studies showed that at the stage of Early Middle High German, the particle still exhibited a locative meaning only. We conjecture that at this stage *irgend* was a non-specific existential expression which stood in opposition to the negative existential expression *nirgend*. While *nirgend* displayed the functions of indirect and direct negation, *irgend* appeared mainly in other non-specific contexts which typically license negative polarity items (NPI), i.e. in the antecedent of conditionals and in questions.

Table 16: Distribution of *nirgend* and *irgend* in phase 1

functions	nirgend (negative)	irgend (non-specific)
DN	OK	out
IN	OK	out
other non-specific contexts	?	OK

We conjecture further that the restricted distribution of *irgend* to non-specific contexts is due to a semantic requirement of (modal) variation as in (Farkas and Brasoveanu, 2013). Analyzing *irgend* as an existential, the condition of variation is satisfied, if there are at least two indices (possible worlds or dynamic assignments) which differ with respect to the witness of the existential claim. Non-specificity follows because the requirement of variation can only be satisfied if the existential appears in the scope of some scoping operator (a quantificational DP, a modal or negation). The exclusion of *irgend* from negative contexts in this period can be explained in terms of blocking. At this stage, *nirgend* has both direct and indirect negation uses, as typical of n-words in a Negative Concord (NC) language. Middle High German is only at the beginning of its transition from a NC language to a Double Negation

language (DN). Being specialised for that purpose, *nirgend* has to be used in negative contexts (possibly due to a morpho-syntactic requirement) and therefore blocks the negative uses of *irgend*.

The conjectured lexical contribution of *irgend* in this phase has three components:

- (47) Lexical contribution of *irgend* in phase 1: locative + existential + variation (non-specificity)

8.2 Phase 2: Loss of locative meaning

In Classical Middle High German, the first uses of the particle in bridging and switching contexts appeared triggering non-locative readings. At the same time we found the first ambiguous cases, where the particle could possibly modify an indefinite expression. At this stage, the particle spreads out to the IR function. Furthermore, the particle was also attested in the IN function. Due to the transition from a Negative Concord language to a DN language, *nirgend* and *irgend* appear here both in the IN function. Another possible explanation of why *irgend* can now occur in IN contexts relates to the fact that for non-locative interpretations of the particle the competition with *nirgend* is no longer at place since the latter never acquired non-locative uses. This line of explanation however has yet to be confirmed by the data.

Table 17: Distribution of *nirgend* and *irgend* in phase 2

functions	nirgend (negative)	irgend (non-specific)
DN	OK	out
IN	OK	OK
other non-specific contexts	?	OK

The conjectured lexical contribution of *irgend* in this phase has only two components:

- (48) Lexical contribution of *irgend* in phase 2: existential + variation (non-specificity)

8.3 Phase 3: Indefinite modifier

In Early New High German, the first unambiguous occurrences of *irgend*-indefinites were found. Thus we can assume that *irgend*-indefinites enter now into the paradigm of German indefinites together with the plain indefinite *ein* and the negative determiner *kein*. The following table displays the distribution of the indefinites in question at stage 3:

Table 18: Distribution of the three indefinites at stage 3

functions	ein	kein	irgendein
SK	OK	out	out
SU	OK	out	out
DN	out	OK	out
IN	OK	OK	OK
non-specific	OK	out	OK

The determiner *ein* has at this stage the functions of SK, SU, IR, Q, CA, IN, see Fobbe (2004), whereas *irgend*-indefinites only appear in IR, CA, Q and IN. The negative determiner *kein* has both the indirect and direct negation function. At this stage all three indefinites can be used in the indirect negation function. Assuming that the transition from a NC to a DN language is not completed at this phase explains why the negative determiner can still be used in the indirect negation function without giving rise to a double negation readings. At the same time, losing the feature of negative concord makes it possible for the two other indefinites to acquire the function of indirect negation.

Note that at this stage, the plain indefinite can be used specifically⁶³, while *irgend*-indefinites cannot.⁶⁴ The latter then, though being more complex, can be selected as the preferred form to express unambiguous narrow scope (non-specific) meanings in constructions potentially ambiguous between a narrow scope and wide scope interpretation of the existential.

In the previous phase the particle *irgend*, which started as an existential with a locative meaning in the non-specific area, lost its locative meaning turning into a plain non-specific existential. In phase 3 the particle *irgend* starts modifying indefinites like *ein*, and in this process loses its existential force and keeps non-specificity as its only lexical contribution.

(49) Lexical contribution of *irgend* in phase 3: variation (non-specificity)

8.4 Phase 4: The current state

In Present Day German, negative concord readings of *kein* are no longer possible. *Kein* now only has direct negation uses. Taking *kein* as the negative form of both the plain determiner *ein* and *irgendein*, makes it the default or optimal form for expressing negative existential meanings, therefore blocking *nicht ein* or *nicht irgendein* combinations. The following table summarizes the distribution of the competing indefinites in this phase:

⁶³ According to Fobbe, *ein* started in the specific-known function in Old High German, acquired the function SU, IR, Q and CA at the stage of MHG, and finally at ENHG it displays also the IN function.

⁶⁴ We found only one early example, therefore we conjecture that at this stage the use was not established.

Table 19: Distribution of the three indefinites at stage 4

functions	ein	kein	irgendein
SK	OK	out	out
SU	OK	out	OK
DN	out	OK	out
IN	OK	out	OK
non-specific	OK	out	OK

Table 20⁶⁵, based on a synchronic corpus study (Aloni and Port, 2014), shows that the specific unknown (SU) use of *irgend*-indefinites is now very frequent as well as the free choice (FC) uses.⁶⁶

Table 20: Synchronic distribution of *irgendein* and *irgendjemand*

syntactic contexts	determiner	pronoun	total
SU	54 (18,0%)	57 (19,0%)	111
IR	29 (09,7%)	31 (10,3%)	60
Q	14 (04,7%)	24 (08,0%)	38
IN	85 (28,3%)	96 (33%)	181
CA	31 (10,3%)	33 (11,0%)	64
CO	13 (04,3%)	24 (08,0%)	37
FC	39 (13,0%)	20 (06,7%)	58
INDC	19 (06,3%)	3 (01,0%)	22
UN	16 (05,3%)	12 (04,0%)	29
total	300 (100%)	300 (100%)	600

The appearance of *irgend*-indefinites in SU contexts can be explained in terms of a shift from semantic variation to pragmatic variation, where in pragmatic variation the relevant indices can correspond also to elements of the pragmatic context set. Whenever this is the case the requirement of variation derives ignorance effects rather than non-specificity effects. The lexical contribution of *irgend* in phase 4 is then assumed to be the following:

⁶⁵ The label INDC in the table stands for an indiscriminacy reading of the indefinite also described for other languages, for example in English, (Horn, 2005, p.185, ex. (14a)), (see also Vlachou (2007)):

- (i) I do not want to go to bed with *just anyone* anymore. I have to be attracted to them sexually.

This function is located closely to the FC function on the extended implicational map in Aguilar-Guevara et al. (2011).

⁶⁶ The data are based on the German corpus ‘Das Digitale Wörterbuch der Deutschen Sprache des 20. Jahrhunderts’. The corpus can be found online under <http://www.dwds.de/>. Data were extracted from the main corpus only. At the time of search, the main corpus contained 100 million tokens of written German from 79,830 different files. The corpus included data from the whole 20th century and is balanced with respect to the different registers. Also these collected data are accessible through an online interface from <https://osf.io/z2j9e/>.

- (50) Lexical contribution of *irgend* in phase 4: (pragmatic) variation (non-specificity or ignorance effects)

To explain the free choice uses we will adopt an account proposed by Aloni and Franke (2013) in which free choice effects are derived as an obligatory conversational implicature for items encoding domain widening effects (Kadmon and Landman, 1993). On our account, domain widening is however not taken to be part of the lexical contribution of *irgend* but rather it is assumed to be contributed by stress (see Aloni, 2012), which as Haspelmath had observed seems to be necessary to trigger FC uses of *irgend*-indefinites. See example (4), repeated here as (51):

- (51) Dieses Problem kann IRGEND JEMAND lösen.
 This problem can *irgend somebody* solve.
 ‘This problem can be solved by anyone.’ (FC)

9 Conclusion

According to most scholars, the particle *irgend* had a locative meaning in Old High German. In our corpus study the first occurrence of the particle dates back to 1060, the period of Early Middle High German. In this period only locative readings were attested. The particle showed its first non-locative readings at the period of Classical Middle High German. At the same time, we found the first intermediate cases in which the particle *irgend* modifies an indefinite form. The first *irgend*-indefinites appeared in Early New High German. In view of these findings, we conjecture that the particle first needed to ‘lose’ its locative meaning before it could modify an indefinite form.

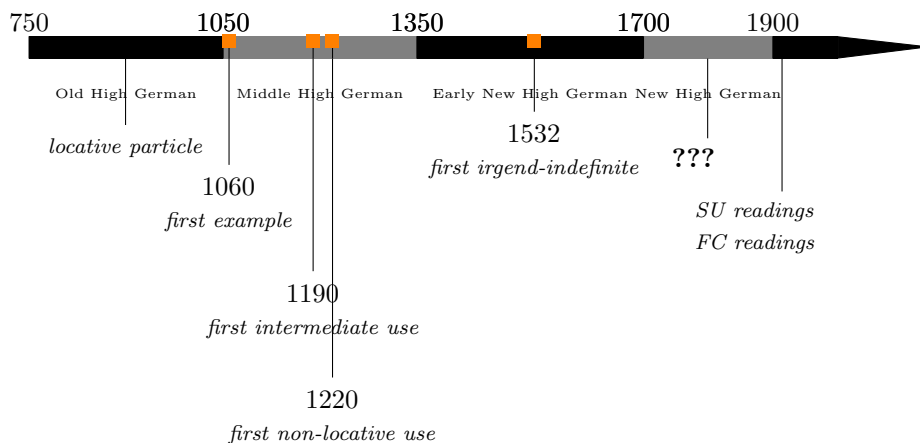
We conjecture four stages in the development of *irgend*-indefinites.

- Phase 1: Locative particle in Old High German till Early Middle High German [\mapsto +locative, +existential, and +non-specific];
- Phase 2: Loss of locative meaning in Classical Middle High German [\mapsto still +existential and +non-specific, but no longer necessarily locative];
- Phase 3: Indefinite modifier in Early New High German [\mapsto still +non-specific but no longer +existential by itself rather combining with other items which are +existential];
- Phase 4: The current state – present day German [\mapsto requiring variation, which can either be semantic, giving rise to non-specificity, or pragmatic, giving rise to ignorance].

The distribution of *irgend* covered a continuous area on Haspelmath’s implicational map, in all phases of its development. Our data suggest that *irgend*-indefinites acquired the SU, the universal CO and the FC functions, while the particle was restricted to the IR, Q, IN, and CA functions. The synchronic study of Aloni and Port (2014) showed that the SU and FC function are well attested in Present Day German. Taking this into account we conclude that

the acquisition of the SU and the FC functions must have taken place between 1700-1900.

The following time axis depicts the development of *irgend*-indefinites through the several periods of German:



Further data are needed to complement the picture, not only for *irgend*-indefinites, but also for other competing forms at the different periods of German.

Conflict of interest

The authors declare that they have no conflict of interest.

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