German *irgendein* - contrastive and diachronic

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WS Indefinites in diachronic and comparative perspective
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Outline

- contrastive : The variety of epistemic indefinites: German *irgendein* and Italian *un qualche*
- Previous analyses: the pragmatic stance
- Proposal: Dynamics with Conceptual Covers (CC)
- Diachronic Study

Epistemic indefinites

- Use of plain indefinites can give rise to an ignorance effect:

(1) Somebody arrived late. (Guess who?/Namely Mary)

a. Conventional meaning: Somebody arrived late
b. Ignorance implicature: The speaker doesn't know who

- **Epistemic indefinites**: ignorance effect conventionalized

(2) German *irgend-* [Haspelmath 1997, Kratzer & Shimoyama 2002]

a. **Irgendjemand** hat angerufen. #Rat mal wer?
somebody has called guess prt who?
b. Conventional meaning: Somebody called – the speaker doesn't not know who

(3) Italian *un qualche* [Zamparelli 2007]

a. Mario ha sposato **una qualche** ragazza, #cioè Maria.
Mario has married a some girl namely Maria
b. Conventional meaning: Mario has married some girl – the speaker doesn't know who

Four functions for epistemic indefinites

- At least four functions (context/meaning) for epistemic indefinites:
  - **spMV**: ignorance (MV) effect in specific uses
  - **epiMV**: ignorance (MV) effect under epistemic modals
  - **NPI**: narrow scope existential meaning in negative contexts
  - **deoFC**: free choice effect under deontic modals
- Function: useful notion for crosslinguistic research (Haspelmath 97)
- In order for an indefinite to qualify for a function, it must
  - be grammatical in the context the function specifies. E.g. no **spMV** for *any*:

    (4) #Mary married *any* doctor. [#spMV]

  - have the meaning that the function specifies. E.g. no **deoFC** for *some*:

    (5) You may marry *some* doctor. [#deoFC]
    ($\not\Rightarrow$ any doctor is a permissible option)

Modal Variation effect in specific uses (spMV)

- Ignorance effect in episodic sentences:

(6) Irgendein Student hat angerufen, (#nämlich Peter).
Some student has called (#namely Peter)
'Some student called, I don't know who'

(7) Maria ha sposato un qualche professore, (#cioè Vito).
Maria has married a some professor (#namely Vito)
'Maria married some professor, I don't know who'

- Modal Variation (MV) effect or Free Choice (FC)?

(8) a. MV: I don't know who $\mapsto \neg\exists x\Box\phi$
b. FC: It might be anyone $\mapsto \forall x\Diamond\phi$

- Modal Variation (MV) rather than Free Choice (FC):

(9) Hide-and-seek situation [O&M 2010]: we don't know where John is, but we know that he is not in the bedroom or in the bathroom

a. John is in some room of the house.
b. John is in irgendein/un qualche room of the house.
c. #He might be anywhere.

Modal Variation under epistemic modals (epiMV)

- Ignorance effect under epistemic modals:

(10) Maria muss irgendeinen Dokter geheiratet haben.
Maria must some doctor married have
'Maria must have married some doctor, I don't know who'

(11) Maria deve aver sposato un qualche professore.
Maria must have married a some professor
'Maria must have married some professor, I don't know who'

- Modal variation effect rather than free choice:

(12) Hide-and-seek situation [O&M 2010]:

a. John must be in some room of the house.
b. John must be in irgendein/un qualche room of the house.
c. #He might be anywhere.

Agent-oriented epistemic effects (epiMV)

- Agent-oriented epistemic effects under propositional attitude verbs:

(13) Andy glaubt, dass Maria irgendeinen Dokter geheiratet hat.
Andy believes that Maria some doctor married had

a. 'Andy believes that Maria married some doctor, I don't know who' [**spMV**]
b. 'Andy believes that Maria married some doctor, *Andy* doesn't know who' [agent-oriented **epiMV**]

(14) Antonio crede che Maria abbia sposato un qualche professore.
Antonio believes that Maria has$_{subj}$ married a some professor

a. 'Antonio believes that Maria married some professor, I don't know who' [**spMV**]
b. 'Antonio believes that Maria married some professor, *Antonio* doesn't know who' [agent-oriented **epiMV**]

Negative polarity uses (NPI)

- *Irgendein*: narrow scope existential meaning in negative contexts

(15) Niemand hat irgendeine Frage beantwortet. [**NPI**]
Nobody has some question answered
'Nobody answered any question'

- *Un qualche*: deviant in negative contexts

(16) ??Nessuno ha risposto a una qualche domanda. [#**NPI**]
Nobody has answered to a some question
#'Nobody answered any question'

Free Choice uses under deontic or other modals (deoFC)

- *Irgendein*: Free choice effect under deontic modals

(17) Maria muss/darf *irgendeinen* Professor heiraten. [K&S 2002]
Maria must/can some professor marry

a. 'There is some professor Maria must/can marry, I don't know who' [**spMV**]
b. 'Maria must/can marry a professor, any professor is a permissible option' [**deoFC**]

- *Un qualche*: no free choice effects under deontic modals

(18) Maria deve/può sposare un qualche professore.
Maria must/can marry a some professor

a. 'There is some professor Maria must/can marry, I don't know who' [**spMV**]
b. #'Maria must/can marry a professor, any professor is a permissible option' [#**deoFC**]

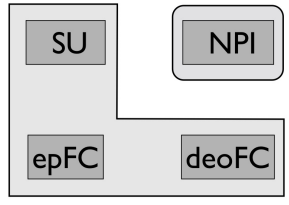
Variety of epistemic indefinites

- Four main functions (context/meaning) for epistemic indefinites:
  - **spMV**: ignorance (MV) effect in specific uses
  - **epiMV**: ignorance (MV) effect under epistemic modals
  - **NPI**: narrow scope existential meaning in negative contexts
  - **deoFC**: free choice effect under deontic modals
- Epistemic indefinites cross-linguistically:

	spMV	**epiMV**	**NPI**	**deoFC**
irgendein	yes	yes	yes	yes
algún	yes	yes	yes	no
un qualche	yes	yes	no	no
si	yes	no	no	no
vreun	no	yes	yes	no
any	no	no	yes	yes

- Main idea: MV and FC effects in EIs are conversational implicatures:
  - Derivable by Gricean reasoning
  - Non-detachable (i.e. inferences based on meaning rather than form)
  - Defeasible/Reinforceable
- Defended in various forms:
  - Kratzer & Shimoyama, 2002, Kratzer 2005, Chierchia 2006
  - Alonso-Ovalle & Menéndez-Benito 2010
  - Aloni 2007a, Aloni and van Rooij 2007
- Serious empirical insufficiency: fails to account for
  - epiMV *vs* deoFC
  - differences in distribution of different EIs

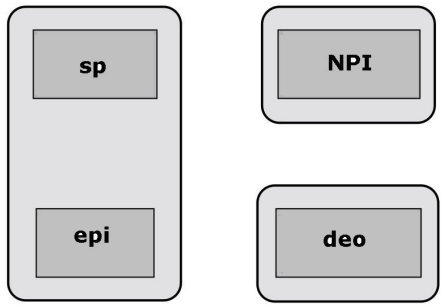
Pragmatic approach:



- predict in specific uses and under modals: FC effect (or MV)
- No account for different distribution of EIs

Summary

- Desiderata:



- **Specific** uses and under **epistemic** modal: MV effect $\mapsto \neg\exists x \Box\phi$
- Under **negation**: no effect (if licensed)
- Under **deontic** or other modals: FC effect $\mapsto$ $\forall x \Diamond\phi$ (if licensed)

An alternative analysis for epistemic indefinites (Aloni & Port, NELS41, 2011)

- Epistemic indefinites $\mapsto$ existentials with two characteristics:
  [cf. Kadmon & Landman 1993]

1. **Domain Shift**: induce an obligatory domain shift
2. **Felicity Condition**: express conditions on the input context that must be satisfied for the indefinite to be felicitous

- Modal Variation effect as result of lexically encoded felicity condition rather than Gricean reasoning (cf. dynamics of presupposition)
  $\Rightarrow$ *??defeasible, ??reinforceable*
- MV as fossilized implicature: inference, pragmatic in origin, now part of lexically encoded meaning $\Rightarrow$ *derivable by Gricean means*
- Difference between different indefinites in terms of different domain shifts they can induce $\Rightarrow$ *variety of EIs*

Domain shift triggered by epistemic indefinites

- Epistemic indefinites block context induced domain selections
  [cf. Zamparelli 2007]
- Two ways in which context determine quantificational domains:
- Contextual domain restriction (Westerståhl 1984):

  (19) Everybody passed the exam. [e.g. everybody in my class]

  Blocking $\mapsto$ **domain widening** (DW)

- Pragmatic selection of a method of identification (Aloni 2001):

  (20) **The card scenario:** Two face-down cards, the ace of hearts and the ace of spades. You know that the winning card is the ace of hearts, but you don't know whether it's the card on the left or the one on the right.

  (21) You know which card is the winning card. [True or False?]

  Blocking $\mapsto$ Shift of identification method or **conceptual cover shift** (CC-shift)

Conceptual Covers

- Identification methods can be formalized as *conceptual covers*:

  (22) A conceptual cover *CC* is a set of concepts such that in each world, every individual instantiates exactly one concept in *CC*.

- In the cards scenario, there are three salient covers/ways of identifying the cards:

  (23)
  a. {on-the-left, on-the-right} [ostension]
  b. {ace-of-spades, ace-of-hearts} [naming]
  c. {the-winning-card, the-losing-card} [description]
  d. #{on-the-left, ace-of-spades}

- Evaluation of (24) depends on which of these covers is adopted:

  (24) You know which$_n$ card is the winning card.
  a. False, if $n \mapsto$ {on-the-left, on-the-right}
  b. True, if $n \mapsto$ {ace-of-spades, ace-of-hearts}
  c. Trivial, if $n \mapsto$ {the-winning-card, the-losing-card}

$\mapsto$ CC-indices n added to logical form, their value is contextually supplied

Epistemic indefinites & identification methods

- Puzzle of specific unknown uses:

(25) Devo incontrare un qualche professore.
I-must meet a some professor
'I must meet a certain professor, but I don't know who he is'

- Specific: speaker has someone in mind ⇒ speaker can identify
- But unknown: speaker doesn't know who ⇒ speaker cannot identify
- Different identification methods are at play:
- Speaker can identify on one method (e.g. description) (specific)
- But not on another (e.g. naming) (unknown)
- MAIN INTUITION: referents of EIs typically identified via a method different from the one required for knowledge ↦ **CC-shift**
- Suppose m is the cover required for knowledge
- EIs signal obligatory shift to a cover n different from m ↦ introduce discourse referents elements of $n \neq m$ [CC-shift]
- If CC-shift is not trivial, use of EI implies speaker doesn't know who

Naming and Ostension

At a workshop:

(26) a. Ich muss **irgendeinen** Professor hier treffen. Er heisst Gennaro Chierchia, aber ich weiss nicht wie er aussieht.
'I have to meet some professor. His name is Gennaro Chierchia, but I don't know what he looks like'

b. *Speaker-can-identify* $\mapsto$ [Naming], *unknown* $\mapsto$ [Ostension]

(27) a. Devo incontrare **un qualche** professore. Si chiama Gennaro Chierchia, ma non so che aspetto abbia.
'I have to meet some professor. His name is Gennaro Chierchia, but I don't know what he looks like'

b. *Speaker-can-identify* $\mapsto$ [Naming], *unknown* $\mapsto$ [Ostension]

Ostension and Naming

At a soccer match:

(28) a. Guck mal! Da ist **irgendein** Spieler verletzt. Weisst Du wer das ist?
'Look! Some player got injured. Do you know who he is?'
b. *Speaker-can-identify* $\mapsto$ [Ostension], *unknown* $\mapsto$ [Naming]

(29) a. ??Guarda! **Un qualche** giocatore si è fatto male. Sai chi è?
'Look! Some player got injured. Do you know who he is?'
b. ??*Speaker-can-identify* $\mapsto$ [Ostension], *unknown* $\mapsto$ [Naming]

EIs & identification methods: Romance *vs* Germanic

- Ranking on methods of identification (Aloni 2001):

  (30) ostension $>$ naming $>$ description

- Hypothesis:

  (31) In Romance, but not in Germanic, identification method required for knowledge must be higher in order than identification method required for specific EIs

- Prediction: if referent identified by ostension, EIs infelicitous in Romance

  Lambada example [Alonso-Ovalle & Menéndez-Benito 2003]:

  (32) a. Look! **Some**/Irgendein professor is dancing on his table!
  b. *Speaker-can-identify* $\mapsto$ [Ostension], *unknown* $\mapsto$ [Naming]

  (33) a. ??Look! **Algún**/Un qualche professor is dancing on his table!
  b. ??*Speaker-can-identify* $\mapsto$ [Ostension], *unknown* $\mapsto$ [Naming]

Ostension, Naming and Description

- Prediction: if description required for knowledge, EIs should be felicitous in German even though referent identified by ostension and naming

  At the office. A secretary to his boss:

  (34) a. Hier ist **irgendein** Besucher fuer Dich. Er heisst Frank Schulz. Kann ich ihn zu Dir schicken?
  'There is some visitor for you. His name is Frank Schulz. Can I let him in?'

  b. *Speaker-can-identify* $\mapsto$ [Ostension/Naming], *unknown* $\mapsto$ [Description]

  (35) a. ??C'è qui **un qualche** cliente per te. Si chiama Frank Schulz. Posso farlo entrare?
  'There is some customer for you. His name is Frank Schulz. Can I let him in?'

  b. ??*Speaker-can-identify* $\mapsto$ [Ostension/Naming], *unknown* $\mapsto$ [Description]

Proposal

- Epistemic indefinites: existentials with two characteristics:

1. Induce obligatory domain-shift ($D \rightarrow D'$):
   - *un qualche*: CC-shift
   - *irgendein*: CC-shift + DW
2. Are felicitous in context σ iff domain-shift is for a reason:

   (i) CC-shift $\mapsto$ Necessary weakening

   (36) $\sigma \models \ldots \exists x_{D'} \ldots$, but $\sigma \not\models \ldots \exists x_{D} \ldots$ [Quality]

   CC-shift justified only if otherwise speaker's information state would not support the statement

   (ii) DW $\mapsto$ Strengthening

   (37) $\ldots \exists x_{D'} \ldots \models \ldots \exists x_{D} \ldots$ [Quantity]

   DW justified only if it creates a stronger statement

- Implementation in Dynamic Semantics with Conceptual Covers (Aloni 2001, chapter 3)

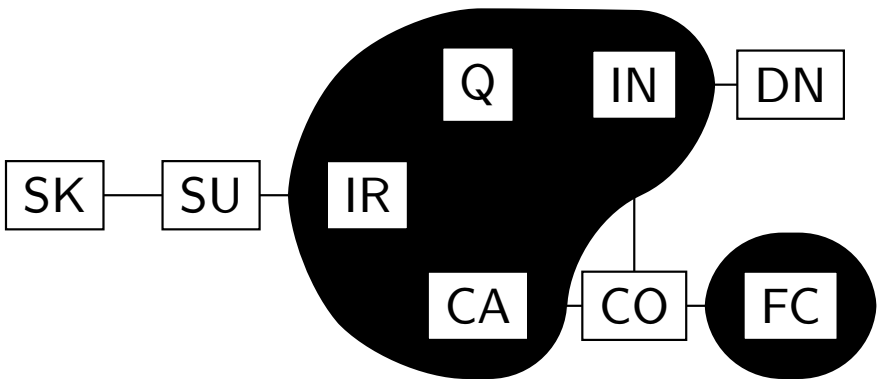
Predictions

	spMV	**epiMV**	**NPI**	**deoFC**
un qualche (only CC-shift)	yes	yes	no	no
irgendein (CC-shift + DW)	yes	yes	yes	no [problem!]

- **spMV** $\equiv$ **epiMV**: via CC-shift + Necessary Weakening
- #**NPI** & #**deoFC** for *un qualche*: CC-shift vacuous under negation or deontic modals
- **epi** $\not\equiv$ **deo**: via dynamic analysis of epistemic modality (Veltman 1997)
- **NPI** for *irgendein*: via DW + Strengthening
- **deoFC** for *irgendein*: several possible solutions that need further investigation

Previous diachronic studies

- the particle *irgend* emerged from the Old High German (OHG) (750-1050) form *io-wergin 'anywhere/somewhere'*
- Fobbe (2004) : used translations of the Bible, no occurrences in OHG and Middle High German (MHG) (1050-1350)
- Fobbe claims that during the period of Early New High German (1350-1650) *irgend* loses its locative meaning and aquires a modal meaning
  (38) *irgendein in Early New High German (Fobbe 2004)*



- this distribution would violate Haspelmath's predictions
- Jäger (2008): *irgend* started as NPI, no occurrences in OHG found

Research questions

1. From locative meaning to other meanings of the particle *irgend*
2. From particle to indefinite form
3. Distribution of *irgend*-indefinites
4. The original function of *irgend*-indefinites.

Corpus - Middle High German

- two corpora are used

Corpus	**occurrences**
Middle High German Conceptual Database (MB)	85
Bochumer Middle High German Corpus (BC)	24
	109

(39) *total amount of occurrences over the 3 periods in MHG*

period	**MB**	**BC**	**in total (percentage)**
Early MHG (1050-1170)	1	4	4,5 %
Classical MHG (1170-1250)	63	10	66,9 %
Late MHG (1250-1350)	21	10	28,4 %

Methodology

- particle or indefinite ?

(40) Die schult ich vf jne selbs lege, Tritt er *irgent* unszer dem wege.
the debt I on him self put, steps he *somewhere* our the way.
'The debt is on himself, if he steps in our way somewhere' [**particle**]
[Diu Crone approx. 1325]

(41) und sollen sie deßwegen nicht zu Rede gestellet/ noch unter *irgend einen* Vorwand beschweret werden.
and should they therefore not to self-justification put/ nor under *any* excuse burdened become.
'and they should therefore not be ask for self-justification nor should they become burdened under any excuse'[**indefinite**]
[Käyserl. und Frantzösischer Friedensschluß, 1679]

- unclear cases labeled as intermediate case [IM]:

(42) sahent ir *irgent* eynen ritter hie für ryten,[**IM**]
saw you *irgent* a knight here for ride,
'did you see a knight **somewhere** here riding'
'did you see **some** knight riding here'
[Prose-Lancelot, approx.1250]

Methodology

- locative meaning of the particle?

(43) Die schult ich vf jne selbs lege, Tritt er *irgent* unszer dem wege.
the debt I on him self put, steps he *somewhere* our the way.
'The debt is on himself, if he steps in our way somewhere'
[Diu Crone approx. 1325]

(44) ich sung im das allerpeste das ich *yergent* kan...
I sang him the very-best that I *irgend* could ...
'I sang for him the very best I *?somewhere* could ..'
[Neidhardt Lieder, app. 1210-1240, MB]

- examples annotated according to the original functions of Hasplemath (1997)

The data

- most common case: particle use + verbs of perceptions

(45) Hiltebrant sach umbe sich, Ob er sîn hêrren Dieterich *Iergen* tôt ligen sæhe
Hiltebant saw around refl, whether he his master Dietrich somewhere dead lying see
'Hildebrant looked around, whether he would see his master Dietrich lying dead somewhere'
[Der Jüngere Sigenot, first quarter of 14*th* century,]

- another frequent construction: superlatives

(46) Do lacht er sich in die unbekanteste herberge die er *ergent* ffnden konde und ....
Then quartered he refl. in the most-unknown hostel, which he ergent find could and ...
'Then he quartered himself into the most unknown hostel which he could find *somewhere* and ...' [Prose-Lancelot (Part 2), appr. 1250]

unclear cases - bridging contexts

- temporal reading rather than a locative reading:

(47) Geliche buzze solle sie lyden,, wylge *irgo* gedar gan uzzer de clost'e,, ob it gedut ane der ebdissen gebot.(.)
Same penance should they do, who *ever* attempted to leave the monastery, if it happened without the commandment of the abbess.

[Oxforder Benediktinerregel, first half 14*th* century,]

- modal reading possible, locative reading excluded due to ILP:

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

[Neidhardt Lieder, app. 1210-1240,]

first intermediate cases in MHG

- particle ?

(49) Und da er sich sahe so nacket, da schampt er sich vor imselber und bat sie das sie im *irgent* geben ein cleyt, das er nit stuond also schemelich.
And because he himself saw so naked, then feel-ashamed he refl. of himself and ask they that they him *irgent* give one apparel, that he not stand too embarrased
'And because he saw himself being naked, he was embarrassed and ask, that they give him one apparel *somehow*, so ... ' [Prose Lancelot (part 3), app. 1250]

- or does *irgend* modify the NP even not being directly adjacent?

(50) Und da er sich sahe so nacket, da schampt er sich vor imselber und bat sie das sie im *irgent* geben ein cleyt, das er nit stuond also schemelich.
And because he saw himself being naked, he was embarrassed and ask, that they give him *some* apparel , so ...

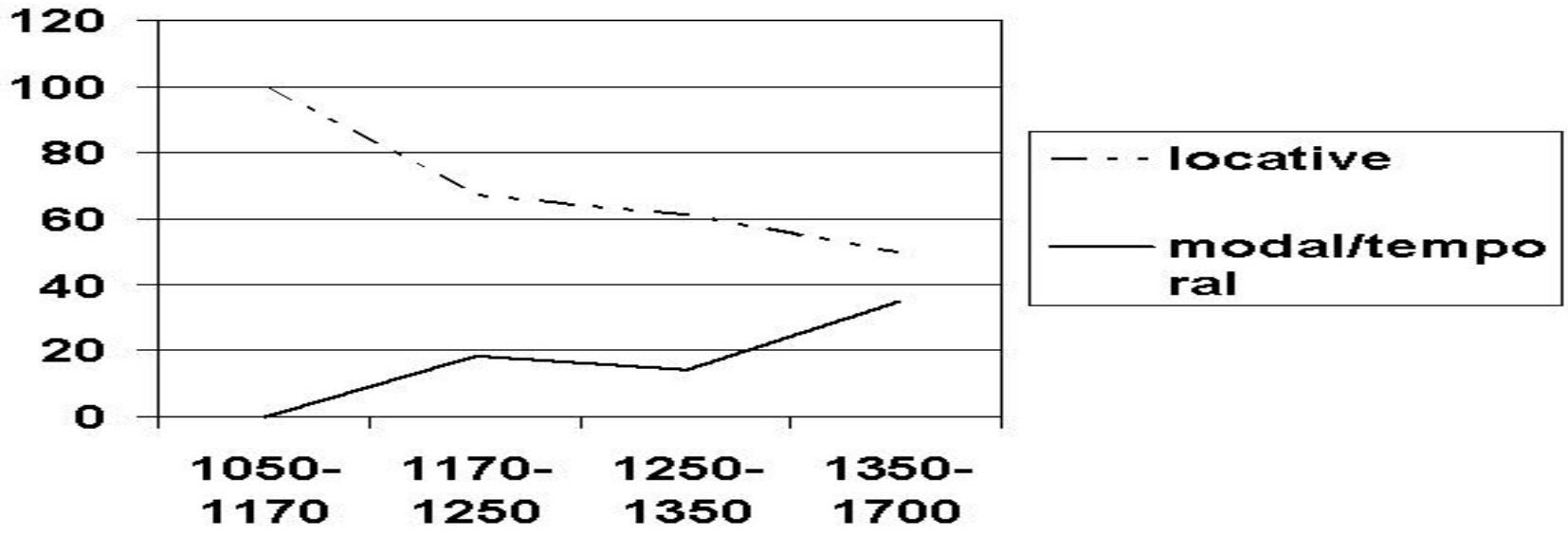
Results for MHG and ENHG - Summary

- from locative meanings to other meanings

(51) *locative readings of the particle irgend*

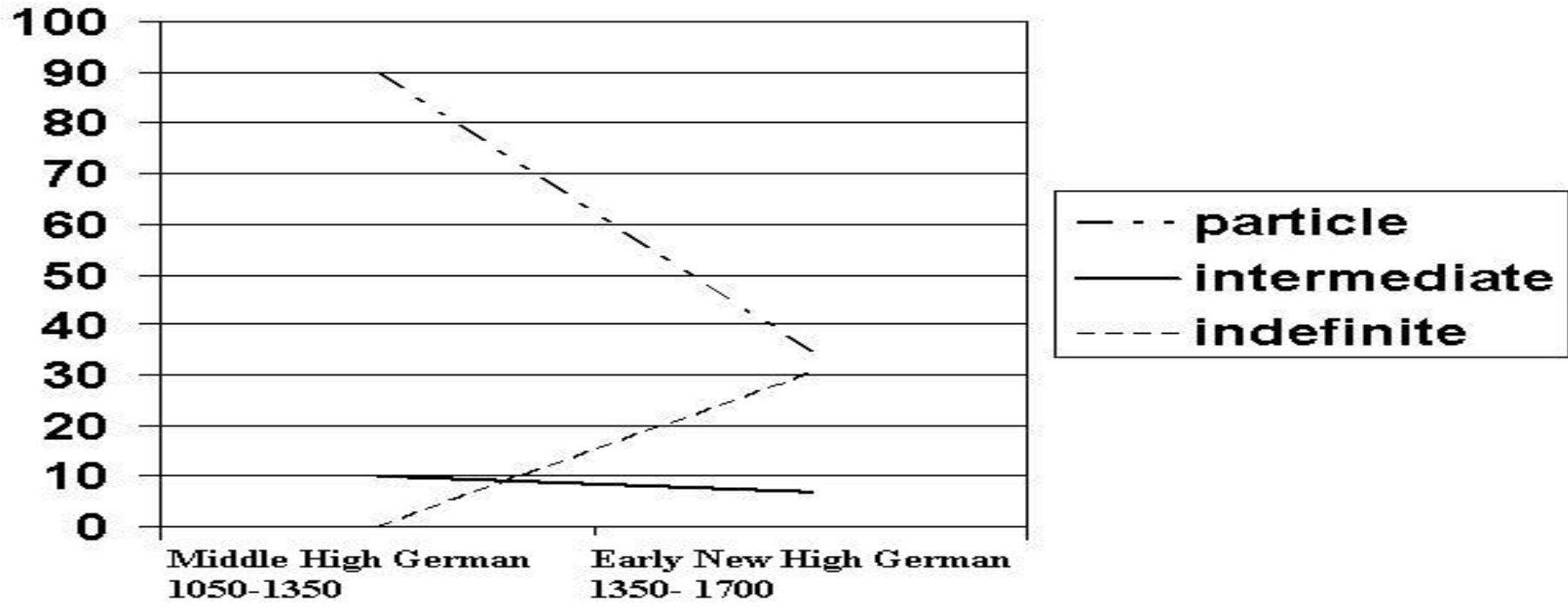
period	**absolute**	**percentage**
Early MHG (1050-1170)	5	100 %
Classical MHG (1170-1250)	49	67 %
Late MHG (1250-1350)	19	61,2 %

(52) *locative meaning of the particle from 1050-1700*

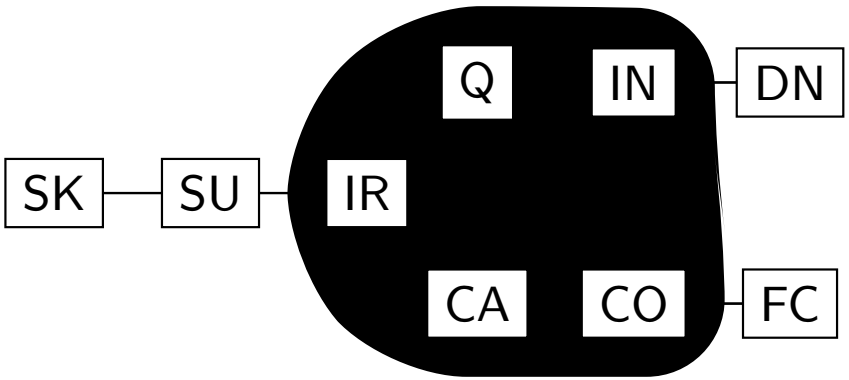


from particle to indefinite

(53) *particle - intermediate - indefinite 1050-1700*



Distribution of *irgendein* in ENHG

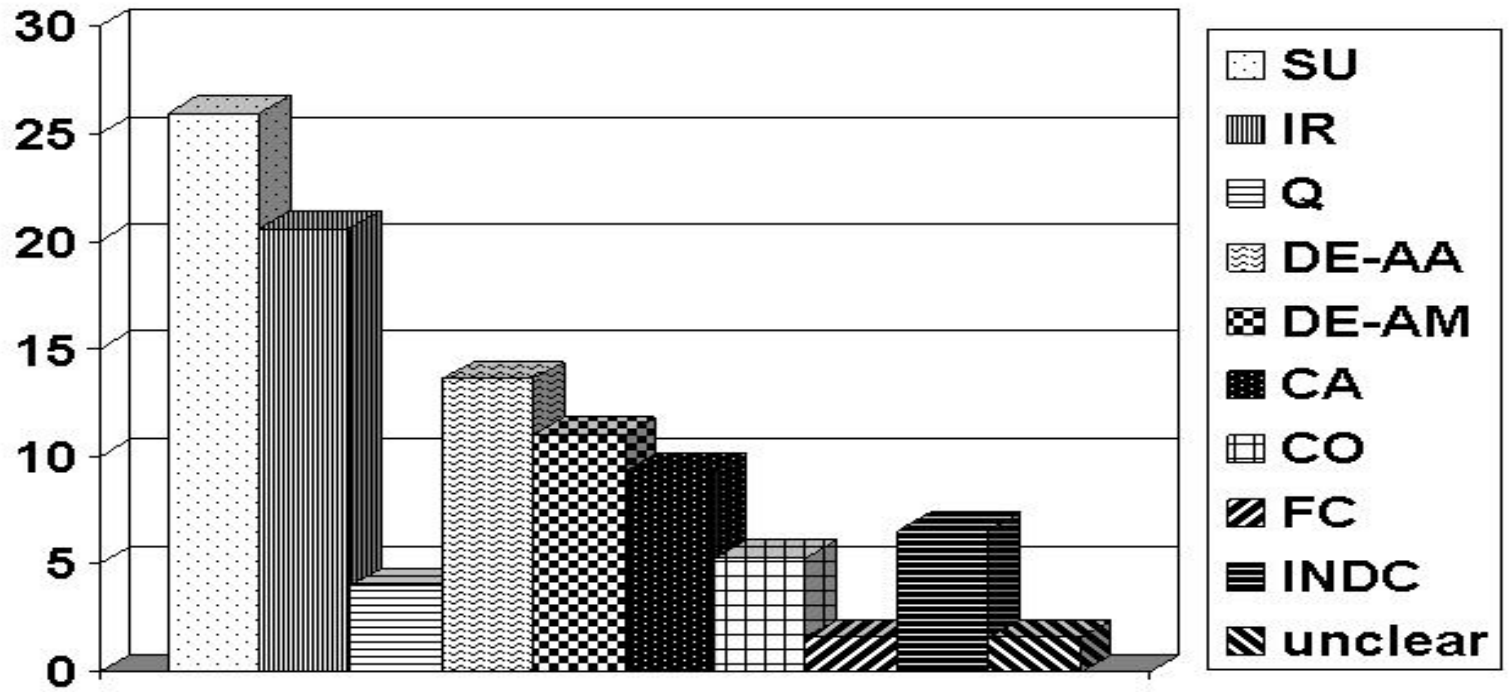


- *irgendein* covers a continous area
- no FC uses are found in contrast to Fobbe(2004)
- one possible early use in spMV function (SU)

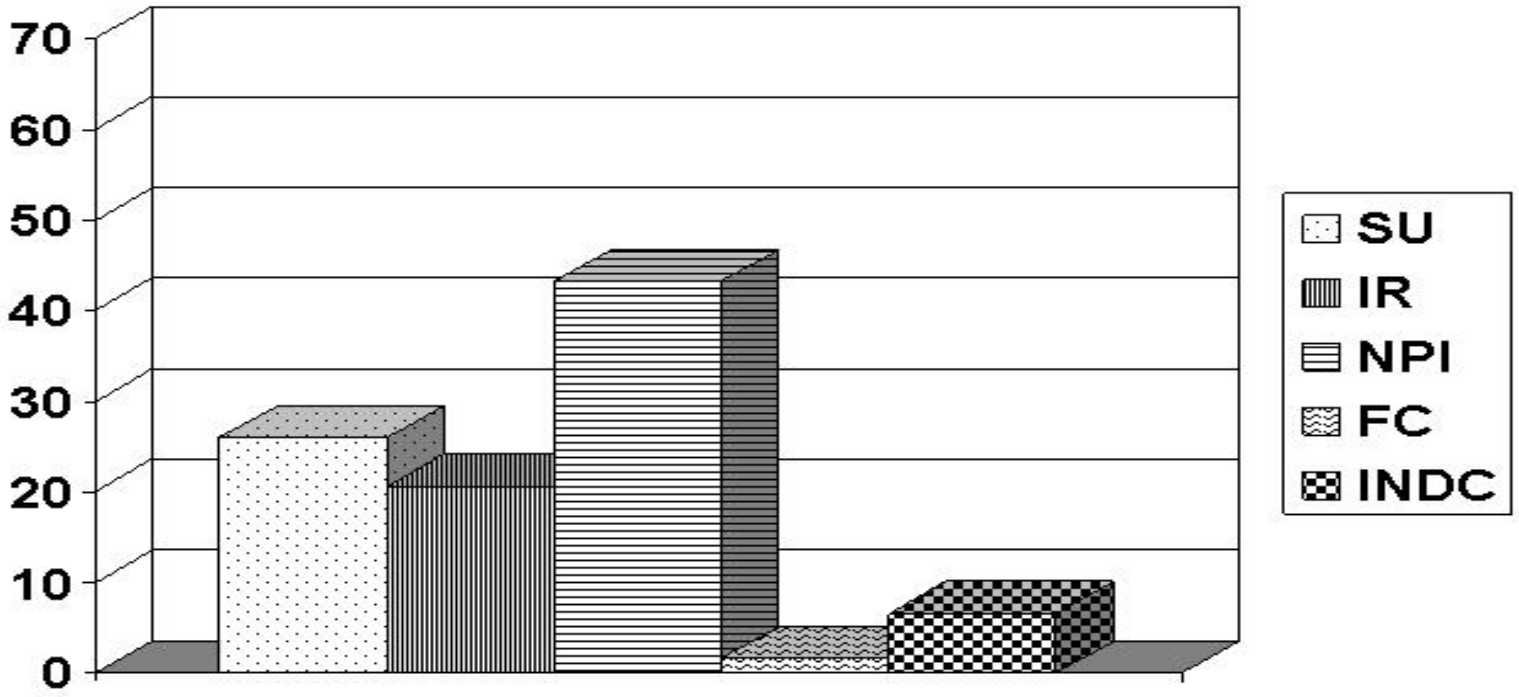
original function of irgend-indefinites

- synchronic corpus study:

  Distribution of the determiner *irgendein*



distribution of *irgendein* in DE- contexts together



- two possible regions where *irgend*-indefinites might have emerged
- specific area or in the NPI area
- given that FC is not very frequent and still seems to need a phonological devive to trigger FC effect this possibility is very unlikely
- the distribution of *irgend* in ENHG excludes the specific area

Irgend-indefinites startet as NPI according to (Jäger 2008)

- most attested uses are IR, CA and Questions in ENHG (the CA area includes superlative construction and restriction of a universal)
- this area is not taken as a typial region where indefinites emerge, cf. Haspelmath (1997): indefinites typically emerge in the FC corner, the negative corner (IN, DN) or in the specific area
- the first contexts where *irgend*-indefinites emerged seem to have a strong connection to evidentiality/epistemic modality rather than being an existential in the narrow scope of negation(NPI)
- complicating matter: MHG was in the transition from a NC language to a DN language
- maybe only the property of non-specificity of *irgend*-indefinites played a role in the diachronic development?
- hypothesis: the CA, Q and IR area might give rise to Epistemic Indefinites
- the first occurences of *irgend* in an indefinite-like use appeared with the determiner *ein 'a(n)'* already in MHG - wh-words in MHG were not **used** as indefinites in this period