The Interpretation of the German Specificity Markers \textit{bestimmt} and \textit{gewiss}

Christian Ebert (Universität Bielefeld)  
Cornelia Ebert (Universität Osnabrück)  
Stefan Hinterwimmer (Humboldt-Universität zu Berlin)
Two markers that seem to indicate specificity in the sense that they have a strong tendency to scope over intensional operators in German: *bestimmt* and *gewiss* (which roughly correspond to *particular* or *certain* in English).

Both markers can be used in DPs headed by either the indefinite article *ein* or by a numeral, and with bare plurals.
Introduction

(1)a. Peter sucht eine bestimmte CD.
   [Peter is looking for a/one bestimmmt-FEM.SING.ACC CD.]

b. Peter sucht eine gewisse CD.

c. Peter sucht eine CD.

In (1a,b): the indefinite necessarily takes scope over the intensional verb *suchen* (search).

(1c) is ambiguous.
Both \textit{bestimmt} and \textit{gewiss}: unacceptable in quantificational DPs other than ones headed by the indefinite article or a numeral.

\textit{Bestimmt}: cannot be combined with the definite determiner.

\textit{Gewiss}: not generally acceptable in definite DPs, but can be combined with the definite determiner in some cases which all have a certain idiomatic flavour to them, however.

In what follows we will ignore the cases where \textit{gewiss} is combined with the definite article as well as degree uses of \textit{gewiss}. We will focus on the singular indefinites \textit{ein bestimmt/ein gewiss} and treat them as complex determiners.
Identifiability

*bestimmt* does not require the speaker to be able to identify the respective object, while *gewiss* does.

This is shown by the following minimal pair.
Semantic Differences: Identifiability

(2) a. Peter sucht schon seit Stunden nach einer bestimmten CD – keine Ahnung, welche genau er sucht.

[Peter has been looking for a/one bestimmmt-FEM.SING.DAT CD for hours now – I have no idea, which one exactly he is looking for].

b. Peter sucht schon seit Stunden nach einer gewissen CD – # keine Ahnung, welche genau er sucht.

In (2a) it is sufficient that Peter has some particular CD in mind. Gewiss, in contrast, is different in this respect, as shown by the oddity of the continuation in (2b).
Important: Identification does not necessarily mean being able to name the respective object.

In the case at hand, the speaker does not have to know the title of the CD Peter is looking for.

Rather, she has to be able to provide a property singling out this particular CD from other CDs owned by Peter.
That *bestimmt* is compatible with non-identifiability by the speaker is supported by the observation that it may be combined with *irgendein* (*any x whatsoever*):

(4) Diese Murmeln haben unter den Kindern untereinander irgendeinen bestimmten Wert, Glasmurmeln zum Beispiel die Werte von zwei einfachen Murmeln … [Deutsches Spracharchiv Corpus]

[These marbles have among the children *irgendein-MASC.SING.ACC bestimmt-MASC.SING.ACC value, marbles made of glass, for example, have the same value as two simple marbles*.]
In contrast, most examples are infelicitous where *irgend* is combined with *gewiss*.

This is expected if *gewiss* requires some kind of speaker identifiability:

(5) ??Diese Murmeln haben unter den Kindern untereinander irgendeinen gewissen Wert, ... .
[These marbles have among the children irgendein-MASC.SING.ACC gewiss-MASC.SING.ACC value, ...]
The same holds for questions:

(6) a. Geht Paul immer in eine bestimmte Kneipe?
   [Does Paul always go to a/one bestimmte-FEM-SING-ACC pub?]
   b. Geht Paul immer in eine gewisse Kneipe?
   [Does Paul always go to a/one gewisse-FEM-SING-ACC pub?]

Most salient reading of (6a): the speaker asks whether there is a particular pub to which Paul regularly goes, and (7) accordingly would be a well-formed answer.

(7) Yes, but I won’t tell you which pub it is.
In the case of (6b), in contrast, the speaker indicates that she has a particular pub in mind. Furthermore, for the question to be felicitous, the hearer also has to know which pub the speaker is talking about.

(6) b. Geht Paul immer in eine gewisse Kneipe?

The question thus can be paraphrased as “Does Paul go regularly to this particular pub that we both know?”. Neither (8a) nor (8b) is therefore an appropriate answer.

(8) a. Yes, but I won’t tell you which pub it is.
   b. Yes, but I don’t know which pub it is.
Section summary:

*gewiss* in the majority of cases requires speaker identifiability.

*bestimmt*, in constrast, only requires that some salient person is in possession of identifying knowledge.

This salient person *might* be the speaker, but in a variety of cases a different agent mentioned in the sentence might be even more salient.

In the next section we will have a closer look at the scope-taking behaviour of the two operators.
Scope-taking behaviour

*bestimmt* can in principle scope under negation while this is strictly impossible for *gewiss*:

(9) a. Die USA unterstützen ein Wirtschaftsprogramm, nicht eine bestimmte/keine bestimmte Person.
[The USA support an economy program, not a/one *bestimmt*-FEM-SING-ACC person
[SZ Corpus]

b. Die USA unterstützen ein Wirtschaftsprogramm, nicht eine gewisse/*keine gewisse Person.
Concerning the interaction with other quantificational DPs, *bestimmt*, but not *gewiss*, can in principle take narrow scope:

(10) a. Jeder Student hat ein bestimmtes Gedicht von Emily Dickinson ausgewählt und analysiert.
[Every student chose a/one bestimmmt-NEUT-SING-ACC poem by Emily Dickinson chosen and analysed it.]
b. Jeder Student hat ein gewisses Gedicht von Emily Dickinson ausgewählt und analysiert.

In (10a): the poems may vary with the students.

In (10b): there is one poem that was analysed by everybody.
Let us turn to conditionals next.

Well-known fact: indefinites can in principle take scope outside of conditionals.

While in many cases both *bestimmt*- and *gewiss*-indefinites seem to behave alike insofar as they have to take scope outside of conditionals, the familiar contrast shows up again in cases such as (11).
(11) a. Wenn morgen wieder alle Kinder ein bestimmtes Pferd reiten wollen, haben wir ein Problem.
[If tomorrow again all children want to ride one particular horse, we will have a problem.]

b. Wenn morgen wieder alle Kinder ein gewisses Pferd reiten wollen, haben wir ein Problem.

(11a) is ambiguous.
**Reading A**: Trouble only obtains if there is one horse such that all children want to ride this particular horse.

**Reading B**: There already is trouble if all children are picky with respect to the horses they want to ride.

(11b): Only **Reading A** available.
Concerning intensional operators, we have already seen that in simple examples both *bestimmt*- and *gewiss*-indefinites have to take scope over the intensional operator.

In cases with more than one intensional operator, however, *gewiss*-indefinites always have to take widest scope, while *bestimmt*-indefinites allow for an intermediate reading.
(12) a. Peter glaubt, dass Paula einen bestimmten Mann heiraten muss.
   [Peter believes that Paula must marry a/one bestimmmt-MASC.SING.ACC man.]
   b. Peter glaubt, dass Paula einen gewissen Mann heiraten muss.

(12a) is ambiguous.
**Reading A:** There is one particular man (about whom the speaker has some further information) such that Peter believes of this man that Paula has to marry him.
**Reading B:** Peter believes that Paula is obliged to marry a man who she/some other salient agent can identify further.

(12b): Only **Reading A** is available.
Semantic Differences: Scope-taking Behaviour

Section Summary

gewiss-indefinites: always have to take widest scope with respect to other operators such as negation, quantificational DPs and conditionals.

bestimmt-indefinites: may in principle take narrow scope with respect to these.

The only exception: sentences with intensional operators, where both bestimmt- and gewiss-indefinites do not allow for narrow scope.
# Section Summary

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Starting point:

A quite literal understanding of identifiability which both markers add: a modified indefinite such as *ein bestimmter/gewisser Diplomat* (a certain diplomat) communicates that some agent/the speaker *knows that diplomat*.

Next step: a closer look at *knowing*-DP constructions.

The DPs in these constructions have been argued to actually stand for concealed identity questions (Heim, 1979).
Idea:

Both specificity markers add the information that some agent/the speaker knows the answer to the concealed question, who the corresponding referent is.

In other words: some agent/the speaker knows who the diplomat is in the example above.

A correct analysis of such knowing-wh constructions requires a relativization of the knowledge states of agents to descriptions under which the individuals in questions are known (Aloni, 2001; Aloni, 2008).
The first ingredient to our formal analysis: Aloni’s (2008) approach to concealed questions in terms of conceptual covers, which we will use to capture the contribution of both \textit{bestimmt} and \textit{gewiss}.

Location of the differences between \textit{bestimmt} and \textit{gewiss}: the distinction of asserted/at-issue meaning and non-asserted meaning.

We propose that \textit{bestimmt} and \textit{gewiss} make the same meaning contribution, but on different levels.

\textit{bestimmt}: adds to the asserted/at-issue meaning.
\textit{gewiss}: enters the scene as a \textit{conventional implicature} (CI).

A conceptual cover: a set of individual concepts (i.e. functions from worlds to individuals) such that for a domain of individuals $D$ and a set of worlds $W$ each element of $D$ is identified by exactly one concept in each element of $W$.

Different conceptual covers (henceforth: CCs) with identical domains: different ways of conceiving of one and the same set of individuals.
Example (from Aloni, 2008): a situation where two face-down cards are lying in front of you, and while you know that one is the Ace of Hearts and one is the Ace of Spades, you don’t know which card is which.

Furthermore, you are playing a game where you have to choose one card and are going to win 10 Euros if you choose the Ace of Spades, while you are going to lose 10 Euros if you choose the Ace of Hearts.
Depends on the mode of identification with respect to which the embedded question in (13) is interpreted whether the sentence is true or false.

(13) You know which card is the winning card (Aloni 2008).

On the one hand, it is true: you know that the Ace of Spades is the winning card.

On the other hand, it is false: you don’t know whether the card on the left or the card on the right is the winning card.
In other words, if the embedded question is interpreted with respect to the CC
\{\lambda w.\text{ace\_of\_spades}(w), \lambda w.\text{ace\_of\_hearts}(w)\}, you know its true answer.

If it is interpreted with respect to the CC
\{\lambda w.\text{card\_on\_left}(w), \lambda w.\text{card\_on\_right}(w)\}, in contrast, you don’t know it.
Conceptual covers: sets of individual concepts which exhaustively and exclusively cover the domain of individuals.

A special index $n \in N$ is added to the variables in the meaning language, which ranges over conceptual covers instead of individuals.

A *conceptual perspective* $\wp$ in a model $M$ is defined as a function from indices in $N$ to individual concepts.

Sentences are interpreted with respect to assignments under a perspective, where an assignment under a perspective $g_{\wp}$ is a function mapping variables $x_n$ to concepts in $\wp(n)$, rather than individuals in $D$. 
A question like $\exists_n P x_n$: groups together the worlds in which the denotation of $P$ is identified by means of the same set of elements of the conceptual cover selected for $n$.

Finally, the interpretation of a DP as a concealed question is modelled via a type shift that maps an entity denoting expression $d$ into the identity question *who is/what is $d$?*

(14) $\uparrow_n d =_{def} \exists_n x_n = d$
Formal Analysis: *Bestimmt*-indefinites

*bestimmt*: contributes the information that some salient agent $\alpha$ knows the answer to an identity question concerning the discourse referent introduced by the indefinite under some pragmatically licensed conceptual cover.

(15) \[[\text{ein bestimmt}]] = \lambda P \lambda Q. \exists x[P(x) \land Q(x) \land K_\alpha(\uparrow_n x)]

\(\text{ein bestimmt}\) takes two predicates as its argument and returns a proposition that is true if there is

(a) an individual that satisfies the two predicates and
(b) a salient individual $\alpha$ knows that individual under a perspective, i.e. a conceptual cover $\wp(n)$.
The variable standing for the agent $\alpha$ can not only be assigned a value from the context, but can also be bound by a quantifier under c-command.

A variable binding operator is inserted directly beneath the respective quantifier (see Büring 2004). Effect: any free variable in the scope of the operator is turned into a lambda-bound variable.

   [Everyone met a bestimmt-MASC.SING.ACC diplomat.]

   b. $\forall x[\text{person}(x) \rightarrow \exists y[\text{diplomat}(y) \land \text{meet}(x,y) \land K_x(\uparrow_n y)]]$

   c. $\exists y[\text{diplomat}(y) \land K_\alpha(\uparrow_n y) \land \forall x[\text{person}(x) \rightarrow \text{meet}(x,y)]]$
The contribution of *bestimmt* is in no way incompatible with being negated.

(17) a. Die USA unterstützen keine bestimmte Person.
    [The USA do not support a bestimmt-FEM.SING.ACC person.]

    b. $\neg \exists x [\text{person}(x) \land \text{support}(\text{usa}, x) \land K_\alpha(\uparrow_n x)]$

Paraphrase: It is not the case that there is a person $x$ such that the USA support this person and such that either the USA or some other salient agent can identify this person (with respect to some salient conceptual cover).
Formal Analysis: *Bestimmt*-indefinites

(18) a. Peter glaubt, dass Paula einen bestimmten Mann heiraten muss.
   [Peter believes that Paula must marry a bestimmt-MASC.SING.ACC man.]

   b. believe(peter, must(paula, ∃x[man(x) ∧ Kₐ(↑ₙ x) ∧ marry(paula, x)]))

Assuming that *must* receives a deontic interpretation, we have four salient agents: Paula, Peter, the speaker and the ‘instructor’. The narrowest scope reading in (18b) leads to implausibility.
(18) a. Peter glaubt, dass Paula einen bestimmten Mann heiraten muss.
   [Peter believes that Paula must marry a bestimmmt-MASC.SING.ACC man.]

c. $\exists x [\text{man}(x) \land K_\alpha(\uparrow_n x) \land \text{believe}(\text{peter}, \text{must}(\text{paula}, \text{marry}(\text{paula}, x)))$]

The wide scope reading in (18c) states that there is a man identifiable to $\alpha$ such that Peter believes that Paula is obliged to marry this man. Concerning the resolution of $\alpha$, every of the four options yields a reasonable reading.
Formal Analysis: *Bestimmt*-indefinites

(18) a. Peter glaubt, dass Paula einen bestimmten Mann heiraten muss.

d. believe(peter, \(\exists x[\text{man}(x) \land K_\alpha(\uparrow_n x) \land \text{must}(\text{paula, marry(paula, x))}]\))

The intermediate scope reading in (18d) can be paraphrased as: In all worlds \(w\) compatible with what Peter believes there is a man that \(\alpha\) can identify in \(w\) such that in worlds \(w'\) deontically accessible from \(w\), Paula marries that man.

At least two resolutions of \(\alpha\) yield sensible results: Peter might believe that there is a man that is identifiable to Paula or the instructor, such that Paula has to marry this man.
Conventional Implicatures

Potts (2005): certain parts of sentences, while syntactically fully integrated, are nevertheless semantically processed at a separate level of interpretation.

CI-meanings function as comments on an at-issue core and are interpreted at the highest level, i.e. they are scopeless and commitments of the speaker.

Prime examples of CIs: nominal appositives, expressive adjectives (cf. also Potts, 2007), epithets and Japanese honorifics.
Conventional Implicatures

(20) a. Lance, a cyclist, is training.
    b. training(lance): $t^a$
       •
       cyclist(lance): $t^c$
Formal Analysis: Gewiss-indefinites

The meaning of gewiss

Main difference between bestimmt and gewiss: level at which an identical lexical content is interpreted.

Contribution of bestimmt: a part of the at-issue content.

Contribution of gewiss: the separate level of conventional implicatures (CIs).

Ein gewiss forms a complex determiner, too, but in contrast to bestimmt, it contributes two meaning components: One on the at-issue level and one on the CI level.
The meaning of *gewiss*

(22) \[[\text{ein gewiss}]\] = \(\lambda P \lambda Q. \exists x [P(x) \land Q(x)] \bullet K_\alpha(\uparrow_n y)\)

where \(y\) is a free variable that needs to be resolved.

The free variable \(y\) needs to be resolved to the freshly introduced \(x\) of the indefinite in an E-type fashion (cf. Potts 2005), since this is the most salient discourse referent.
The meaning of *gewiss*

Two important consequences:

First, the information that some $\alpha$ is in possession of identifying information of $y$ is backgrounded information that is meant to comment on the at issue proposition.

Consequence: the resolution possibilities of $\alpha$ are limited to the one to which the CI as such is ascribed.

Second, the indefinite has to be interpreted with widest scope in order for the resulting CI proposition to be compatible with the at issue proposition.
The meaning of *gewiss*

(23) a. Paula muss einen bestimmten Mann heiraten.
   b. \(\exists x [\text{man}(x) \land \forall w' R_{\text{must}} w : \text{marry}(Paula, x)(w')]\): \(t^a\)
      •
      \(K_\alpha(\uparrow_n y)\): \(t^c\)
   c. \(\forall w' R_{\text{must}} w : \exists x [\text{man}(x)(w') \land \text{marry}(Paula, x)(w')]\): \(t^a\)
      •
      \(K_\alpha(\uparrow_n y)\): \(t^c\)

In (23b): the at-issue proposition and the CI proposition are coherent.
In (23c): an E-type derivation fails, and \(y\) cannot be resolved.
The meaning of *gewiss*

We thus have an account for why *gewiss*-indefinites always have to take widest scope:

The CI proposition generated by *gewiss* would not be compatible with any other option.
Summary

Both *bestimmt* and *gewiss* add the information that some salient individual is able to identify the discourse referent introduced by the indefinite with respect to some contextually salient conceptual cover.

They differ with respect to the level at which this information is interpreted: in the case of *bestimmt*, it is the level where the at-issue content is computed, while in the case of *gewiss* it is the CI-level.
Bibliography

Introduction – Semantic Differences between bestimmt and gewiss – Formal Analysis: Gewiss-Indefinites


