GERMAN DOCH

AN ELEMENT THAT TRIGGERS A CONTRAST PRESUPPOSITION*

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Roadmap

- An analysis of unstressed doch in German: What is it? What does it do?
- Detailed analysis of the first meaning component of doch (Uncontroversiality)
- Detailed analysis of the second meaning component of doch (Correction)

1. The Analysis in a Nutshell

1.1 Introducing Unstressed doch in German

- German has a particle doch (I’m focusing on the unstressed version), which contributes the following to a sentence.

(1) Uttering a [doch p] declarative conveys:
   - p is an established fact (the “uncontroversiality meaning component”)¹
   - p is used to correct a salient q (the “correction meaning component”)²

- Illustration 1: Explicit correction.

(2) Otto: Jan muss nicht kochen. Er hat doch abgewaschen.
    J. need not cook he has DOCH washed.up
    ≈ ‘It’s not the case that Jan needs to cook; because he washed up.’
    (literally: ‘Jan doesn’t need to cook. He [DOCH] washed up.’)
    ⇒ [p He washed up] is used to correct [q he needs to cook].

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¹ This part of my analysis is based on Kratzer & Matthewson’s (2009) analysis of the particle ja.
Illustration 2: Implicit correction. (Note: Bill imputes shared knowledge to Mary!)

(I will come back to how the blatant disagreement in (3) is compatible with the assumption that doch triggers the presupposition that it is an established fact that these flowers are beautiful)

(3) Mary: Schau mal! Diese Blumen sind so hässlich.
look once these flowers are so ugly
‘Have a look! These flowers are so ugly.’

Bill: Was hast du denn? Diese Blumen sind doch schön!
what have you then these flowers are DOCH beautiful
‘What’s your problem? These flowers are [DOCH] beautiful’

⇒ [p The flowers are beautiful] is used to correct [q the flowers are ugly].

Illustration 3: Contextual correction.

(4) Context: I wake up on a Sunday at 6AM, because the neighbors are drilling.

Patrick: Heute ist doch Sonntag!
today is DOCH Sunday
≈ ‘But today is SUNDAY!’
(literally: ‘Today is [DOCH] Sunday!’)

⇒ [p Today is Sunday] is used to correct [q it’s ok to drill today].

Illustration 4: Refuting presuppositions.

(5) Luna: Wann kommt der Erzherzog von Chicago nach Boston?
when comes the archduke of Chicago to Boston
‘When does the archduke of Chicago come to Boston?’

Ron: Es gibt doch keinen Erzherzog von Chicago.
it gives DOCH no archduke of Chicago
‘There is [DOCH] no archduke of Chicago.’

⇒ [p There is no archduke of Chicago] is used to correct [q there is an archduke of Chicago].

The Puzzle:

How can we formulate a parsimonious analysis of doch that is general enough to rule in all attested cases, but specific enough to capture its corrective function?
1.2 Analyzing Unstressed *doch* in German

- **Core Proposal:**
  - *doch* has two meaning components.
    
  - The meaning of *doch* can be given as in (6) and (8) below.

(6) **Semantics of *doch* (informal version which will be used in this talk)**

a. *doch* $p$ presupposes that $p$ is an established fact and $\neg p$ can be safely discarded.

(loosely based on Kratzer & Matthewson’s 2009 semantics of German *ja*)

*(note: This is not a Stalnakerian presupposition, but rather an ‘expressive presupposition’. In this sense, the statement *is an established fact* does not mean *is in the common ground.*)

b. *doch* $p$ presupposes that there is a contextually salient proposition $q$, such that:

   i. $q$ is a focus alternative of $p$

   ii. given contextually salient background assumptions, $q$ contradicts $p$

   (i.e. if $p$ and $q$ is not a logical contradiction, *doch* $p$ presupposes that in the current context $\neg [p \text{ and } q]$.)

   (see Abraham 1991, Bárány 2009, Doherty 1985, Ornelius-Sandblom 1997 for predecessors of the idea that $p$ corrects a salient $q$ that entails $\neg p$)

$\Rightarrow$ The correction effect is derived as follows.

(7) *doch* $p$ conveys that $p$ is true in the context of evaluation. $\quad = (6a)$

*doch* $p$ presupposes that a contextually salient $q$ contradicts $p$. $\quad = (6b)$

therefore, $q$ is false in the context of evaluation $\quad q.e.d.$

- While the informal statement is sufficient for the purpose of today’s talk, a formal analysis can be given in the framework of alternative semantics, sketched in (8).

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$^3$ It is difficult to say what *it is an established fact* does mean (cf. Kratzer & Matthewson 2009), but in the case of *doch*, it must be compatible at least with the hearer having a different opinion, which the speaker refutes as obviously wrong. It must also cover propositions that are not salient and potentially forgotten by the hearer.
(8) Semantics of doch (more formally)

  a. For any sentence \(p\), \(\|\text{doch } p\|_c\) (where \(c\) is the utterance context) is only defined if:
      i. the speaker in \(c\) takes \(p\) to be firmly established in \(w_c\) and therefore
      ii. assumes that it is safe to discard \(\neg p\) as a possible answer to the
          question of whether \(p\) or \(\neg p\) holds in \(w_c\).
          (based on Kratzer & Matthewson’s 2009 meaning of ja)

  b. If defined, \(\text{doch } p\) presupposes that there is a contextually salient proposition \(q\), such that:
      i. ordinary semantic value: \(\|\text{doch } p\|_o = \|p\|_o\)
      ii. focus value: \(\|\text{doch } p\|_f = \{\|p\|_o\}\)
      iii. presupposition: \([\text{doch } p]\) presupposes that there is at least one
          contextually salient proposition \(q \in \|p\|_f - \{\|p\|_o\}\) such that \(\neg [p \text{ and } q]\).
          (modeled after Rullmann’s 2003:339 analysis of English also/too)

- Categorizing doch:
  ⇒ I assume that (6a) is a meaning component that doch shares with German ja.
  ⇒ I assume that (6b) groups doch with other focus-sensitive particles, such as too.

- Contributions of this Paper:
  I. Overall, in this talk I propose an integrative analysis of doch that aims at covering
     all uses of the unstressed sentence-medial particle doch.

  II. I provide new empirical arguments that the meaning of doch (‘uncontroversiality +
     correction’) properly includes the meaning of ja (‘uncontroversiality’), section 2.

  III. This proposal makes correct predictions on the distribution of ja and doch (sect. 3)

  IV. I empirically argue (sect. 4) for a the correction component of doch, which assumes
      (i.) that the relation between \(p\) and \(q\) is indeed contradiction (as opposed to a
      notion of underspecified contrast, Karagjosova 2004, 2008), cf. sect. 4.1.
      (ii.) that the salient proposition \(q\) must be a focus alternative (rather than just
      any salient or topical \(q\)), cf. section 4.2.
      (iii.) that the correction meaning component of doch has to be licensed in a
      local context, rather than in a global context, cf. section 4.3.

  V. My proposal yields an explanation for the ordering ja doch (vs *doch ja) (sect. 5)
1.3 Illustrating How the Analysis Works

- **Note:** To make paraphrases more intuitive, I will write \( p \) is an established fact as an abbreviation for \( p \) is an established fact and \( \neg p \) can be safely discarded.

- **First Example:** Analyzing explicit correction.

\[(9)\] Otto: Jan muss nicht kochen. Er hat **doch** [abgewaschen].

J. need not cook he has **DOCH** washed up

\( \approx \) ‘It’s not the case that Jan needs to cook; because he washed up.’

\( \text{do}ch \)

\( \begin{align*}
\text{i.} & \text{ It is an established fact that } [p \text{ Jan washed up}]. \\
\text{ii.} & \text{ There is a contextually salient proposition } q \in \{\text{Jan did wash up, Jan did cook, Jan has to wash up, Jan has to cook, …}\}, \text{ namely } [q \text{ Jan has to cook}] \\
\text{iii.} & \neg [p \text{ and } q], \text{ i.e. it is false that } [p \& q \text{ Jan washed up and Jan has to cook}] \\
& \text{(given that everybody must either wash up or cook, but not both).}
\end{align*} \]

- **Second Example:** Implicit correction.

\[(10)\] Mary: Schau mal! Diese Blumen sind so hässlich.

look once these flowers are so ugly

‘Have a look! These flowers are so ugly.’

Bill: Was hast du denn? Diese Blumen sind **doch** schön!

what have you then these flowers are **DOCH** beautiful

‘What’s your problem? These flowers are [DOCH] beautiful!’

\( \text{do}ch \)

\( \begin{align*}
\text{i.} & \text{(I hereby declare:) it’s an established fact that } [p \text{ the flowers are beautiful}]. \\
& \text{(By conveying this, Bill indicates that } p \text{ is obvious and that Mary is obviously wrong!)}
\end{align*} \)

\( \text{do}ch \)

\( \begin{align*}
\text{ii.} & \text{ There is a contextually salient proposition } q \in \{\text{the flowers are beautiful, the flowers are ugly …}\}, \text{ namely } [q \text{ the flowers are ugly}] \\
\text{iii.} & \neg [p \text{ and } q], \text{ i.e. it is false that } [p \& q \text{ the flowers are beautiful and the flowers are ugly}] \\
\end{align*} \)

\( \text{! Note: By conveying that it is an established fact that } [p \text{ the flowers are beautiful}], \) Bill explicitly ignores Mary’s statement that \( [q \text{ the flowers are ugly}] \) and presupposes the opposite. Mary can now either accommodate this imputation or reject Bill’s statement, thereby starting an argument. (See also appendix 1.)

\( \text{(One might refer to this type of interaction with the label “forced accommodation”.)} \)
• **Third Example:** Contextual correction.

(11) **Context:** I wake up on a Sunday at 6AM, because the neighbors are drilling.

Patrick: Heute ist doch Sonntag!

today is DOCH Sunday

≈ ‘But today is SUNDAY!’

(literally: ‘Today is [DOCH] Sunday!’)

\[
\begin{aligned}
&i. \text{ It is an established fact that } [p \text{ today is Sunday}]. \\
&ii. \text{ There is a contextually salient proposition } q \in \{\text{today is Sunday, today it’s ok to drill, …}\}, \text{ namely } [q \text{ today it’s ok to drill}] \\
&iii. \neg [p \& q], \text{ i.e. it is false that } [p \& q \text{ today is Sunday and today it’s ok to drill}]
\end{aligned}
\]

*Note:* This is presumably a case of wide sentential focus, so the relevant question that describes the focus alternatives is *What’s the case?* or *What’s the case today?*

• **Fourth Example:** Refuting presuppositions.

(12) Luna: Wann kommt der Erzherzog von Chicago nach Boston?

when comes the archduke of Chicago to Boston

‘When does the archduke of Chicago come to Boston?’

Ron: Es gibt doch keinen Erzherzog von Chicago.

it gives DOCH no archduke of Chicago

‘There is [DOCH] no archduke of Chicago.’

\[
\begin{aligned}
&i. \text{ It is an established fact that } [p \text{ there is no archduke of Chicago}]. \\
&ii. \text{ There is a contextually salient proposition } q \in \{\text{there is an archduke of Chicago, there is no archduke of Chicago}\}, \text{ namely } [q \text{ there is an archduke of Chicago}] \\
&iii. \neg [p \& q], \text{ i.e. it is false that } [p \& q \text{ there is an archduke of Chicago and there is no archduke of Chicago}]
\end{aligned}
\]

*Note:* This is presumably a case of Verum Focus, so the only relevant focus alternatives are \(p = \text{It is false that } q\) and \(q = \text{It is true that } q\).

• Having seen that the analysis works, I argue for the component parts in the remainder.
2. Part 1 of the Analysis: The *Uncontroversiality* Meaning Component

- **Sub-Proposal “Uncontroversiality”:**
  
  *doch* has a meaning component that expresses uncontroversiality, which can be stated as follows.

  \[(13) \text{ Uncontroversiality Meaning Component of } \text{ \textit{doch}} (\text{and } \text{\textit{ja}}) = (6a)\]

  *doch* \(p\) presupposes that \(p\) is an established fact and \(\neg p\) can be safely discarded.

  (based on Kratzer & Matthewson’s 2009 analysis of \textit{ja})

- This analysis envelopes the following main claim.

- **Claim 1:** *doch* \(p\) shares the property of \(\text{\textit{ja}} p\) to convey that \(p\) is already firmly established and \(\neg p\) (in some sense) no longer under consideration.

- **Argument for Claim 1:** Contrasting *ja* and *doch* with stressed *DOCH*, the former are ruled out when it cannot be assumed that the modified proposition is already established, whereas the latter is ruled out when this is given. Crucially I focus on cases where the speaker can choose whether to intend correction or not (see below).

(14) a. **Context:** The hearer attended the last colloquium party and knows that Hans brought expensive wine.

  Wir haben geglaubt, der Hans sei ein totaler Schnorrer, aber we have believed the H. be a complete scrounger but

  am Freitag hat er *doch* / *ja* / #DOCH / #\(\emptyset\) einen teuren Wein on Friday has he *DOCH* *JA* #DOCH an expensive wine

  mitgebracht.

  ‘We always believed Hans to be a complete scrounger, but then he

  \[(DOCH / JA / #DOCH / #\emptyset)\) brought expensive wine to the party.’
b.  *Context:* The hearer was out of town and didn’t attend the last colloquium party, so she doesn’t know that Hans brought expensive wine.

Wir haben geglaubt, der Hans sei ein totaler Schnorrer, aber wir have believed the H. be a complete scrounger but am Freitag hat er #doch / #ja / DOCH / ∅ einen teuren Wein on Friday has he #DOCH #JA DOCH an expensive wine mitgebracht.

‘We always believed Hans to be a complete scrounger, but then he (#DOCH / #JA / DOCH / ∅) brought expensive wine to the party.’

(15) a.  *Context:* The hearer is well aware that she’s been to Paris before and the speaker wants to make this fact salient in order to follow up on it.

Du warst #ja / doch / #DOCH schon in Paris.

‘You’ve (JA / DOCH / DOCH) already been to Paris.’

b.  *Context:* The hearer is an amnesiac and believes that she has never been to Paris, when the speaker discovers an old flight ticket to Paris with the hearer’s name on it.

Du warst #ja / #doch / DOCH schon in Paris.

‘You’ve (#JA / #DOCH / DOCH) already been to Paris.’

3.  Prediction of the Analysis: Interactions between *ja* and *doch*

- I have argued that *doch* has an uncontroversiality meaning component that *ja* also has. However, *doch* has a correction meaning component that *ja* misses:

(16)  **Schema of *doch* and *ja***

a.  *ja* = ε … where ε is ‘conveys uncontroversiality’

b.  *doch* = ε + π … where π is ‘conveys correction’
3.1 The Ways in Which *doch* and *ja* Differ

- **Claim 2**: Unstressed *doch* has a correction component, repeated in (17), whereas *ja* lacks it.

(17) **Correction Meaning Component of *doch* (= (6b))**

*doch* presupposes that there is a contextually salient proposition *q*, such that:

i. *q* is a focus alternative of *p*

ii. given contextually salient background assumptions, *q* contradicts *p*  
   (i.e. if *p and q* is not a logical contradiction, *doch* presupposes that in the current context ¬ [ *p and q* ].)

- **Prediction 1**: If the speaker wants to convey correction, *doch* must be used, (18a).

  ⇒ Given that *doch* has more presuppositions than *ja* and (by assumption) entails *ja*, this preference for *doch* over *ja* is an instance of *Maximize Presupposition* (Heim 1991).

- **Prediction 2**: If the speaker doesn’t want to convey correction, *ja* must be used, (18b).

  ⇒ It follows that whenever *ja* is used on its own, the hearer understands that no correction is intended (this can be considered a type of scalar implicature).

(18) a. A: Wir fahren morgen ans Meer!  
   we drive tomorrow to.the sea  
   ‘We’re going to the seaside tomorrow!’

   B: Wie denn das? Du musst *doch* / # *ja* morgen arbeiten.  
   how PRT that you must DOCH / # JA tomorrow work  
   ‘How so? You [DOCH / # JA] have to work tomorrow.’  ⇒ **correction**

b. A: Ich kann morgen nicht mit euch mitkommen.  
   I can tomorrow not with you come  
   ‘I can’t come with you tomorrow.’

   B: Ich weiß eh. Du musst *ja* / # *doch* morgen arbeiten.  
   I know PRT you must JA # DOCH tomorrow work  
   ‘I know. You [JA / # DOCH] have to work tomorrow.’  ⇒ **no correction**
⇒ Examples (19) and (20) are further illustrations of this pattern.

    about me is absolutely nothing special  
    ‘Absolutely nothing about me is special.’  

    B: Du hast doch / #ja grüne Augen!  
    you have DOCH #JA green eyes  
    ‘You have [DOCH / #JA] green eyes!’  ⇒ correction

b. A sees B for the first time in bright sun light and realizes B’s eye color.

    A: Du hast #doch / ja grüne Augen!  
    you have #DOCH JA green eyes  
    ‘You have [JA / #DOCH] green eyes!’  ⇒ no correction  
    (after Thurmaier 1989:108)

(20) a. Heinz: Hast du deinen Pullover vielleicht im Schwimmbad  
    have you your sweater maybe in the bath  
    vergessen?  
    forgotten  
    ‘Maybe you forgot your sweater in the public baths?’

    Anna: Ich war doch / #ja schon seit Jahren nicht mehr schwimmen.  
    I was DOCH #JA already since years not more swimming  
    ‘I [DOCH / #JA] haven’t been swimming in years.’  ⇒ correction  
    (after Thurmaier 1989:111)

b. Heinz: Schön, dass du morgen ins Schwimmbad mitkommst.  
    nice that you tomorrow into the bath come along  
    ‘It’s nice that you’re coming along to the public baths tomorrow.’

    Anna: Ich freu mich schon.  
    I excite me already  
    ‘I’m already excited.’

    Ich war ja / #doch schon seit Jahren nicht mehr schwimmen.  
    I was JA #DOCH already since years not more swimming  
    ‘I [JA / #DOCH] haven’t been swimming in years.’  ⇒ no correction
• **Summary of the Consequences of My Analysis:**

  Given that *ja* and *doch* can be viewed as elements on a scale, *ja* and *doch* are in competition.

  ⇒ i. when correction is intended, *doch* is required by Maximize Presupposition
  ⇒ ii. when no correction is intended, *doch* is blocked and only *ja* is possible

3.2 Choosing (Not) to Differ

• **Prediction 3:** When correction is optional, *ja* or *doch* can be used.

• **Prediction Carried Out:** In many cases, there is no obvious competition between *ja* and *doch*. An extreme case is given in (21). Such examples are sometimes (implicitly or explicitly) treated as counterexamples to a correction component of *doch* utterances.

(21) *Out-of-the-Blue* (slightly modified from Thurmair 1989:113)

  Hallo Otto! Du hast **doch** / **ja** letztes Jahr ein Mörike-Seminar besucht.
  Kann ich da mal die Unterlagen haben?

  ‘Hi Otto! You [**DOCH** / **JA**] attended a Mörike seminar last year. Can I borrow your notes?’

• **Explanation:** The speaker can choose whether to make a focus alternative *q* (with sentential focus, question: *What is the case?*) salient or not.

  ⇒ If so, *doch* is used, and the hearer is expected to accommodate for some focus alternative.

  ⇒ In the present case, this might be *q* = *I am mistaken and you didn’t attend a Mörike seminar*, which clearly contradicts the modified *p*, licensing *doch* *p*. (See Bárány 2009:102, who shows that such a *doch* *p* utterance can be extended to an utterance of *I am not sure, but doch p* without any change in meaning.)

• **A Final Remark:** If the uncontroversiality component is expressive in nature (see Kratzer & Matthewson 2009), we expect that it can be uttered iteratively (i.e. *ja* and *doch* can be combined, as *ja doch*), on a par with *damn in this damn damn dog!* (see Potts 2005). This is correct, as shown in appendix 3.
4. Part 2 of the Analysis: The *Correction* Meaning Component

- **Proposal**: *doch* has a meaning component that expresses correction, which can be summarized as follows.

\[(22) \text{Correction Meaning Component of } \textit{doch} (= (6b))\]

\[\text{doch } p \text{ presupposes that there is a contextually salient proposition } q, \text{ such that:}\]

i. \(q\) is a focus alternative of \(p\)

ii. given contextually salient background assumptions, \(q\) contradicts \(p\)

(i.e. if \(p\) and \(q\) is not a logical contradiction, \(\text{doch } p\) presupposes that in the current context \(\neg [p \text{ and } q].\))

- This analysis decomposes into the following claims.

  \(\Rightarrow\) **Claim 3:** *doch* makes use of an alternative semantics.

  \(\Rightarrow\) **Claim 4:** *doch* presupposes a contradiction between the salient alternative proposition and the modified statement.

  \(\Rightarrow\) **Claim 5:** The contribution of *doch* is presuppositional in nature.

  \(\Rightarrow\) **Claim 6:** *doch* is a particle like English *too*, which lexically encodes focus-sensitivity, i.e. the salient alternative must be a focus-alternative.

4.1 An alternative semantics for *doch*

- **Claim 3:** *doch* makes use of an alternative semantics.

- **Argument for Claim 3:**
  - *doch* behaves like more familiar elements such as *auch* ‘also’, in that it can establish a semantic link between two propositions.
  - these two propositions are contextual alternatives in one way or another.
  - while *auch* ‘also’ expresses parallel, (23), *doch* expresses contrast, (24).
(23) a. Jan hat das Essen gekocht. Er hat auch / #doch abgewaschen.
   J. has the food cooked he has also / #DOCH washed up
   ‘Jan cooked the food. He also / #DOCH washed the dishes.’ (q, p)

   b. Jan hat nicht gekocht. Er hat auch / #doch nicht abgewaschen.
   J. has not cooked he has also / #DOCH not washed up
   ‘Jan didn’t cook. He also / #DOCH didn’t wash the dishes.’ (¬q, ¬p)

   J. has the food cooked he has DOCH also not washed up
   ‘Jan cooked the food. He DOCH also didn’t wash the dishes.’ (q, ¬p)

   b. Jan hat nicht gekocht. Er hat doch / #auch abgewaschen.
   J. has not cooked he has DOCH also washed up
   ‘Jan didn’t cook. He DOCH also washed the dishes.’ (¬q, p)

(felicitous in a context where nobody both cooks and washes the dishes)

4.2 doch as a corrective device

• Claim 4: doch presupposes a contradiction between a salient focus-alternative and the modified statement.

• Argument for Claim 4: In a situation where p and q is explicitly possible (in fact p → q), doch becomes bad. In contrast, the sentence without doch is fine if a rhetorical break is added (indicated by ‘--’).

   as good as every atheist is liberal and green Hans is the exception
   ‘As good as every atheist is liberal and green. Hans is the exception.’

   b. Er ist nicht liberal. Er ist nicht grün. -- Er ist (#doch) [ATHEIST]!
   He is not liberal he is not green he is #DOCH atheist
   ‘He is not liberal. He is not green. -- He is (#DOCH) atheist!’

   c. q = Hans is liberal and green

   d. p = Hans is atheist

   e. #doch p infelicitously conveys that the current context presupposes ¬ [p and q], however, in the current context, it has been made explicit that [p and q] is a possibility, as [p and q] would be the normal case.
The infelicitous presuppositions of *doch*, which renders (25) unacceptable:

1. It is an established fact that \([p \text{ Hans is atheist}]\).
2. There is a contextually salient proposition \(q \in \{\text{he is atheist, he is liberal and green, }\ldots\}\), namely \([q \text{ he is liberal and he is green}]\).
3. \(\neg [p \text{ and } q]\), i.e. it is presupposed that \([-[p \& q] \text{ Hans being an atheist contradicts Hans being liberal and green}]\).

### 4.3 *doch* as a presupposition trigger

- **Claim 5:** The correction component of *doch* is presuppositional in nature.

- **Argument for Claim 5:** The presuppositions can be satisfied in a local context. They don’t have to be satisfied in a global context.

  ⇒ For the following examples, assume the house rules in (26).

(26) **House Rules:** Everybody either cooks or cleans. Nobody does both.

  ⇒ (27) brings out that *auch* ‘also’ presupposes a focus alternative of the same polarity.

(27) Otto hat nicht [gekocht]. Otto hat *auch / # doch* nicht [geputzt].

  O. has not cooked O. has also / # DOCH not cleaned


  ⇒ (28) brings out that *doch* presupposes a focus alternative of opposite polarity.

(28) Otto hat [gekocht]. Otto hat *doch / # auch* nicht [geputzt].

  O. has cooked O. has DOCH / # also not cleaned


  *doch* \(\approx\) there is a contextually salient proposition \(q (q = \text{Otto didn’t cook})\), which contradicts the modified utterance \(p (p = \text{Otto didn’t clean})\), given that we know that Otto did exactly one of them.

  ⇒ (29) shows that embedding under *I believe* maintains this distribution.

  (Note that *doch* and *auch* ‘also’ require different contexts, which I gloss over.)
(29) Ich glaube, dass Otto [gekocht] hat. Er hat **doch** / **AUCH** nicht [geputzt].
    'I believe that O. cooked has he has **DOCH** / **AUCH** not cleaned
    'I believe Otto [did] cook. He [DOCH] [didn’t] clean.'

⇒ The following example shows that the relevant licensing of **auch** ‘also, too’ and
    **doch** has to take place in a local context, and not in the global context.

(30) Otto hat nicht [gekocht].
    O. has not cooked
    'Otto [didn’t] cook.'

    Aber wenn er [gekocht] hätte,
    but if he cooked had
    dann hätte er **doch** / **# auch** nicht [geputzt].
    then had he **DOCH** / **# auch** not cleaned
    'But if he [had] cooked, then he [DOCH] [wouldn’t] have cleaned.'

doch ⇒ **in the local context**, there is a contextually salient proposition $q$ ($q = Otto$
    didn’t cook in the local context), which contradicts the modified utterance $p$ ($p$
    = Otto didn’t clean in the local context), given that we know that Otto would
    have done exactly one of them.

    I believe that O. cooked has
    'I believe Otto [did] cook.'

    Aber wenn er nicht [gekocht] hat,
    but if he not cooked has
    dann hat er **auch** / **# doch** nicht [geputzt].
    then has he **AUCH** / **# DOCH** not cleaned
    'But if he [didn’t] cook, then he **AUCH** [didn’t] clean.'

⇒ The following sketchy schema summarizes the point:

(32) a. $\neg$ **cook,**
    $\#DOCH(\neg$ **clean**) / $\#AUCH(\neg$ **clean**)

   b. $\neg$ **cook**, but [if **counterfactually** **cook**, then
    **DOCH(\neg** **clean**) / $\#AUCH(\neg$ **clean$$]

(33) a. **believe**(**cook**),
    **DOCH(\neg** **clean**) / $\#AUCH(\neg$ **clean**

   b. **believe**(**cook**), but [if $\neg$ **cook**, then
    $\#DOCH(\neg$ **clean**) / $\#AUCH(\neg$ **clean$$]

Whether **doch** or **auch** ‘also’ is licensed also depends on the local context (i.e. the
context defined by the conditional antecedent), not just on the global context.
4.4 *doch as a focus-sensitive operator*

- **Claim 6:** *doch* lexically associates with focus.

- **Preliminaries for Claim 6:**
  
  ⇒ It follows from the corrective meaning of *doch* that it can be used in explicit verbal reasoning, (34).

(34) *Schema of Reasoning*

i.  \( \neg[p \& q] \)

ii. therefore \( \neg q \), because *doch* \( p \)

(35) *Illustration*

a.  \( p = \text{Hans cooks.} \)

b.  \( q = \text{Hans cleans.} \)

c.  \( \text{Hans putzt oder kocht immer, aber niemals beides.} \ (= \neg[p \& q]) \)

   ‘Hans always cleans or cooks, but never both.’

   Daher \( \neg q \) hat Hans heute nicht geputzt], weil \( p \) er *doch* gekocht hat.

   ‘Therefore \( \neg q \) Hans didn’t clean today], because \( p \) he DOCH cooked.’

⇒ Note that in such configuration, *doch p* utterances can be embedded, (36).

(36) a.  \( \text{Hans putzt oder kocht immer, aber niemals beides.} \ (= \neg[p \& q]) \)

   ‘Hans always cleans or cooks, but never both.’

b.  Daher \( \neg q \) hat Hans heute nicht geputzt],

   weil’s heute der Fall ist, dass gilt, dass \( p \) er *doch* gekocht hat.

   ‘Therefore [Hans didn’t clean today], because it’s the case today that it’s a fact that [he DOCH cooked].’

- **Argument for Claim 6:** Beaver & Clark (2008): If an element lexically associates with focus, it cannot associate with reduced elements or traces.
(37) You can see Bush, but do you see Cheney?
   a. Yes, I **ALways see’im** / see HIM.
   b. I can **ONly #see’im** / see HIM.

   (Beaver & Clark 2008:158)

   ⇒ Reasoning with *doch* becomes illformed when *doch* cannot associate with the focus to yield the relevant focus alternative, because of extraction or reduction:

(38) a. \( p = \text{Hans kissed Anna} \).
   b. \( q = \text{Hans kissed Helga} \).
   c. Hans küsst jeden Tag entweder Anna oder Helga, aber nicht beide. \((= \neg [p \& q])\) ‘Every day Hans kisses either Anna or Helga, but never both.’

   Daher \([-q \text{ hat er heute nicht Helga geküsst}], \)
   ‘Therefore \([-q \text{ Hans didn’t kiss Helga today}], \)
   …’

   d. **Association with Focus**

   ... weil’s heut die Anna ist, für die gilt, dass \([p \text{ er } \text{ (} \text{doch} \text{)} \text{ SIE} \text{]}_F \) because’it today the A. is for who holds that he \([\text{DOCH} \text{ HER} \text{]} \) geküsst hat.
   kissed has

   ‘…because today it is Anna for who it’s the case that [he (DOCH) kissed HER].’

   e. **Failure to Associate with a Reduced Element**

   ... weil’s heut die Anna ist, für die gilt, dass \([p \text{ er } \text{ s } \text{ (} \text{doch} \text{)} \text{ #DOCH} \text{)] \) because’it today the A. is for who holds that he \([\text{her} \text{ #DOCH} \text{]} \) geküsst hat.
   kissed has

   ‘…because today it is Anna for who it’s the case that [he (#DOCH) kissed her].’

   f. **Failure to Associate with an Extracted Element**

   ... weil’s heut die Anna ist, [p die er \([\text{doch} \text{]}_{t} \text{ t7} \text{ geküsst hat} \).
   because’it today the A. is who he \([\text{DOCH} \text{ t} \text{]} \) kissed has

   ‘…because today it is Anna who [he (#DOCH) kissed \(t_7 \)].’

   ⇒ Further Evidence for Focus Sensitivity of *doch* is given in Appendix 4.
• **Prediction from Focus Sensitivity:** When *doch* tries to associate with the same focus as some other focus-sensitive element, intervention effects arise (Beck 2006).

(39) A: Er hat also von niemandem Nacktfotos hergezeigt?
he has thus of nobody nude photographs shown around
‘So he hasn’t shown around nude photographs of anyone?’
B: Naja …
well
‘Well …’

he has **DOCH** one shown around in which the K. naked is
‘He **DOCH** showed around one photograph in which KARL is naked.’

   **doch ≃** there is at least one contextually salient proposition
   \( q = \text{no one is such that he showed around at least one picture in which they are naked} \),
   which contradicts the modified utterance \( p \).

b. B: Er hat **nur** eines hergezeigt, in dem der [fKARL] nackt ist.
he has **ONLY** one shown around in which the K. naked is
‘He **ONLY** showed around one photograph in which KARL is naked.’

   **only ≃** All true focus alternatives of the modified proposition \( p \) are identical to \( p \).

he has **DOCH only** one shown around in which K. naked is
He **DOCH only** showed around one photograph in which KARL is naked.’

intended: All true focus alternatives of the modified proposition \( p \) are identical to \( p \), and there is at least one contextually salient proposition

   \( q = \text{no one is such that he showed around at least one picture in which they are naked} \),
   which contradicts the modified utterance \( p \), and \( q \) is false.

⇒ Even though (39c) is not contradictory, given the compatible presuppositions of

   *doch* and *nur* ‘only’, (39c) is illformed, indicating an intervention effect\(^4\).

\(^4\) For cases where *doch* and *nur* ‘only’ can co-occur without triggering intervention effects, I assume that
the particles do not try to associate with the same set of alternatives. I assume that intervention effects only
occur when two elements try to lexically associate with exactly the same focus.
5. A Prediction on Ordering Restrictions

- **Phenomenon:** *ja doch* is a possible combination, but *doch ja* isn’t (cf. Thurmair 1989). See appendix 3 for a discussion of the meaning of *ja doch* in combination.

(40) Sie sind *ja doch* / *doch ja* ein Akademiker.
   you are **JA DOCH** / **DOCH JA** an academic
   ‘You are [**JA DOCH** / **DOCH JA**] an academic.’

   then has **JA DOCH** the H. the O. **JA DOCH** the dog given
   ‘Then (**JA / DOCH**) Hans gave this dog to Otto.’

   then has **JA** the H. the O. **DOCH** the dog given
   ‘Then **JA DOCH** Hans gave this dog to Otto.’

   * then has **DOCH** the H. the O. **JA** the dog given
   * ‘Then **DOCH JA** Hans gave this dog to Otto.’

- **Proposed Explanation:**
  i. *ja* and *doch* must scope at a very high level (in the CP-domain), see Malte Zimmermann (2004a, 2004b).

ii. Given that adverbs do not scopally interact, their surface position reflects their scope position.

iii. I propose (below) that *ja* cannot intervene between an element that triggers focus alternatives and a focus-sensitive particle that interprets these alternatives.

iv. My proposal entails that *ja doch* is a possible order, whereas *doch ja* violates (iii). This derives the empirical ordering restrictions.

- Kratzer (1999) argues that *ja* operates on complete propositions and cannot occur between a quantifier and a variable that it binds:
Stacie hat ihren Job verloren, weil sie ja in der Gewerkschaft war.

‘Stacie lost her job, because she was [JA] in the union.’

(Kratzer 1999:5)

Keiner von diesen Arbeitern hat seinen Job verloren, weil er (*ja) in der Gewerkschaft war.

‘None of these workers lost his job, because he (*JA) in the union was.

(43) (based on Kaufmann’s 2004 suggested modification of Kratzer’s 1999:5 example)

⇒ Kratzer attributes the infelicity of (43) to the fact that the embedded clause contains a free variable and is thus not a complete proposition.

• However, we seem to find the same type of effect in cases where ja is located between a focus alternative trigger and a focus-sensitive element.

A: Haben alle Gewerkschaftsmitglieder ihren Job verloren?

‘Did all union members lose their jobs?’

B: Nein. Stacy hat ihren Job nur verloren, weil sie (*ja) in der Gewerkschaft der CHEMIEARBEITER war.

‘No. Stacy only lost her job, because she was (*JA) in the union of the CHEMICAL WORKERS.

≈ ‘The chemical workers’ union was such that being in it was the cause for Stacy’s losing her job; if she had been in any other union, this wouldn’t have caused her to lose her job.’

• I take this to argue that ja can only combine with fully semantically interpreted propositions (i.e. with propositions that may neither contain unbound variables nor a focus meaning distinct from the ordinary meaning).
⇒ This correctly predicts that nur ... ja is good if ja is part of the focus!

(45) A: Hätte Stacy ihren Job auf jeden Fall verloren?
    had Stacy her job in any case lost
    ‘Would Stacy have lost her job under any circumstances?’

    B: Nein. Stacy hat ihren Job nur verloren, [weil sie ja in der
    no Stacy has her job only lost because she JA in the
    Gewerkschaft der Chemiearbeiter war].
    union of.the chemical.workers was
    ‘No. Stacy only lost her job, because she [JA] was in the union of chemical
    workers.’

⇒ It is not clear whether we can find a uniform generalization for (43) and (44). The
    reason that (44) is bad might be that it is non-sensical for ja to be part of the focus
    alternatives.

• Given that we have seen that doch associates with focus, this predicts correctly
  that ja doch should generally be good, but doch ja should be bad, unless ja takes
  scope in a different clause, and ja is part of the focus that doch associates with.

(46) A: Haben nur Mitglieder der Gewerkschaft der Gemeindebediensteten
    have only members of.the union of.the magistrates
    ihren Job verloren?
    their job lost
    ‘Did only members of the union of magistrates lose their jobs?’

    B: Nein. Stacy hat ihren Job doch verloren, weil sie (*ja) in der
    no Stacy has her job DOCH lost because she JA in the
    Gewerkschaft der CHEMIEARBEITER war.
    union of.the CHEMICAL.WORKERS was
    ‘No. Stacy [DOCH] lost her job, because she was (*JA) in the union of
    CHEMICAL WORKERS.’
(47) A: Hat Stacy ihren Job ohne Grund verloren?
    has Stacy her job without reason lost
    ‘Did Stacy lose her job under any circumstances?’

    B: Nein. Stacy hat ihren Job **doch** verloren, [weil sie **ja** in der
    no Stacy has her job **DOCH** lost because she **JA** in the
    Gewerkschaft der Chemiearbeiter war]
    union of the chemical workers was
    ‘No. Stacy [DOCH] lost her job, because she was [JA] in the union of chemical
    workers.’

**Conclusion**

- The German particle *doch*
  - shares a (presuppositional/expressive) meaning component with the particle *ja*:
    ‘p is an established fact’
  - has an additional presuppositional meaning component that *ja* lacks:
    ‘there is a salient focus alternative q, such that q contradicts p’

- This predicts
  - that *doch* is preferred over *ja* (on their own) when correction is intended
  - *ja* can be used, but *doch* cannot be used, when no correction is intended

- Also, there is evidence that *ja* cannot occur between a focus-sensitive element and the
  focus. This correctly predicts that *ja* must precede *doch* if they attach high and their
  scope is rigid (unless *ja* is contained in the focus that *doch* combines with):
  - ✓ *ja ... doch ... [ ... ]_F*
  - * *doch ... ja ... [ ... ]_F*
  - ✓ *doch ... [ ... ja ... ]_F*
Appendix

A1  “Forced Accommodation” and Implicit Correction

• **Puzzle:** Sometimes *doch* *p* presupposes the falsity of a salient *q* when the truth of *q* has been explicitly asserted in the context.

(48)  A:  Diese Blumen sind hässlich.
       these flowers are ugly
       ‘These flowers are ugly.’

       B (after seeing the flowers):  Diese Blumen sind doch schön!
          these flowers are DOCH beautiful
          ‘These flowers are beautiful!’

• **Solution:** “Forced Accommodation” – By using unstressed *doch*, the speaker tries to force the hearer into accommodating that ¬*q*, thus correcting the hearer’s (mistaken) beliefs.

(49)  a.  A:  Diese Blumen sind hässlich.
        these flowers are ugly
        ‘These flowers are ugly.’

        B (after seeing the flowers):  [pDiese Blumen sind doch schön!]
           these flowers are DOCH beautiful
           ‘These flowers are beautiful!’

   b.  *doch* *p* conveys that the speaker considers it firmly established that *p* = *these flowers are beautiful*.

   c.  *doch* *p* presupposes that there is a contextually salient focus alternative *q* = *these flowers are ugly*, and *p* and *q* is contradictory.

   d.  It follows that it is false that *q* = *these flowers are ugly*

   d.  If A opts not to refute B’s statement, A is forced by B to accommodate (against A’s articulated beliefs) that these flowers are not ugly.

⇒ The result of such reasoning is that (49) ends up equivalent to (50), which can be uttered without a strong feeling of redundancy.
(50) A: Diese Blumen sind hässlich.
   these flowers are ugly
   ‘These flowers are ugly.’

B: Diese Blumen sind nicht hässlich. Diese Blumen sind doch schön.
   these flowers are not ugly these flowers are DOCH beautiful
   ‘These flowers are not ugly. These flowers are beautiful.’

A2 The Optionality Problem: Optional doch versus Obligatory auch ‘too’

• **Puzzle:** Presupposition triggers like auch ‘too’ are typically obligatory, yet doch is typically optional.

• **Response:** There are generally cases where presupposition trigger are optional.

(51) Ich hab ein Buch und der Hans hat (auch) ein Buch, also haben wir zwei.
   I have a book and the hans has (also) a book so have we two
   ‘I have a book and John has a book (too), so we have two.’

• … and we do seem to find cases, in which doch is obligatory, namely if the $\neg[p and q]$ implicature has a purpose of semantically linking two propositions.

(52) a. Peter: Der Hans putzt heute nicht.
    the H. cleans today not
    ‘It is not the case [$p$ that Hans cleans today].’

b. Susi: Wieso?
   ‘Why?’

c. Peter: Also, der Hans hat #(doch) aufgeräumt.
   well, the H. has #(DOCH) cleaned.up
   ‘Well, [$\alpha$ Hans cleaned DOCH up].’

d. Susi: Oh, ok.

⇒ Without doch, (52c) feels like an unconnected utterance, most likely to prompt
   Susi to say “so?”, rather than “ok”.
A3 But What is the Meaning of \textit{ja doch} Combinations?! \\

- \textbf{The Predicted Meaning:} If we assume that the \textit{uncontroversiality} meaning component of \textit{ja} and \textit{doch} is expressive in nature (as argued by Kratzer 1999 and assumed to be a possibility by Kratzer & Matthewson 2009), we predict that \textit{ja doch} means something like ‘\(p\) is really firmly established, and it falsifies a salient \(q\)’.

\[\Rightarrow\] This does seem to be the case, as shown in (53).

(53) Sie, als Akademiker, sind \textbf{ja doch} intelligent.  
you as academic are \textbf{JA DOCH} intelligent  
‘There is no doubt whatsoever that you as an academic are intelligent (so why do you say crap like that?)’

- \textbf{Preliminary Conclusion:} For cases where we are uncontroversially dealing with (unstressed) \textit{ja doch}, this might be the case. See also Lindner (1991:193), who observes that \textit{ja doch} is ‘more powerful’ and more intense than the use of either \textit{ja} or \textit{doch} on its own.

A4 More Evidence that \textit{doch} Lexically Associates with Focus

- \textbf{Another Argument for Claim 6 (\textit{doch} Lexically Associates with Focus):} \textit{doch} cannot associate with the presuppositions of an utterance.

\[\Rightarrow\] We are considering two alternative hypotheses:

- Hypothesis 1: \textit{doch} selects a salient \(q\) from the set of all salient propositions.
- Hypothesis 2: \textit{doch} selects a salient \(q\) from the set of focus alternatives.

\[\Rightarrow\] In a context where focus and presuppositions make different propositions salient, hypothesis 2 predicts that \textit{doch} can only associate with the focus alternatives.

\[\Rightarrow\] \textbf{Preliminary Example:} The proposition \(p\) that \textit{doch} modifies in the following examples is the same proposition that is given in (54b). The reason for choosing such a complex utterance is that the non-restrictive relative clause, together with a particular intonation pattern, seems to license focus stress on \textit{Königin} ‘queen’, which is relevant in the test examples in (55) and (56).
(54) a. Was gibt's neues?
   ‘What’s news?’

   b. Hans, der ja bekanntlich viele Dänen kennt, hat letztes Jahr die
   [KÖNIGIN] von Dänemark getroffen!
   QUEEN of Denmark met

   ‘Hans, who is notorious for knowing many Danes, met the QUEEN of Denmark
   last year!’

c. set of focus alternatives:

   {Hans met the queen of Denmark, Hans met the president of Denmark, Hans
   met the chancellor of Denmark, …}

d. set of salient propositions: (the presuppositions of (54b) and their negations)

   {there is a queen of Denmark, there is no queen of Denmark, Denmark exists,
   Denmark doesn’t exist, …}

⇒ Baseline Example: In (55d), doch is used to falsify a focus alternative q

   (the intended q: Hans met the president of Denmark).

(55) a. p = Hans met the queen of Denmark.

   b. q = Hans met the president of Denmark.

   c. Entweder hat Hans die Königin von Dänemark getroffen oder den Präsidenten
   von Dänemark, aber nicht beide. (= ¬[p&q])

   ‘Either Hans met the queen of Denmark or the president, but not both.’

   d. Wir schließen [¬q dass Hans nicht den Präsidenten von Dänemark getroffen hat],
   weil wir wissen, [p dass Hans, der bekanntlich viele Dänen kennt, letztes Jahr
   (doch) die KÖNIGIN von Dänemark getroffen hat.]

   ‘We conclude [¬q that Hans didn’t meet the president of Denmark], because we
   know [p that Hans, who is notorious for knowing many Danes, [DOCH] met the
   QUEEN of Denmark last year].’
\[
\Rightarrow \textbf{Test Example:} \text{ As (56d) shows, } \textit{doch} \text{ cannot be used to falsify any contextually salient proposition } q \text{ that is not part of the focus alternatives}
\]

(the intended \(q\): there is no queen of Denmark – this can be assumed to be salient, as it is the negation of the presupposition that there is a queen of Denmark)

(56) a. \(p = \text{Hans met the queen of Denmark.}\)

b. \(q = \text{There is no queen of Denmark.}\)

c. \(\text{Entweder gibt es keine Königin von Dänemark oder Hans hat sie früher oder später getroffen.} \quad (= \neg[p\&q])\)

‘Either there is no queen of Denmark or Hans met her sooner or later.’

d. \(\text{Wir schlüßen } [\neg q \text{ dass es eine Königin von Dänemark gibt}, \text{ weil wir wissen, dass es wahr ist, } [p \text{ dass Hans, der bekanntlich viele Dänen kennt, letztes Jahr } \#\text{doch} \text{ die KÖNIGIN von Dänemark getroffen hat.}]\)

‘We conclude \([\neg q \text{ that there is a queen of Denmark}], \text{ because we know it to be true } [p \text{ that Hans, who is notorious for knowing many Danes, } \#\text{DOCH} \text{ met the QUEEN of Denmark last year}].’

\textbf{A5} \quad \textit{Whatever ja can do, doch can too}^5

\begin{itemize}
\item \textbf{Prediction of Claim 1&2:} \(\textit{doch } p\) has the same distribution as \(\textit{ja } p\), modulo the correction component that \(\textit{doch}\) has and \(\textit{ja}\) lacks.

\item \textbf{Background:} Kratzer & Matthewson (2009) argue against an approach that posits requirements on hearers’ knowledge, as shown in (57), and propose the alternative approach in (58).
\end{itemize}

(57) \text{An utterance } [\textit{ja } \phi] \text{ in a context } c \text{ indicates:}

\begin{itemize}
\item \textit{Veridicality of ‘ja’}
the speaker in \(c\) takes the descriptive content \(p\) of \(\phi\) to be \textbf{true}.

\item \textit{Requirement on the Hearer’s Knowledge State}
the speaker in \(c\) assumes that \(p\) \textbf{might already be known to the addressee in } c.

\end{itemize}


---

^5 To save paper, this appendix was not included in the printed handouts, as it merely extends on the similarity between \textit{ja} and \textit{doch} and does not add further arguments. It was added back in afterwards.
An utterance \([ja \phi]\) in a context \(c\) indicates:

i. Veridicality of \('ja'\)
   the speaker in \(c\) takes the descriptive content \(p\) of \(\phi\) to be an established fact.

ii. Requirement on the Mutual Acceptance that \(p\)
   the speaker in \(c\) assumes that the question whether \(p\) or \(\neg p\) is resolved and
doesn’t consider this question to be an issue for current or further inquiry.

(\(my\ \text{rendering\ of\ Kratzer\ &\ Matthewson\ 2009:6}\))

- While my own analysis in this talk (in (1), (6) and (8)) is based on (58), nothing
  hinges on this choice. The crucial point for present purposes is that \(doch\) (when
  controlling for the additional correction meaning) shares this property (the
  ‘uncontroversiality component’, as I call it) with \(ja\). This crucially predicts that \(doch\)
  should be good whenever \(ja\) is good (as long as some ‘correction’ can be motivated).

- Consider first an example where the speaker reports on a mutually known fact.

(59) Vor 5 Minuten hast du \(ja\) noch behauptet, dass du Italienisch kannst.
before 5 minutes have you \(JA\) still claimed that you Italian know
‘As little as five minutes ago you \([JA]\) claimed that you know Italian.’

(Kratzer & Matthewson 2009:3)

\(\Rightarrow\) If the speaker intends to use this sentence to correct some salient proposition \(q\),
\(doch\) is equally acceptable.

(60) Sample Context: The hearer first brags about how well he speaks Italian, but then,
5 minutes later, after a topic change, claims not to speak any language except
German.

Vor 5 Minuten hast du \(doch\) noch behauptet, dass du Italienisch kannst.
before 5 minutes have you \(DOCH\) still claimed that you Italian know
‘As little as five minutes ago you \([DOCH]\) claimed that you know Italian.’

- The following example is one of the examples Kratzer & Matthewson use to argue
  against a requirement on the hearer’s knowledge state, as the speaker reports facts
  that the addressee explicitly doesn’t know.
(61) **Context:** You are talking to a new colleague who doesn’t know you and talking about how it’s hard to go on holiday. You say:

Wir müssen immer jemand finden, der sich um unsere Tiere kümmert.
‘We always have to find someone who takes care of our animals.’

Wir haben ja zwei Katzen.
‘We have [JA] two cats.’

(Kratzer & Matthewson 2009:3)

⇒ Again, if we modify the context to introduce the contrast/contradiction that *doch* requires, *doch* can be used to as well.

(62) **Context:** You are talking to a new colleague who doesn’t know you and talking about how it’s hard to go on holiday. You say:

Auf eine drei-monatige Reise nach Asien können wir leider auch nicht.
‘Unfortunately, we can’t go on a three-month trip to Asia either.’

Wir haben doch zwei Katzen.
‘We have [DOCH] two cats.’ (typically with a hand-waving/shrugging gesture)

⇒ While (62) might seem slightly more marked than (61), example (63) below is a clear case of *doch* being used in a situation where the speaker reports facts that the addressee explicitly doesn’t know.

(63) Jetzt hör dir an, was ich erlebt habe. Das wirst du nicht glauben. … (story) … und dann hat doch tatsächlich der Otto die Anna ein Stinktier genannt!!
‘Now listen to what happened to me. You won’t believe this! [tells the story] … … and then Otto [DOCH] called Anna a skunk!!’
• Finally, the following example illustrates the ‘surprise use’ of *ja*.

(64) **Context:** We are walking along and are chatting. At some point, I notice that a little kitten has been following us.

\[
\text{Da ist } \textbf{ja} \text{ ein Kätzchen!} \\
\text{there is } \textbf{JA} \text{ a kitten} \\
\text{‘There is [JA] a kitten!’} \\
\]  

(Kratzer & Matthewson 2009:12)

⇒ Again, if we adapt the context in order to create the type of conflict that *doch* presupposes, *doch* can also be used in surprise contexts, compare (65) to (66).

(65) **Context:** Bill and I are eating tapas at Susi’s birthday party and are chatting. At some point, I notice that Klaus just entered the room, who neither of us knew was coming to the party.

\[
\text{Das ist } \textbf{ja} \text{ der Klaus! Ich wusste gar nicht, dass der die Susi kennt!} \\
\text{that is } \textbf{JA} \text{ the Klaus I knew at all not that he the Susi knows} \\
\text{‘That’s [JA] Klaus over there! I didn’t know that he knew Susi!’} \\
\]  

(66) **Context:** Bill and I are eating tapas at Susi’s birthday party and are chatting. At some point, I notice that Klaus just entered the room, who neither of us knew was coming to the party.

\[
\text{Das ist } \textbf{doch} \text{ der Klaus! Ich dachte, der sei in Paris auf Arbeitsreise!} \\
\text{that is } \textbf{DOCH} \text{ the Klaus I thought he was in Paris on work trip} \\
\text{‘That’s [DOCH] Klaus over there! I thought he was in Paris on a work trip!’} \\
\]  

• *doch* also shares the property of *ja* that a *doch* utterance cannot usually be used to answer a question (sentential focus is intended in (67)), as discussed in Kratzer & Matthewson (2009:6-8).
(67) Luna: Kommt Obama nach Boston?
      comes Obama to Boston
‘Does Obama come to Boston?’
Ron: # Obama kommt ja / doch nicht nach Boston.
      Obama comes JA DOCH not to Boston
‘Obama does [JA / DOCH] not come to Boston.’

⇒ Recall however that doch p can be used to reject a question, e.g. by negating a presupposition.

(68) Luna: Wann kommt der Erzherzog von Chicago nach Boston?
      when comes the archduke of Chicago to Boston
‘When does the archduke of Chicago come to Boston?’
Ron: Es gibt doch keinen Erzherzog von Chicago.
      it gives DOCH no archduke of Chicago
‘There is [DOCH] no archduke of Chicago.’
⇒ [p There is no archduke of Chicago] is used to correct [q there is an archduke of Chicago].

(69) Luna: Kommt der Erzherzog von Chicago nach Boston?
      comes the archduke of Chicago to Boston
‘Does the archduke of Chicago come to Boston?’
Ron: Es gibt doch keinen Erzherzog von Chicago.
      it gives DOCH no archduke of Chicago
‘There is [DOCH] no archduke of Chicago.’
⇒ [p There is no archduke of Chicago] is used to correct [q there is an archduke of Chicago].

⇒ In certain case, a doch p statement that superficially does seem to answer a question is rather used to reject the question that it appears to answer (Kratzer & Matthewson 2009:7), as shown in (70). I assume that in such cases the doch p statement actually does not answer the question, but rather negates the grounds on which the question is asked, i.e. the speaker of doch p rejects the question based on the fact that the asker should have known the answer and never even asked the question to begin with. This is indicated in (70). Such an approach is supported by the fact that it seems nearly obligatory to follow up by You (should) know that!
(70) Luna: Wen hat Lily geheiratet?
    who has Lily married
    ‘Who did Lily marry?’
Ron: Lily hat **doch** James geheiratet! Das weißt du **doch**!
    Lily has **DOCH** James married that know you **DOCH**
    ‘Lily [**DOCH**] married James! You [**DOCH**] know that!’
⇒ [p, Lily married James] is used to correct [q (it is possible that) there is
    somebody other than Lily such that James married that person] and the
    possibility of q is entailed by Luna’s question.

• Note that the semantic inclusion of *ja* by *doch* also makes a correct prediction in the
  other direction. In contexts, in which a *doch* utterance openly contradicts a previous
  utterance by the hearer, *ja* is actually possible, shown in (72) (versus (71)), as long as
  the conflict has first been pointed out (e.g. by adding *no!*) and correction no longer
  needs to be conveyed by the particle.

(71) Sue: Jetzt schau dir mal diese hässlichen Blumen an!
    now see you once these ugly flowers v.prt
    ‘Now have a look at these ugly flowers!’
Mary (when she sees them): Diese Blumen sind **doch** / **ja** SCHÖN!
    these flowers are **DOCH** / **JA** beautiful
    ‘These flowers are [**DOCH/**JA] beautiful!’

(72) Sue: Jetzt schau dir mal diese hässlichen Blumen an!
    now see you once these ugly flowers v.prt
    ‘Now have a look at these ugly flowers!’
Mary (when she sees them): Nein!! Diese Blumen sind **doch** / **ja** SCHÖN!
    no these flowers are **DOCH** **JA** beautiful
    ‘No!! These flowers are [**DOCH/**JA] beautiful!’
⇒ In a sense, what the *ja* does in (72) is to override Sue’s statement as something
  of which it should be most evident to Sue that she was wrong, but it no longer
  expresses correction, which is not necessary, given that *no!* already does so.
References


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