

# On the meaning and use of OKAY in spoken German

## Uptake only

A: Sag mir, was du über C weißt.  
Tell me what you know about C.  
B: C kommt aus Hamburg.  
C is from Hamburg.  
A: Okeh (fall), das ist falsch. C kommt aus Homburg.  
Okay, that's wrong. C is from Homburg.

## Acceptance

A: Hast du einen Stift?  
Do you have a pen?  
B: Ja.  
Yes.  
A: Okeh (fall). Also du musst jetzt vom Startpunkt ...  
Okay. So, you have to move from the starting point ...

## Undecidedness

A: Du hast keine Nägel?  
You don't have nails?  
B: Mhmh. (fall)  
Uhuh.  
A: Okeh? (rise)  
Okay?  
B: Ich habe einen Schornsteinfeger.  
I've got a chimney sweeper.  
A: Okeh. (fall) Dann sind das aber nicht so ganz gleiche Bilder.  
Okay. But then the pictures aren't exactly the same.

$$okay+ \downarrow^- (I, C, p) := uptake(I, C, p)$$

$$C = \begin{bmatrix} f_A & g_A \\ f_B & g_B \end{bmatrix}$$

$$C' = \begin{bmatrix} f_A & g_A \\ f_B & g_B \sqcup \{(p, 1)\} \end{bmatrix}$$

$$C'' = \begin{bmatrix} f_A & g_A \\ f_B \sqcup \{(p, 1)\} & g_B \sqcup \{(p, 1)\} \end{bmatrix}$$

$$C''' = \begin{bmatrix} f_A \sqcup \{(p, 0)\} & g_A \\ f_B \sqcup \{(p, 1)\} & g_B \sqcup \{(p, 1)\} \end{bmatrix}$$

$$okay+ \downarrow^+ (I, C, p) := acceptance(I(uptake(I, C, p), p))$$

$$C = \begin{bmatrix} f_A & g_A \\ f_B & g_B \end{bmatrix}$$

$$C' = \begin{bmatrix} f_A & g_A \\ f_B & g_B \sqcup \{(p, 1)\} \end{bmatrix}$$

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$$C''' = \begin{bmatrix} f_A \sqcup \{(p, 1)\} & g_A \\ f_B \sqcup \{(p, 1)\} & g_B \sqcup \{(p, 1)\} \end{bmatrix}$$

$$okay+ \uparrow^+ (I, C, p) := undecidedness(I(uptake(I, C, p), p))$$

$$C = \begin{bmatrix} f_A & g_A \\ f_B & g_B \end{bmatrix}$$

$$C' = \begin{bmatrix} f_A & g_A \\ f_B & g_B \sqcup \{(p, 0)\} \end{bmatrix}$$

$$C'' = \begin{bmatrix} f_A & g_A \\ f_B \sqcup \{(p, 0)\} & g_B \sqcup \{(p, 0)\} \end{bmatrix}$$

$$C''' = \begin{bmatrix} f_A \sqcup \{(p, u)\} & g_A \\ f_B \sqcup \{(p, 0)\} & g_B \sqcup \{(p, 0)\} \end{bmatrix}$$

## OKAY states truth of propositions

## Speech Act Model

$$\begin{aligned} C &:= (A, B) & f_{(p,n)} &:= \{(q, n') : q \neq p, (q, n') \in f\} \cup \{(p, n)\} \\ A &:= (f_A, f_B) & f \sqcup \{(p, n)\} &:= \begin{cases} f \cup \{(p, n)\} & \text{if } f \text{ is undefined for } p \\ f_{(p,n)} & \text{else} \end{cases} \\ B &:= (g_A, g_B) & p \in cg &\leftrightarrow f_A(p) = f_B(p) = g_A(p) = g_B(p) = 1 \end{aligned}$$

$$uptake(I, C, p) := \begin{cases} ((f_A, f_B \sqcup \{(p, n)\}), (g_A, g_B)) & \text{if } I = A, g_B(p) = n \\ ((f_A, f_B), (g_A \sqcup \{(p, n)\}, g_B)) & \text{if } I = B, f_A(p) = n \\ \text{undefined} & \text{else} \end{cases}$$

$$acceptance(I, C, p) := \begin{cases} ((f_A \sqcup \{(p, 1)\}, f_B), (g_A, g_B)) & \text{if } f_B(p) = n, g_B(p) = n, I = A \\ ((f_A, f_B), (g_A, g_B \sqcup \{(p, 1)\})) & \text{if } f_A(p) = n, g_A(p) = n, I = B \\ \text{undefined} & \text{else} \end{cases}$$

$$undecidedness(I, C, p) := \begin{cases} ((f_A \sqcup \{(p, u)\}, f_B), (g_A, g_B)) & \text{if } f_B(p) = g_B(p) = u, I = A \\ ((f_A, f_B), (g_A, g_B \sqcup \{(p, u)\})) & \text{if } f_A(p) = g_A(p) = u, I = B \\ \text{undefined} & \text{else} \end{cases}$$

$$assertion(I, C, p) := \begin{cases} ((f_A \sqcup \{(p, 1)\}, f_B), (g_A, g_B)) & \text{if } I = A \\ ((f_A, f_B), (g_A, g_B \sqcup \{(p, 1)\})) & \text{if } I = B \\ \text{undefined} & \text{else} \end{cases}$$

## Outlook

General formal model of speech acts and speech act interpretation by modifying the event calculus of Lambalgen and Hamm (2005)

This is a type-free first-order system for axiomatizing notions of causality (instantaneous vs continuous change)

It provides a non-Davidsonian event semantics for lexical and sentential meaning

Illocutionary acts as achievements obeying instantaneous change: Illocutionary actions as causes of illocutionary effects

OKAY as truth predicate

