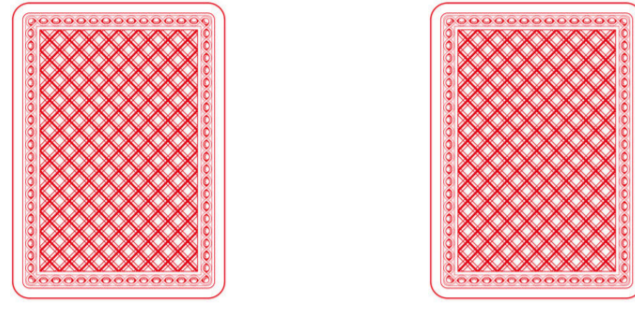


Questions & methods of identification

The card game. One of the cards below is an Ace of Spades, and the other is an Ace of Hearts. If you guess the Ace of Spades, you get \$10.



Aloni (2001): do you know the answer to the following question?

- (1) Which card is the winning card?

It depends on **how we identify the cards** (by name or by position?):

- *Ace of Spades or Ace of Hearts?* \Rightarrow this you know
- *The card on the left or the card on the right?* \Rightarrow this you don't

Conceptual Covers

Aloni's account of the different meaning of (1) has two ingredients:

1. *wh*-phrases range over **sets of individual concepts**, i.e., $s \rightarrow e$ functions
2. these sets **must be Conceptual Covers** (CCs):

A set of individual concepts U is a Conceptual Cover iff

$$\forall w. \forall x. \exists! u \in U. u_w = x$$

“in each world, each individual is identified by a unique concept in U ”

- (2) $\llbracket(1)\rrbracket^w = \{ (\lambda w'. u_{w'} = \text{win.card}_{w'}) \mid \text{card}_w(u_w) \wedge u \in U \}$

Two CCs that can be the value of U :

- a. $\{ (\lambda w'. \text{ace.sp}), (\lambda w'. \text{ace.ht}) \}$
- b. $\{ (\lambda w'. \text{left.card}_{w'}), (\lambda w'. \text{right.card}_{w'}) \}$

This poster

- We argue CCs are **not necessary**: general felicity conditions of questions derive a similar restriction
- Furthermore, they are **empirically inadequate**: domains with overlapping concepts are permitted under certain conditions

Felicity conditions of questions

Fox (2019), (building on Dayal 1996) proposes that: (we simplify it)

- (3) A question Q is felicitous in a context C only if:
- a. for any $p \in \llbracket Q \rrbracket$, *only* p is true in some $w \in C$
 - b. for any $w \in C$, some $p \in \llbracket Q \rrbracket$ is such that *only* p is true in w

This derives the uniqueness presuppositions of singular *which* questions:

- (4) Which card is red? \rightsquigarrow *a unique card is red*

Uniqueness follows from the fact that, by (3), the question presupposes:

- (5) a. for any card x , x is the only red card in some $w \in C$
b. for any $w \in C$, some card x is the only red card in w

Doing away with Conceptual Covers

We now advance the following proposal:

- *wh*-phrases can in principle range over **any** set of individual concepts
- restrictions on non-overlapping concepts are due to condition in (3)

Non-overlap via uniqueness. Non-overlap among concepts can be imposed by the presupposition of questions:

- (6) Which card _{U} is the winning card?
The Ace of Spades or the card on the left?
 \rightsquigarrow *the Ace of Spades is not the card on the left*

Condition (3) requires the worlds in C to be in one of two sets:

- $\{ w \in C \mid \text{ace.sp} = \text{win.card}_w \wedge \text{right.card}_w \neq \text{win.card}_w \}$
 - $\{ w \in C \mid \text{right.card}_w = \text{win.card}_w \wedge \text{ace.sp} \neq \text{win.card}_w \}$
- \Rightarrow *this can only hold if the concepts don't overlap!*

Blocking too many concepts. Some questions will end up having presuppositions that can't be satisfied (under ‘the card game’ scenario):

- (7) Which card _{U} is the winning card?
#The Ace of Spades, The Ace of Hearts, the card on the left or the one on the right?

\Rightarrow *since there are four concepts but two cards, it's impossible for only one of these concepts to return the winning card!*

When overlapping concepts are allowed

Case #1: Uncertainty about identity

Ann's disguises. In the morning, you meet with a woman with a hat, a woman with a scarf and a woman with gloves. Later, I tell you that you met Ann more than once — she was disguised. You can ask:

- (8) Which _{U} people I met with were Ann?

where $U = \{ (\lambda w. \text{wm.hat}_w), (\lambda w. \text{wm.scarf}_w), (\lambda w. \text{wm.gloves}_w) \}$

- ALONI (2001): The question should be unacceptable (U is not a CC).
- OUR PROPOSAL: Acceptable as long as the worlds in C are partitioned into the following (non-empty) sets:

$$\begin{aligned} & \{ w \in C \mid \text{wm.hat}_w = \text{ann} \neq \text{wm.scarf}_w \neq \text{wm.gloves}_w \} \\ & \{ w \in C \mid \text{wm.scarf}_w = \text{ann} \neq \text{wm.hat}_w \neq \text{wm.gloves}_w \} \\ & \{ w \in C \mid \text{wm.hat}_w = \text{wm.scarf}_w = \text{ann} \neq \text{wm.gloves}_w \} \\ & \vdots \end{aligned}$$

Case #2: Intensional operators within the question

- (9) a. Which card wins the game according to the rules?
The Ace of Spades or the card on the left?
b. Who does Ann dreams of meeting?
The current president of the US or Obama's vice president?

- ALONI (2001): The questions should be unacceptable (in both cases, the domain of *wh* is not a CC).
- OUR PROPOSAL: Exhaustification of answers, in these examples, doesn't lead to non-overlap inferences:

- (10) Ann dreams of meeting the current president of the US
but she doesn't dream of meeting Obama's vice president.
 \Rightarrow *though the concepts are co-extensional, the above is consistent!*

Acknowledgments We are grateful to comments and suggestions by Danny Fox and our SALT reviewers. All mistakes are our own. **References.** [1] Aloni (2001) *Quantification under Conceptual Covers* [2]. Fox (2019) “Partition by exhaustification: Comments on Dayal (1996)” [3] Dayal “Locality in WH Quantification: Questions and Relative Clauses in Hindi”.