

- research question: speech act reference by anaphora or deixis?
- different from reference to explicitly introduced events?

## EXP. 1: SENTENCE COMPLETION TASK

(1) *Niklas hat gerade sein Abitur mit Bravour bestanden. Seine große Schwester Lara freut sich für ihn.*  
 Niklas has just his high-school-diploma with flying-colors passed his older sister Lara is-happy refl for him  
 'Niklas hast just passed his high-school diploma with flying colors. His older sister Lara is happy for him.'

*Lara sagt zu Niklas: „Herzlichen Glückwunsch!“*  
 Lara says to Niklas cordial congratulation  
 'Lara says to Niklas, "Congratulations!"'

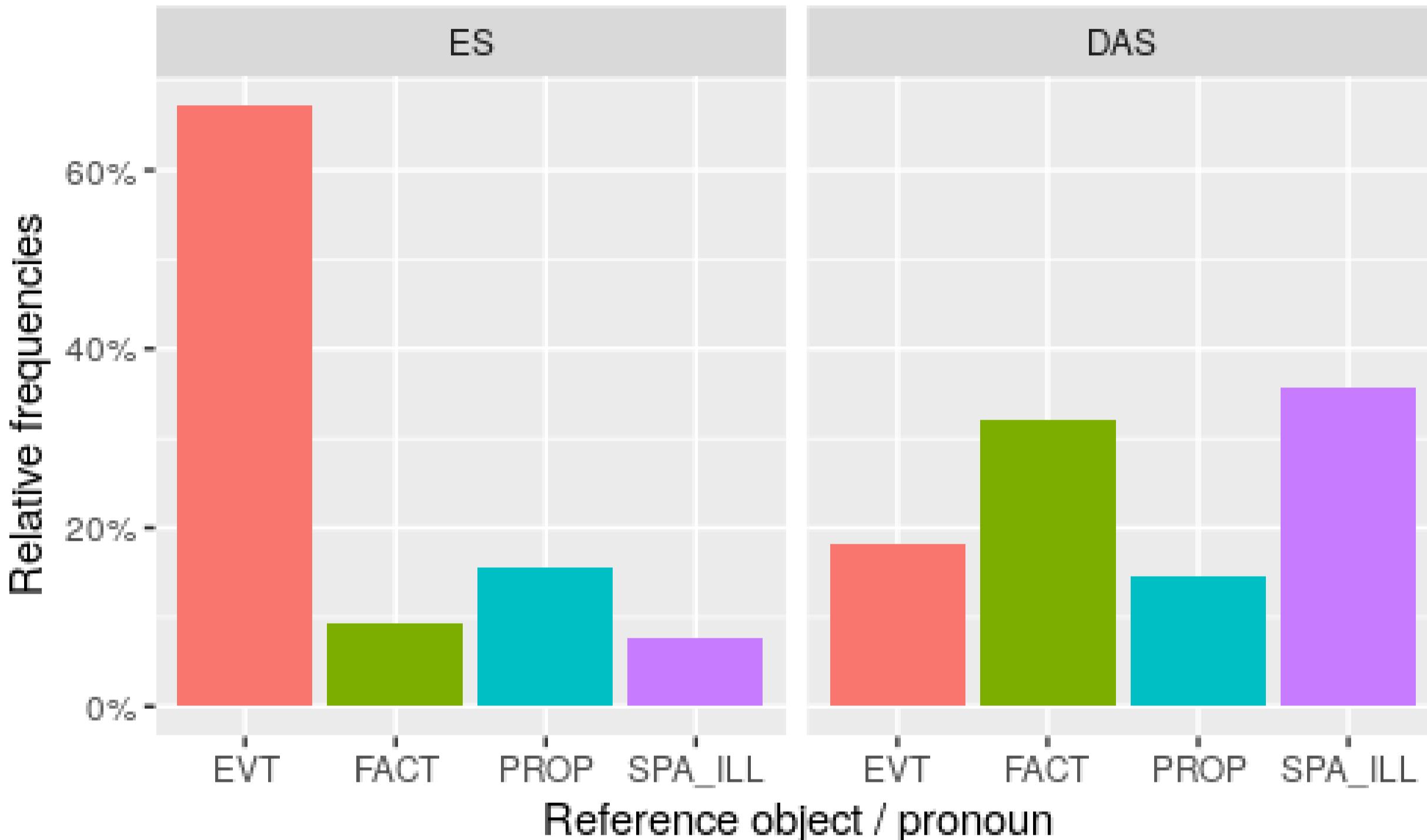
*Was könnte Niklas darauf sagen?*  
 What could Niklas there-on say  
 'What could Niklas answer to this?'

*Niklas erwidert: „Das ist ... lieb von dir, danke.“ [SPA\_ILL]*  
 Niklas replies that is nice of you thanks  
 'Niklas replies, "That is nice of you, thank you."

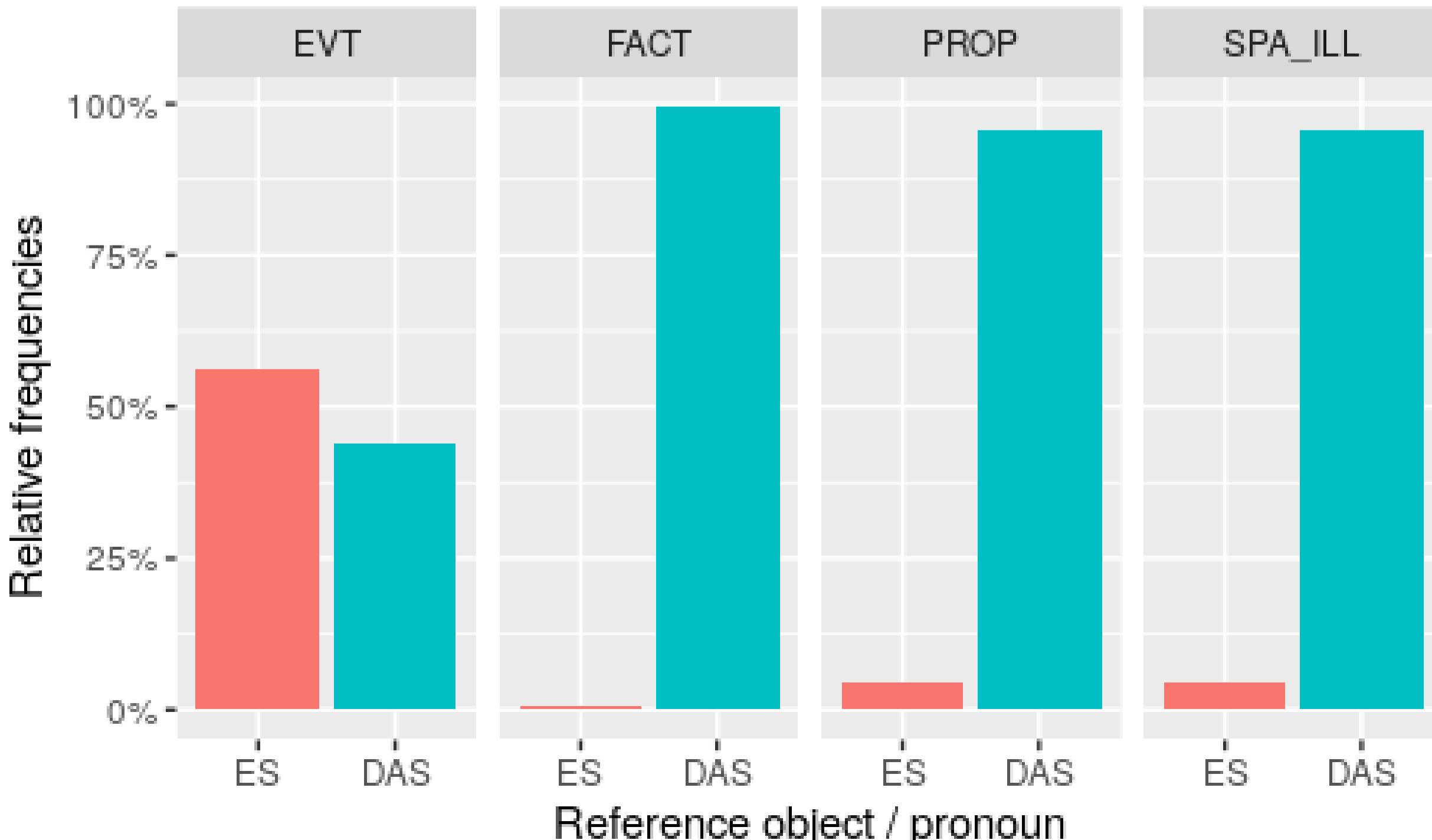
## EXP. 2: FORCED CHOICE OF PRONOUN

(2) [...] *Niklas erwidert: „{ Es / Das } ist lieb von dir, danke.“ [SPA\_ILL]*  
 Niklas replies it that is nice of you  
 thanks  
 'Niklas replies, "{ It / That } is nice of you, thank you."

## EXP. 1: TYPES OF REFERENTS GIVEN PRONOUN



## EXP. 2: PRONOUN CHOICE GIVEN REFERENT



## EXP. 1: SIGNIFICANCE TESTING

EVT vs. SPA_ILL	logits	proportion	for	p-value	SE
<i>es</i>	2.15	89.6 %	EVT	$5.26 * 10^{-6}$	0.472
<i>das</i>	-0.673	33.8 %	EVT	0.00618	0.246
omnibus	—	—	—	$1.13 * 10^{-7}$	0.533
PROP vs. FACT	logits	proportion	for	p-value	SE
<i>es</i>	-0.511	37.5 %	FACT	0.323	0.516
<i>das</i>	0.788	68.8 %	FACT	0.00346	0.270
omnibus	—	—	—	0.0257	0.583

## EXP. 2: SIGNIFICANCE TESTING

level	logits	proportion	for	p-value	SE
EVT	-0.240	44.0 %	<i>das</i>	0.106	0.149
FACT	5.209	99.5 %	<i>das</i>	$2.02 * 10^{-7}$	1.00
IND	0.751	67.9 %	<i>das</i>	$2.00 * 10^{-6}$	0.158
PROP	3.091	95.7 %	<i>das</i>	$1.22 * 10^{-17}$	0.361
SPA_ILL	3.091	95.7 %	<i>das</i>	$1.22 * 10^{-17}$	0.361
EXPL	-0.307	42.4 %	<i>das</i>	$3.98 * 10^{-2}$	0.149
EVT vs. SPA_ILL	—	—	SPA_ILL more <i>das</i>	$1.53 * 10^{-17}$	0.391
PROP vs. FACT	—	—	FACT more <i>das</i>	0.0469	1.07
omnibus	—	$\chi^2(7) = 622.65$		$2.2 * 10^{-16}$	—

- speech act reference is deixis; strict distinction between discourse content and utterance content