Permission and irony: the case of German *dürfen*

Introduction There is disagreement in the literature on scalar implicatures about whether implicatures are obligatorily computed. This talk introduces intuitions about irony as a new data point in this debate, and argues that implicature computation is obligatory. Besides, this talk utilizes irony to probe into the lexical semantics of the German modal verb *dürfen* 'may, be allowed to' and suggests a novel analysis whereby *dürfen* carries a presupposition that the prejacent is desirable to the permissee. The view of irony adopted in this talk is an extension of Grice's (1975) proposal about irony as an implicature from blatant falsity.

Data My testing ground is the German modal verb *dürfen* 'may, be allowed to'. *dürfen* commonly functions as a root possibility modal. As such it combines with a realistic modal base and a normative, commonly deontic (cf. (1)), less commonly goal-oriented (cf. (2)) ordering source (see Kratzer 2012:55ff.).

(1)   Ich habe gehört, dass man in manchen Ländern bereits mit 16 wählen darf.
        I   have heard   that one in some   countries aleady at   16 vote   DARF
        'I have heard that in certain countries one is eligible to vote at 16.'

(2)   (*Two detectives trying to catch a thief:*)
        Wir dürfen   uns nicht zu viel   Zeit lassen.   (NEG > DÜRFEN)
        we   DÜRFEN us   not   too much time take
        'We must not take too much time.' (*in view of our goal to catch the thief*)

In this talk, I turn attention to an understudied use of *dürfen*, exemplified by (3). *dürfen* in this use is characterized by a distinctly ironic flavor. (I assume that native speakers, just as having intuitions about the grammaticality and felicity of sentences, also have intuitions regarding the presence of irony.)

(3)   Context: *The rules at Sam's new workplace require Sam to get up at five, and Sam is known to dislike getting up early.*
        Sam darf   in ihrer neuen Arbeit jeden Tag um fünf Uhr   aufstehen.
        Sam DARF in her   new   work   every day at   five o'clock get-up
        'Sam gets to get up at five every day for her new work.'
        ⤳ *The speaker is being ironic.*

dürfen triggers irony in contexts such as (3) where (i) the prejacent proposition is a necessity, and (ii) the prejacent proposition is undesirable to the permissee/obligee. I argue that property (i) renders the *dürfen* sentence in (3) false due to an obligatory implicature, which I make part of the assertion by adopting a grammatical view of exhaustification. Property (ii) conflicts with a presupposition triggered by *dürfen* that the prejacent is desirable to the individual towards which the modal is oriented. I propose that the presence of both properties in prototypical cases of ironic *dürfen* can be understood if we extend Grice's account and make irony an implicature from blatant non-truth rather than falsity.

Generalization *dürfen* gives rise to an ironic inference in utterance contexts with the following two properties: (i) The prejacent proposition of *dürfen* is perceived as necessary rather than merely possible. (ii) The prejacent proposition is believed to be undesirable to the individual towards which the modal is oriented. Properties (i) and (ii) are satisfied by the prejacent of *dürfen* in (3) but, given our world knowledge and default desirability attitudes (e.g., a non-negative attitude towards voting), neither is satisfied in (1) or (2).

Analysis I propose a modification of Grice's idea and argue that irony is triggered by non-truth rather than falsity. I adopt a trivalent approach, where falsity (0) and presupposition failure (#) both entail non-truth (¬1) of an assertion. As a result, there are two avenues to irony: irony via falsity and irony via presupposition failure. I demonstrate that both are exploited in prototypical cases of ironic *dürfen* such as (3).

First, contexts like (3) where ϕ is a necessity (property (i)) render a given sentence *dürfen*

ϕ false because the scalar implicature triggered by *dürfen* is false in such contexts. I take the presence of irony to support Magri's (2009) view that a given scalar implicature is non-cancelable if the scalar alternative it negates is relevant. In line with Magri, I assume scalar implicatures to be computed in the grammar by means of an obligatory sentence operator EXH which takes a proposition and returns this proposition conjoined with the negation of its relevant scalar alternatives. As for (3), the *dürfen* sentence has a stronger alternative involving the necessity modal *müssen* 'must', namely, *Sam muss in ihrer neuen Arbeit jeden Tag um fünf Uhr aufstehen* 'Sam has to get up at five every day for her new work'. Since this alternative is arguably relevant in the context described for (3), strengthening of the *dürfen* sentence in (3) by means of EXH leads to the following, strong possibility meaning. This meaning is false of the context described for (3).

(4) $[[\text{EXH}\ [Sam\ darf\ in\ ihrer\ neuen\ Arbeit\ jeden\ Tag\ um\ fünf\ Uhr\ aufstehen]]]^{w,a} =$
    1 iff Sam is allowed to get up at five every day for her new work in w & Sam does not have to get up at five every day for her new work in w

Secondly, I suggest a novel semantics for *dürfen* as introducing a desirability presupposition, cf. (5). It follows that a given sentence *dürfen* ϕ is ironic in contexts where ϕ is undesirable to the individual targeted by the modal (property (ii)) because the presupposition *dürfen* contributes is not satisfied, which renders the sentence non-true.

(5) $[[dürfen]]^{w,a} = \lambda f_{\langle s,\langle st,t\rangle\rangle}.\ \lambda g_{\langle s,\langle st,t\rangle\rangle}.\ \lambda p_{\langle s,t\rangle}$: p is desirable to x s.t. x is the target of the modal in a. $\exists w' \in \max_{g(w)}(\cap(f(w)))$: $p(w') = 1$

The suggested presupposition is in line with the observation that *dürfen* (as opposed to *können* 'can') often triggers an inference preserved under negation that its complement is desirable to the individual towards which the modal is oriented.

Evidence for irony from presupposed content My analysis predicts that in DE contexts (contexts which Magri expects not to show hallmarks of obligatory exhaustification), *dürfen* can still be ironic provided that its desirability presupposition is failed. (6), where *dürfen* is in the scope of negation yet triggers irony, shows that this prediction is borne out.

(6)   Peter darf   zumindest nicht jeden Tag um fünf Uhr   aufstehen.
    Peter DARF at least   not   every day at five o'clock get-up
    'At least Peter does not get to get up at five every day.'

I also discuss the predictions my analysis makes with respect to *können* 'can': Similar to *dürfen*, a sentence *können* ϕ is expected to trigger irony if ϕ is a necessity. Unlike *dürfen*, however, *können* does not carry a desirability presupposition and, therefore, should not reliably trigger irony in non-Magri environments such as under negation. These predictions are on the right track: Irony is preserved in (3) but not (6) if we replace *dürfen* by *können*; (6) involving *können* only asserts the absence of possibility, i.e., 'At least Peter cannot get up at five every day'.

I explain that *dürfen* is generally more conventionalized in its ironic use than *können* because its lexical properties allow for two sources of irony, viz., falsity and presupposition failure, both of which are exploited in prototypical cases of ironic *dürfen* such as (3).

Moreover, I show that, in line with expectations, sentences involving universal modals in DE environments, e.g., *nicht muss/braucht* ϕ 'does not have/need to ϕ', can trigger irony in contexts where their strengthened meaning $\neg\text{MUST}(\phi)$ & $\text{CAN}(\phi)$ is false.

Conclusion My talk demonstrates the utility of irony to probe for non-cancelable content. I apply irony as a diagnostic (i) to argue that implicatures are not cancelable, and (ii) to probe into the lexical semantics of *dürfen* and help understand differences between *dürfen* and other modals like *können*.

Grice, H.P. 1975. Logic and conversation. In P. Cole et al. (Eds.): *Syntax and Semantics 3: Speech Acts.* NY: Academic Press. 41-58.||Kratzer, A. 2012. *Modals and conditionals.* Oxford, New York: OUP.||Magri, G. 2009. A theory of individual-level predicates based on blind mandatory scalar implicatures. *NLS* 17(3)(3). 245–297.