**The meaning and distribution of the discourse particle *kwa* in Igbo**

There is a discourse particle ***kwa*** in Igbo that is somewhat similar to the scalar particle, ***even,*** in some of its uses (1) but which also has other uses that go beyond the typical uses of scalar particles in languages like English.

(1) Ọ́ mà àkpụ́ isí, ná-ésè-**kwá** tàtúù ísị̄.
3sg know HAB-barb hair HAB-draw-KWA tattoo head
'He barbs hair really well and even draws head tattoos.'

While *kwa* as shown in (1) may generally induce a scalar inference on a proposition, similarly to *even* which also induces a scalar inference on the proposition expressed by its prejacent (Kartunen & Peters, 1979; Rooth, 1992; Krifka, 1998), it differs from *even* and other focus particles with scalar inferences as illustrated in the examples that follow. This work is based on the judgements of felicity and truth-value of the first author, who is a native speaker of Igbo.

*Kwa* may be distinguished from *even* with respect to some of the ways that it is used in discourse; it may be used incredulously (2), miratively (3), for expressing epistemic objection to a discourse move (4), or for expressing deontic disapproval of a salient target (5).

(2) A: When did Ada stop smoking (cigarettes)?
B: Ísè sị̀gá **kwá.**
smoke cigarette KWA
'Smoking?!'

(3) *Obi drives into the compound in a new car:*
Obi go-**kwà**-rá ụ́gbọ́àlà ọ́hụ́rụ̄!
Obi buy-KWA-PST vehicle new
'Obi bought a new car!'

(4) A: I saw you kissing a woman last night.
B: Ọ́ **kwà** nwúnyè ḿ!
it KWA wife 1sg
'That was my wife!'

(5) *A mom to her child who is about to leave the dinner table*:
Á-hāpụ̀-**kwà**-là ákwụ́kwọ́ ńrī
Pr-leave-KWA-NEG leaf food
n'éféré gị̄.
on plate 2sg
'Do not leave vegetables on your plate! (you'd better not!).'

*Kwa* differs from *even* not only in the discourse uses outlined in (2-5), but also in the sources of the proposition that it scopes over as an operator, which we refer to as its "target". It may target a proposition that has been presupposed (2) or a proposition that is at issue, such as the one expressed by its prejacent in (3). It may also target a proposition that has been conversationally implicated as shown in (4). In this manner, *kwa* differs from *even* in that it can target different levels of meaning.

The goal of this paper is to explore all these uses of *kwa* and see if there is any coherence in their set and how it can be captured. Adapting Chung and Mascarenhas' (2023) decision theoretic semantics for linguistic modality, we will propose a unified semantics of *kwa* (6) from which all of its uses can be derived as pragmatically salient interpretations. Our proposal is that *kwa* as a discourse particle targets a salient proposition and conventionally implicates that (i) its target has a lower expected value than a threshold, and (ii) there is an alternative to the target whose expected value is higher than the threshold. In other words, the expected value of the target is not good-enough, and there is a good-enough alternative.

(6) $[[\text{Kwa } \varepsilon_{st}]\ S\ ]] = [[S]]^{w}$ and
$[\text{Kwa } \varepsilon_{st}]$ conventionally implicates $\mathbb{E}_w\ [\mu_{\text{EVAL}} \mid \phi] < \theta \wedge \exists\ \psi$ in $\text{Alt}(\phi)$: $\mathbb{E}_w\ [\mu_{\text{EVAL}} \mid \psi] \geq \theta$

where $\phi = [[\ \varepsilon_{st}\ ]]^w$ the target of *kwa,*

$\theta$ = threshold,

and $\mathbb{E}_w\ [\mu_{EVAL}\ |\ \phi]$ is the expected value of $\phi$ conditioned on $\mu_{EVAL}$.

According to (6), *kwa* syntactically combines with a clause and returns the same clause, and targets a proposition $\phi$, signalling that the expected value of that proposition is lower than a certain threshold $\theta$, and that there is some alternative $\psi$ to $\phi$ that is higher than the threshold. The notion of expected value (i.e., the notion of a good-enough proposition) can be interpreted epistemically as in examples (2) to (4), or deontically as in example (5).

Assuming Farkas and Bruce's (2009) model of the structure of discourse (Table 1) where the conversation set is grouped into different components such as the Table, discourse commitment sets of the addressee and the speaker ($DC_A$ and $DC_B$ respectively), the common ground (*cg*), and the projected set (*ps*), we will also argue that the proposition targeted by *kwa* can virtually come from any of these components of the context structure.

*Table 1. Sample Context Structure (Farkas & 2009:89).*

| **A** | **Table** | **B** |
|---|---|---|
| $DC_A$ | *S* | $DC_B$ |
| Common Ground *cg* | | Projected Set *ps* |

An illustration of *kwa* targeting a proposition in $DC_A$ which is a proposition that the addressee has committed to that is not a joint commitment is seen in (7), where *kwa* targets the proposition that was conversationally implicated by the addressee's utterance- *that the person being kissed by the speaker is not his wife*.

(7) A: Ị saw you kissing a woman last night.
B: Ọ́ **kwà** nwúnyè ḿ!
It **kwa** wife 1sg
'That was my wife!'

Since B's utterance in (7) is inconsistent with A's conversational implicature, one can assume that *kwa* targets that implicature. Furthermore, the relevant notion of expected value in this context is Bayesian likelihood, i.e. a measure of the explanatory value of a hypothesis. In (7), the facts to be explained are that the speaker was seen kissing a woman, and the targeted hypothesis is that the woman was not his wife (hence, that he is having an affair). A's conversational implicature is therefore conventionally implicated to be less likely than a threshold, and some alternative to this proposition is conventionally implicated to meet that threshold.

In the talk, we will show how other uses of *kwa* arise from the interaction of the choice of the target proposition and the relation of the conventionally implicated low expected value, with the overall illocutionary force of the speaker's utterance. For instance, in the mirative use of *kwa* (3), the proposition that is targeted as having low expected value is also asserted as being true, which conveys surprise whereas for incredulity (2), the proposition that is targeted as having a low expected value is questioned, which conveys incredulity. In (5), *kwa* targets the proposition that the child is going to leave vegetables on their plate, and conveys that this proposition has low expected utility compared to its alternative, namely, that the child is going to eat their vegetable. In that example, *kwa* reinforces the deontic value of the negative imperative.

The relation between the target propositions and alternatives is constrained by the question under discussion (QUD) (Roberts, 1996). If it is a proposition that has already been put on the conversation Table by a previous discourse move, then the QUD that is relevant is whatever question that proposition was meant to address. If it is a prejacent, then it is the question that the current discourse move is addressing."

**References**

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