Danish Verb Phrase Anaphora: Deep or surface?

In the original typology of anaphora introduced by Hankamer and Sag (1976) for English, most types of surface anaphora are null, notably Verb Phrase Ellipsis (VPE), Sluicing, and NP-Ellipsis. Hankamer and Sag argue that this correlation within English is accidental, and more generally that the deep vs. surface distinction is orthogonal to whether the anaphoric element has a phonological realization or not. They cite *do so* anaphora as their primary example of overt surface anaphora, but recent work by Kehler and Ward (1999) has shown that the characterization of *do so* as surface anaphora is problematic, an observation that calls into question whether overt surface anaphora exists at all. In this paper, we examine a little-studied type of anaphora in Danish, Verb Phrase Anaphora (VPA), in which a proform *det* is substituted for a vP and is anaphoric to an antecedent vP (1). We argue that VPA must be analyzed as possessing underlying syntactic structure, confirming the existence of overt surface anaphora.

Danish VPA is highly reminiscent of English VPE with two noticeable differences. First, the anaphoric vP is realized overtly as *det*. Second, *det* participates in Ā-movement, generally appearing in sentence-initial position (Spec-CP), as in (1). Like VPE, but unlike *do so*, VPA is licensed by any modal or auxiliary and does not restrict the semantics of the antecedent vP (data not shown). Since VPA patterns with VPE in these respects, VPA might be a type of surface anaphora in which a fully articulated vP is realized as the proform *det*. In support of this hypothesis, VPA passes Hankamer and Sag's original diagnostics for surface anaphora: it exhibits the Missing Antecedent Phenomenon (3), it strongly prefers a linguistic antecedent, as shown by the infelicity of (4), and it requires parallelism in transitivity between the antecedent and target clauses (5). VPA is also available with unaccusative (6) and passive (7) verbs. If the single argument of unaccusative and passive verbs originates as the sister of V, then the grammaticality of (6) and (7) constitutes further evidence that *det* has internal syntactic structure.

If VPA is surface anaphora, we predict that Ā-extraction out of the vP should also be possible, as it is for VPE in English (Schuyler 2001). However, this is not possible, as illustrated for a direct object wh-phrase in (8) and an indirect object wh-phrase in (9). The ungrammaticality of Ā-extraction from the anaphoric vP would follow directly from an analysis of *det* as deep anaphora, since there would be nothing to extract. Such an analysis would have to resolve how a deep anaphor could test positive for surface anaphora according to the traditional diagnostics of Hankamer and Sag. Furthermore, this analysis would be at odds with the long-standing assumption that passive and unaccusative subjects are Merged as the complement of V. As a deep anaphor, *det* could not contain these DPs and they would have to be Merged in their surface position in Spec-TP; the question then is how they receive their thematic roles.

This paradox can be resolved if the lack of Ā-extraction from the anaphoric vP is understood as following from locality effects. Since the vP pronounced as *det* conveys given information and is topic, it participates in discourse movement, raising to Spec-CP (1). When another discourse-marked element occupies Spec-CP, *det* is prevented from fronting and remains in situ; this is shown for a subject wh-phrase in (2). Since the subject wh-phrase is located in Spec-TP, it is closer to C than the topic-marked vP and so is expected to raise to Spec-CP instead of the vP. For internal arguments, however, the vP will always be closer to C than any wh-phrase contained inside it, assuming a definition of locality based on dominance (Fitzpatrick 2002:446). Hence, (8–9) are ungrammatical.

The analysis of Danish VPA as surface anaphora, together with general principles of locality, accounts straightforwardly for the data in (1–9) and reaffirms Hankamer and Sag's claim that some instances of surface anaphora are overt.

(1)   Han siger han kan hækle, men **det** kan han ikke.
        he   says he can crochet but DET can he not
        'He says he can crochet, but he can't.'

(2)   Jeg kan ikke hækle, men **hvem** kan egentlig **det**?
        I   can not crochet but who   can actually DET
        'I don't know how to crochet, but who actually can?'

(3)   Jeg har aldrig redet på en kamel, men det har Ivan og   han siger at   den stank
        I   have never ridden on a camel but DET has Ivan and he says that it   stank
        forfærdeligt.
        terribly
        'I have never ridden a camel, but Ivan has and he says it stank terribly.'

(4)   [A and B are observing C struggling to swim in a pool]

        A: # Det kan jeg heller ikke.
             DET can I   either not
             Intended: 'I can't swim either.'

(5)   * Jeg ville   hænge hesteskoen   over døren   og det gør den nu.
        I   wanted hang   horseshoe-the over door-the and DET does it   now
        Intended: 'I wanted to hang the horseshoe over the door and it hangs there now.'

(6)   Bare det ville   bryde sammen lige   nu! Men det gjorde det selvfølgelig ikke!
        just it would break together right now but DET did   it of.course   not
        'If only the train would break down right now! But of course it didnt!'

(7)   Det var første gang, jeg ønskede at blive   afsat,   og det blev   jeg.
        it   was first   time I   wanted to become dismissed and DET became I
        'It was the first time I had wanted to be dismissed and I was.'

(8)   * Jeg ved   hvilken hundehvalp I   ikke burde adoptere, men jeg ved   ikke **hvilken**
        I   know which   puppy   you not should adopt   but I   know not which
        (hundehvalp) I   burde **det**.
        puppy   you should DET
        Intended: 'I know which puppy you should not adopt but I don't know which puppy you
        should.'

(9)   * Jeg ved   hvem Susan gav sin nøgle, men jeg ved   ikke **hvem** Palle gjorde **det**.
        I   know who Susan gave her key   but I   know not who   Palle did   DET
        Intended: 'I know who Susan gave her key to but I don't know to whom Palle did.'

Fitzpatrick, J. M. 2002. On Minimalist approaches to the locality of movement. *Lingusitic Inquiry* 33:443–463. **Hankamer, J. and I. A. Sag.** 1976. Deep and surface anaphora. *Linguistic Inquiry* 7:391–426. **Kehler, A. and G. Ward.** 1999. On the semantics and pragmatics of identifier *so*. In K. Turner, ed. *The Semantics/Pragmatics Interface from Different Points of View.* Amsterdam: Elsevier. **Schuyler, T.** 2001. Wh-movement out of the site of VP-Ellipsis. In Séamas Mac Bhloscaidh, ed. *Syntax and Semantics at Santa Cruz, Volume 3*, 1–20.