A Note on Quotative Inversion in Hungarian*

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It will be argued that Quotative Inversion (QI) in Hungarian, i.e., inversion of the finite verb and a verbal modifier within a reporting clause, requires incorporation of an abstract operator, $Q_0$, into Pred°. This accounts among other things for the fact that Hungarian QI is incompatible with unbounded dependency formation, i.e., incompatible with $Q_0$ placement in Spec,FocP. The overall head initiality of clauses undergoing QI will be derived in two steps. First, a PF-linearization mechanism in the spirit of Fox and Pesetsky (2005) guarantees strictly Pred°-initial PredP. Second, information structural impoverishment "shuts down" TopP and FocP, the phrases dominating PredP. The latter idea will be grounded in particular assumptions about the narrative force of QI constructions. $Q_0$ will be argued to be a covert counterpart of overt demonstratives incorporated into the Hungarian verb *mondja* (‘say’). A semantics of demonstrative incorporation is shown to shed interesting light on exhaustive interpretation in the presence of communication predicates having undergone QI. Considerable efforts are made to weigh the language-specific choices for the analysis of Hungarian against the options available for deriving varieties of QI in languages like English, French, Spanish, and Dutch, as our analysis is developed against the backdrop of the approaches by Collins and Branigan (1997), Collins (1997), Suñer (2000), and de Vries (2006).

Keywords: Inversion, reported direct speech, parentheticals, demonstratives, information structure

1 Introduction

Quotative Inversion (QI) occurs in English when a quote (Q), i.e., a passage of reported direct speech, immediately precedes or encloses a reporting clause (RC). As shown in (1), inversion in English affects the order of subject and main verb within RC.

(1) a. "As falls Wichita, so falls Wichita Falls" said Pat
   b. "As falls Wichita," said Pat "so falls Wichita Falls"

Notably, English QI is optional, as illustrated in (2).

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1 On a more general approach the term "reported direct speech" has to be replaced by "(re)presented direct speech and thought." We will not deal with what Bonami and Godard (2008) call "behaviors" like, for example, sound emission ("Pshhhh went the balloon"). Recent overviews over varieties of quotation are given by Cappelen and Lepore (2007, chapter 2) and Brendel, Meibauer and Steinbach (2011). In this paper we will have nothing to say about "pure quotation" ("Boston has six letters") or "mixed quotation" (Quine said that quotation "has a certain anomalous feature"), both of which come with "standard syntax."
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(2) a. "As falls Wichita, so falls Wichita Falls" Pat said
    b. "As falls Wichita," Pat said "so falls Wichita Falls"

When Q follows RC as in (3), inversion as in (3b) is fairly marked, mostly belonging to "journalistic" registers (Quirk et al. 1985, 1024, fn.[c]).

(3) a. Pat said: "As falls Wichita, so falls Wichita Falls"
    b. Said Pat: "As falls Wichita, so falls Wichita Falls"

More recent formal studies of QI in English have been provided by Collins and Branigan (1997), Collins (1997, chapter 3), Suñer (2000), Barra-Jover (2004), and Branigan (2011, 3.1), and varieties of QI in other languages have been studied formally by de Vries (2006; 2008) [Dutch], Holmberg (1986, 4.4.3.4) [Swedish], Collins and Branigan (1997), Doeleman (1998), Barra-Jover (2004), and Bonami and Godard (2008) [French], Suñer (2000) [Spanish], Matos (2013) [Portuguese], and Barra-Jover (2004) [Russian].

Hungarian, our main object of study, likewise possesses a variety of QI, as has been noted among others by Fónagy (1986). Formally, QI in Hungarian involves inversion of the finite verb and a "verbal modifier" (VM) within the RC. The set of VMs contains predicate forming items (cf., e.g., É. Kiss 2002, chapter 3; Komlósy 1994, section 4) such as bare nouns, PPs, and verbal particles. An instance of the latter is el in example (4).²

(4) a. "Kedden sikerült a vizsgám" mondtta el János
    b. "Kedden sikerült" mondtta el János "a vizsgám"

In contrast to English, QI in Hungarian is obligatory and no counterpart to (3b) exists. This is shown in (5).³

(5) a. * "Kedden sikerült a vizsgám" elmondta János
    b. * "Kedden sikerült" elmondta János "a vizsgám"
    c. * Mondta el János: "Kedden sikerült a vizsgám"

Starting point for our discussion will be two assumptions made in the literature on the formal syntax of QI. These are stated in (6):

(6) a. QI involves an A’-(moved-)operator, Op (Collins & Branigan 1997, 10f.)
    b. Op is placed in Spec,FocP (Suñer 2000, 541f.)

According to (6a), the RC of QI contains some hidden structure such that said Pat in (1) corresponds to the (internally complex) constituent [ Op said Pat ]. In addition, (6b)

² We agree with an anonymous reviewer that the split of Q in (4b) is more natural if the second part of Q is heavier, such as in életem legnehezebb vizsgája ("the most difficult exam of my life"). We translate the verb elmond with English 'say,' since the slightly more adequate 'tell' is not very idiomatic if used in simple transitives. The German verb erzählen would capture elmond more directly.

³ By orthographic convention, verbal particles and main verbs are written together when the former immediately precede the latter. This leads to forms like elmondta in (5a) and (5b).
requires that within RC, \( \mathbf{Op}_Q \) occupy the specifier of FocP, a functional projection hosting focused constituents (cf., e.g., Rizzi 1997).

Working out the details of the picture just sketched for Hungarian will be our task in Section 2. As we will find there, the resulting analysis faces three main obstacles: (i) \( \mathbf{Op}_Q \) does not enter into unbounded (A’-)dependencies, (ii) \( \mathbf{Op}_Q \) does not license additional postverbal foci, and (iii) QI does not come with the exhaustive interpretation associated with Hungarian preverbal focus. Section 3 will therefore replace \( \mathbf{Op}_Q \)-in-Spec,FocP by \( \mathbf{Op}_Q \)-in-Spec,PredP and assimilate QI to VM placement. This approach meets all three objections from Section 2. In addition it correctly predicts that Hungarian QI occurs in "VM-climbing" environments. On the other hand, the \( \mathbf{Op}_Q \)-in-Spec,PredP approach makes the incorrect prediction that manner adverbials, standardly taken to adjoin to PredP, should be able to occur RC initially. In Section 4 this will be taken care of by assuming \( \mathbf{Op}_Q \)-to-Pred° incorporation instead of \( \mathbf{Op}_Q \)-in-Spec,PredP. While preserving the advantages the latter approach has over the original \( \mathbf{Op}_Q \)-in-Spec,FocP, incorporation is able to feed a linearization mechanism in the spirit of Fox and Pesetsky (2005) that enforces initial position within PredP of the complex \( \mathbf{Op}_Q \)-Pred° head at Spell-Out. In favor of incorporation it will be argued that \( \mathbf{Op}_Q \) is an abstract demonstrative resembling \( \text{īgy ('so') in 'so s/he says'} \) and \( \text{azt ('that') in 's/he says that'} \), i.e., in canonical heads of RC of older and contemporary Hungarian (Section 4.1). Section 5 turns to cross-linguistic comparison and shows how the overall head initiality of Hungarian RCs can be derived from information structural impoverishment leading to "shut-down" (inaccessibility) of TopP and FocP. Section 6 summarizes our findings. Two appendices provide further background for the analysis. Appendix A lays some illocutionary foundations for the information structural analysis in Section 5 and links the obligatoriness of \( \mathbf{Op}_Q \)-to-Pred° incorporation and concomitant head initiality to clausal typing. Appendix B provides a semantics for demonstrative incorporation modeled structurally on noun incorporation with the additional property of introducing token-indexicality into the RC predicate. This opens up the independent possibility of deriving exhaustive interpretation of Q.

2 Quotative Inversion and \( \mathbf{Op}_Q \)-in-Spec,FocP

Adopting the assumptions in (6) for the analysis of QI in Hungarian makes a lot of initial sense, given that (narrowly) focused constituents in Hungarian have regularly been argued to occupy a specific preverbal functional projection (cf., e.g., Brody 1990). And, crucially, preverbal focus triggers inversion of the finite verb and VM. Consider first a standard subject initial declarative clause of Hungarian without any narrow focus:

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4 Alternatives have more recently been explored by, e.g., Surányi (2004, 2011, 2012) and Horvath (2009).

5 With infinitival verbs, focus-induced inversion is optional (cf. Brody 1990). Since QI occurs in root clauses only (see Appendix A), one has to inspect direct speech in combination with Hungarian root infinitives, the latter described by Bartos (2002). It turns out that of the two types, the deontic variety is unable to serve as RC. This can be explained as an incompatibility with the kind of narrative force involved in QI (see Appendix A). At the same time, "circumstantial" root infinitives do occur as RCs, as shown in (i):

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(7) a. János bemutatta Pétert Marinak
   John VM.introduced Peter.ACC Mary.to
   'John introduced Peter to Mary'

b. TopP
   János
   Top'
   Top° [+1] FocP
   Foc° [+1] PredP
   be
   Pred'
   Pred° [+] t₁ Pétert t₁ t₁ Marinak

Here FocP is empty and the subject is "topicalized" to Spec,TopP. Default "non-inverted" order of VM and the finite verb is a consequence of their being hosted by Spec,PredP and Pred°, respectively. Focus Inversion (FI) results from Pred°-to-Foc° promotion of the main verb, accompanied by placement of the focused constituent in Spec,FocP. This is shown in (8).

(8) a. János PÉTERT mutatta be Marinak
   'John introduced PETER to Mary'

Curiously, RC has to be strictly verb initial here too, i.e., neither the manner adverb nor the verbal particle can appear preverbally. To keep things simple, we disregard this construction in the following.

For a general background on Hungarian syntax, see the overview by É. Kiss (2002) and references cited there. Except for some sketchy remarks in footnotes, we won't have anything to say about the fine structure of "VP".

We use subscripted [+1] to indicate that a syntactic functional head "attracts" a constituent into its specifier and/or another head into head-adjoined position.

In the presence of narrow focus in Spec,FocP, VM-to-Spec,PredP movement might be optional. This would follow if VM-in-Spec,PredP could be assumed to trigger aspherical effects like perfectivization (cf., e.g., É. Kiss 1994, 7.2, where such a case is argued for "verbal prefixes").
We follow among others Banfield (1982, 42), Collins and Branigan (1997, 11) and de Vries (2006, 220) in assuming that the relation between RC and Q is (analogous to) that of a parenthetical and its host. The syntactic details of this shall not concern us here, though, except for noting that such an analysis correctly makes the prediction that RC cannot be discontinuous (Bonami & Godard 2008, 9; de Vries 2006, 215). This is illustrated in (10).10,11

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9 Work on the kind of "integrated parentheticals" we have in mind has been provided, among others, by Reis (2002), Fortmann (2007), and Steinbach (2007). Bonami and Godard (2008, 6) observe that the possibility of "niching" RC depends on the internal analyzability of Q, absent in the case of represented "behaviors" such as, for example, *"Pshhhh," went the balloon, "shhhh".

10 Discontinuous RCs can, however, be found in Latin literary texts, as documented by Kieckers (1913). It is not clear whether such cases can still be treated as (varieties of) parenthetical RCs or have to be analyzed as main clause RCs with Q integrated into object position. The latter seems to be a common strategy for dealing with reported direct speech in (more strictly) "verb final" languages, such as Turkish (Kornfilt 1997, 2) and Japanese (Coulmas 1985, 56f.).
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(10) *"Kedden    sikerült"  mondta el   János "a vizsgám"     a barátainak
     "On Tuesday I passed my exam" said John to his friends.

However, the analysis of QI in terms of Op-in-Spec,FocP makes a number of specific predictions, which, importantly, are not borne out. These predictions concern (i) exhaustive interpretation, (ii) the formation of unbounded dependencies, and (iii) the licensing of postverbal focus.

(i) Assimilating QI to FI, i.e., involvement of focusation, predicts an exhaustivity effect. Thus, as has originally been observed by Szabolcsi (1981a, 1981b), Hungarian preverbal focus comes with exhaustive interpretation. Consider (11).

(11) * A parlament   a médiatörvényt     szavazta meg, the parliament the media.law.VM voted
     és az alkotmányt      is   megszavazta and the constitution.VM also voted
     VOTE FOR(p,ml) & VOTE FOR(p,c). (11) formulates the exhaustivity constraint that (11) violates in terms of exclusion of alternatives.13

According to the characterization by Krifka (2008, 259), exhaustive focus "indicates that the focus denotation is the only one that leads to a true proposition, or rather more generally: that the focus denotation is the logically strongest that does so." Logical strength is definable in terms of entailment: \( p \) is logically stronger than \( q \) iff \( p \) entails \( q \) and \( q \) does not entail \( p \).12 Thus, (11) is odd because due to narrow focus on a médiatörvényt ("the media law"), its first conjunct presents \( VOTE .FOR(p,ml) \) as the logically strongest truth about parliamentary voting (in that situation), while the overall sentence asserts the logically stronger \( VOTE .FOR(p,ml) & VOTE .FOR(p,c) \).

11 In addition, the analysis in (9) avoids a specific problem concerning the syntax of clause combining in Hungarian. As shown by Kenesei (1994, 330; cf., Szabolcsi 1981, 516), full clauses are banned from the focus position:

(i) a. * Ervin csak [DP azt [CP hogy Emma megérkezett]] tudta
     Ervin only that that Emma VM.arrived knew
b. * Ervin csak [CP hogy Emma megérkezett] tudta
     ‘The only thing Ervin knew was that Emma had arrived’

As illustrated in (ie), focusing a full clause is done by placing an expletive, namely, the demonstrative \( azt \), in Spec,FocP and "extrapolating" the associated CP. Now, given that it isn’t the reported clause but Op that would occupy Spec,FocP in QI, nothing special has to be said: QI observes the same constraint. Kenesei (1994, 331f.) provides a prosodic account of the facts in (i) based on work by, a.o., Vogel and Kenesei (1987). The issue is also briefly addressed by É. Kiss (2002, 231). We will have more to say about demonstratives in Section 4 and Appendix B.

12 Krifka (1995) provides a generalized version of this and applications.

13 Subscripted "(11)" indicates that we assume the computation of alternatives to be sensitive to the particular context of utterance. We take no stance on the recent debate on how exactly exhaustive interpretation triggered by Hungarian focus comes about, i.e., on whether it is built into the semantics or results from (defeasible) inferential mechanisms. A case for the latter perspective has been made by Wedgwood (2005, 2007, 2009) and Onea and Beaver (2011).
\[ \neg \exists x \in ALT_{(10)}(ml) \left[ x \neq ml \land VOTE.(p,x) \right] \]

Now, crucially, the same effect does not arise in the case of QI. This is shown in (13), which is unobjectionable.

(13) "Tizenöt éves koromban elmentem otthonról" mondta el Béla fifteen years age.my.in VM.went home.from said VM Béla és ezt is elmondta: "egy gyárban kezdtem el dolgozni" and that also VM.said a factory.in started VM work.INF

"When I was fifteen years old I left home" said Béla, and he also said: "I (then) started to work in a factory"

Thus, QI in RC of the first conjunct is clearly compatible with (14):\(^{14,15}\)

(14) \[ \exists x \in ALT_{(13)}(\text{"Tizenöt éves ..."}) \left[ x \neq \text{"Tizenöt éves ..."} \land \text{SAY}(b,x) \right] \]

(ii) As is familiar from earlier studies (e.g., É. Kiss 1987, Horvath 1985), Spec,FocP must be able to serve as landing site for long-distance operator movement. However, while focused constituents are able to enter into unbounded dependencies, \(Q_{\text{Op}}\) isn’t. This is shown in (15).\(^{16}\)

(15) a. \(EZT \text{ A BUTASÁGOT ismerte } be \text{ János, hogy mondta this the stupidity.ACC admittedVM John that said 'THIS STUPIDITY, John admitted that he had said'}\)

b. * "Elloptam az ékszereket" ismerte be János, hogy mondta stole.1SG the jewels.ACC admitted VM John that said "I stole the jewels" John admitted that he had said’

(iii) As illustrated in (16), focused constituents in Spec,FocP license additional postverbal csak.-('only'-)NPs (cf., É. Kiss 1998, 262) while \(Q_{\text{Op}}\) doesn’t.

(16) a. * János bemutatta Pétert csak Marinak John VM.introduced Peter.ACC only Mary.to 'John introduced Peter only to Mary’

b. \(PÉTERT \text{ mutatta be János csak Marinak} \text{‘It is Peter that John introduced only to Mary’} \)

c. * "Sikerült a vizsgám" mondta el csak János

"I passed my exam" said only John’

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\(^{14}\) For the semantics of utterance terms, i.e., the expressions in "corner quotes," we follow Potts (2007). See Appendix B for the details.

\(^{15}\) Quite analogously, QI in German does not come with the kind of contrastiveness (or "emphasis") otherwise found in argument inversion environments, as has been documented by, e.g., Frey (2010). Section 5 provides reasons to believe that "fronted" Q is not licensed as givenness or aboutness topic either.

\(^{16}\) In this respect, Hungarian patterns with English (* "What next?", swore Michelle that Marcel asked) (Collins & Branigan 1997, 12), and differs from Spanish (Suñer 2000, 546) and Dutch (de Vries 2006, 220).
The contrast between (16a) and (16b) indicates that a postverbal csak-NP requires a (narrowly) focused constituent in Spec,FocP (cf. É. Kiss 2002, 90f.). Clearly, Op cannot serve that function, which rules out (16c).

We take these three substantial divergences between FI and QI as sufficient motivation for doubting the Op-in-Spec,FocP approach and exploring an alternative.\footnote{Prosodically, constituents in Spec,FoeP come with (emphatic) nuclear stress triggering post-nuclear stress reduction ("eradication") (cf., e.g., Kálmán et al. 1986). Although it is doubtful that the prosody of Q in QI configurations is of that kind, it must be noted that RC equals the post-nuclear domain in lacking any major stress (Kálmán & Nádasdy 2004, 461; Varga 2002, 93). What is different, though, is that when RC follows Q as in (4a), it is set off and projects its own intonation phrase (IP) (Varga 2002, 96). This difference can, of course, be accounted for on the basis of the parenthetical nature of RC, irrespective of its internal structural make up.}

3 Quotative Inversion and Op-in-Spec,PredP

The finite verb and a VM can also occur in inverted order when there is more than one VM. (17) exemplifies a case where a verbal particle ends up in postverbal position because Spec,PredP is preempted by a PP functioning as secondary predicate.

\begin{equation}
(17) \quad a. \quad \text{Mari pirosra festette be a kerítést }
\quad \small{\text{Mary red.onto[VM] painted VM the fence.ACC}}
\quad \small{\text{'}Mary painted the fence red'}
\end{equation}

\begin{equation}
\begin{aligned}
\text{} & \text{TopP} \\
\text{Mari} & \quad \text{Top'} \\
\text{Top} & \quad \text{FocP} \\
\text{Foc} & \quad \text{PredP} \\
\text{pirosra} & \quad \text{Pred'} \\
\text{Pred} & \quad \text{VP} \\
\text{festette} & \quad \text{Pred} \\
\text{Pred} & \quad \text{tₜ tₖ be tₜ a kerítést}
\end{aligned}
\end{equation}

The existence of this kind of configuration opens up the possibility of analyzing QI as one variety of "Predicate Inversion" (PI) instead of as a variety of FI.\footnote{This approach comes close in spirit to the one advocated by Collins (1997, chapter 3) and Branigan (2011, 3.1). It would be even closer, were we to adopt the proposal by Olsvay (2004), É. Kiss (2008), and Surányi (2009, 2012) to reanalyze the Hungarian PredP as TP. However, we take the fact (see below) that the projection in question serves as default attachment site for "low" adverbials like manner adverbs as sufficient reason for sticking with the original label. See Section 5 for some further cross-linguistic considerations.} The resulting alternative structure for the RC in (4) is given in (18).
Now, with $O_{\partial}$ removed from Spec,FocP, it is clear that the core challenges to the analysis of QI discussed in Section 2 are met: (i) exhaustive interpretation is no longer expected under QI, which accounts for the contrast between (11) and (13); (ii) Spec,PredP is not a landing site in unbounded dependencies, which accounts for the contrast between (15a) and (15b); (iii) $O_{\partial}$ does not count as focal "licensor" of postverbal csak-NPs, which accounts for the contrast between (16b) and (16c).

The $O_{\partial}$-in-Spec,PredP analysis makes an additional prediction, namely, that QI should be fine in environments that allow "VM-climbing" (cf., e.g. É. Kiss 2002, 3.6.1). The examples in (19) and (20) can be taken to confirm this prediction.

\begin{enumerate}
\item[(19)] a.  
\begin{quote}
El akarja olvasni Maria könyvet
\end{quote}
\begin{itemize}
\item VM want.3SG read.INF Mary the book.ACC
\end{itemize}
‘Mary wants to read the book’

\item b.  
\begin{quote}
"Fejezzétek be ezt a butaságot!" akarja mondani
\end{quote}
\begin{itemize}
\item stop.SUBJ.2PL VM this the nonsense.ACC want.3SG say.INF
\end{itemize}
‘“Stop this nonsense!” (s)he wants to say’

\item[(20)] a.  
\begin{quote}
Piruna kell, hogy fessék a kerítést
\end{quote}
\begin{itemize}
\item red.onto[VM] should that paint.SUBJ.3PL the fence.ACC
\end{itemize}
‘They should paint the fence red’

\item b.  
\begin{quote}
"Fejezzétek be ezt a butaságot!" kell, hogy mondjak
\end{quote}
\begin{itemize}
\item stop.SUBJ.2PL VM this the nonsense should that say.SUBJ.3PL
\end{itemize}
‘“Stop this nonsense!” they should say’
\end{enumerate}

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19 É. Kiss (2002, 232f.) draws an analogous conclusion wrt. the placement of expletive $az$ (‘that’) accompanying complement clauses of "verbs of saying, and verbs expressing mental activities". Reluctantly, we have to leave exploration of the overall connection between direct and indirect speech in Hungarian to further research.

20 Except for the extraction diagnostics, Csirmaz (2004, 235f.) provides analogous data to argue that preverbal "designated arguments" of a particular class of light verbs called "stress avoiding verbs" (cf. É. Kiss 1994, 31) are not in focus position but fill the VM position, i.e., Spec,PredP.

21 For some approaches to "VM-climbing," see the contributions to É. Kiss & van Riemsdijk (eds.) (2004) and references cited there. (19b) and (20b) show that prosodically, Q counts as satisfying the "stress-avoidance" requirement of akar and kell, that is, these (auxiliary) verbs are unstressed here, which means they aren’t focused for contrast or VERUM (cf., e.g., Csirmaz 2004, Kálmán et al. 1986, Komlósy 1994, Szendrői 2004).
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That we are dealing with QI in (19b)/(20b) can be inferred from the contrast in (21). As shown in (21a), bare infinitives can serve as VM (cf. Komlósy 1994, 99; Koopman & Szabolcsi 2000, 73). (21b), a direct counterpart of (19b), shows that QI forces the bare infinitive to remain postverbal.\(^{22}\)

\[(21)\]
\begin{align*}
a. & \text{Mondani akarja hogy} \\
& \quad \text{say.INF want.3SG that} \\
& \quad \text{‘(S)he wants to say that...’}
\end{align*}

b. * "Fejezzétek be ezt a butaságot!" mondani akarja

A much more general issue that we are obliged to address is the question of how the strict (surface) verb initiality of RC \(^{-}\) mentioned in Section 1 but ignored in Section 2 \(^{-}\) is going to be enforced within the overall phrase structural setting we have been assuming. This will be done in two steps. The question as to what blocks accessibility of FocP and TopP will be dealt with in Section 5. For now, we confine ourselves to PredP. A closer look at this projection already reveals a very specific challenge to the Op-in-Spec,PredP analysis, which is due to the assumption (É. Kiss 2009, section 6; 2010, 522f.; Egedi 2009, 112) that manner adverbials are adjoined to PredP. (22) (cf. É. Kiss 2010, 523) shows a manner adverb immediately preceding the neutral position of a VM in Spec,PredP.

\[(22)\]
\begin{align*}
a. & \text{A tanár hangosan fel olvasta a dolgozatokat} \\
& \quad \text{the teacher loudly VM read the paper.PL.ACC} \\
& \quad \text{‘The teacher read the papers out loudly’}
\end{align*}

b. \ldots [PredP hangosan [PredP fel [Pred olvasta ]VP \ldots]

Given the analysis of QI in (18), we expect manner adverbials to be able to occur in the initial position of RC. (23) (Collins & Branigan 1997, 9) shows that this indeed is a possibility in English.

\[(23)\] "Don’t touch that dial!" abruptly suggested the TV screen

By contrast, Hungarian manner adverbials have to follow the finite verb under QI, as shown in (24).

\[(i)\]
\begin{align*}
a. & \text{"A demokrácia kompromisszumokra épül kezdte el mondani} \\
& \quad \text{the democracy compromise.PL.onto built began VM say.INF} \\
& \quad \text{‘Democracy is built on compromise’ he began to say’}
\end{align*}

b. * Pirosra kezdte el festeni a kerítést \\
& \quad \text{red.onto[VM] began VM paint.INF the fence.ACC} \\
& \quad \text{‘He began to paint the fence red’}

\[(ib)\] would only be fine if \textit{pirosra} were (narrowly) focused, i.e., as an instance of FI. We assume that a fine-grained version of relativized minimality will take care of (i).

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\(^{22}\) As the contrast between (ia) and (ib) shows, \textit{Op-to-Spec,PredP} is possible across an intervening VM, unlike standard "VM-climbing" (cf., e.g., Farkas & Sadock 1989, 327).
(24) a. "Fejezzétek be ezt a butaságot!" hangosan kiáltott fel Mari stop.SUBJ.2PL.VM this the nonsense loudly shouted VM Mary
b. "Fejezzétek be ezt a butaságot!" kiáltott fel hangosan Mari "Stop this nonsense!" shouted Mary out loudly

Now, instead of simply stipulating a ban on adjunction to PredP when occupied by $\text{Op}_Q$, we will appeal to the option particular to light VMs of incorporating into Pred°. As is going to be discussed in the next section, this assumption will be supplemented with a linearization mechanism that enforces (domain-specific) initial positioning for the resulting head.

4 Quotative Inversion and $\text{Op}_Q$-in-Pred°

One of the running themes of research into Hungarian VMs is their hybrid status. Their displacement properties, of which VM-climbing illustrated in (19a)/(20a) is only one instance, have – among other things – been taken to speak for the phrasal nature of VMs (cf., e.g., Koopman & Szabolcsi 2000; É. Kiss 2002, 3.6; Surányi 2009). On the other hand, a number of prosodic, morphosyntactic, and semantic properties support the assumption that VMs may be incorporated (at least) at some level of analysis (cf., e.g., Ackerman 1982; É. Kiss 2002; several contributions to É. Kiss & van Riemsdijk (eds.) 2004; Farkas & de Swart 2003; Farkas & Sadock 1989; Surányi 2009). Our suggestion therefore is to slightly modify the analysis of the RC in Hungarian QI and replace $\text{Op}_Q$-in-Spec,PredP, shown above in (18), by $\text{Op}_Q$-in-Pred°, shown in (25).

\[
\begin{array}{c}
\text{PredP} \\
\text{Pred°} \quad \text{VP} \\
\text{Op}_Q \quad \text{Pred°} \\
\text{mondta} \quad \text{Pred°[+]} \\
\end{array}
\]

Regarding feature-checking between Pred° and $\text{Op}_Q$, we take (25) to be equivalent to (18), i.e., Spec,PredP is not available for any additional VM. The contrast between (4a)/(4b) and (5a)/(5b) thus remains a core consequence of the analysis of Hungarian QI. We are not entirely sure, though, what it is that gives $\text{Op}_Q$ absolute priority over other VMs to enforce this. The fact itself fully supports the idea by Csirmaz (2004, 240f.) of a "verbal modifier hierarchy" regulating access to PredP in the presence of multiple VMs. In particular, $\text{Op}_Q$ perfectly fits the observation that "[a]t the highest end of the hierarchy are [...] covert operators" (p.240). We suggest that the decisive additional factor for the QI case at hand is clausal typing in the sense made more explicit in Appendix A.
Another important property of the \( \mathcal{OP}_Q \)-in-Pred\(^0\) approach sketched in (25) deserves being stressed: the advantages discussed in Section 3 of assimilating QI to PI instead of FI carry over.\(^{23}\)

Let us next turn to the issue, raised at the end of Section 3, of how to guarantee head initiality of PredP. The proposal here is that this be modeled in terms of linearization at Spell-Out. We adopt and slightly adapt the idea promoted by É. Kiss (2008, 2009, 2010) that (a) PredP is the lowest clausal domain feeding PF-linearization in Hungarian and (b) PF-linearization of PredP involves "domain flattening," so that constituent order will be determined by principles such as Behaghel's "Law of Growing Constituents" (É. Kiss 2008, 7.1). In modifying É. Kiss's approach, we follow Fox and Pesetsky (2005, 15), who see "no need to distinguish phases from Spell-out domains". Accordingly, PredP will be linearized in its entirety, including its head, Pred\(^0\), and "edge" constituents.

Now, crucially, the effect of incorporating \( \mathcal{OP}_Q \) into Pred\(^0\) will have to be that Pred\(^0\) becomes a "PF-prefix" in the string-theoretic sense familiar from formal language theory (cf. Kracht 2003, 1.2). Notationally, we register this by having \( \mathcal{OP}_Q \) carry a "firstness" feature, \( \Theta \), which is inherited by Pred\(^0\). In the framework of Fox and Pesetsky (2005), this amounts to adding the "ordering statement" \( \text{Pred}^0 < X \), where \( X \) is a variable ranging over the entire set of constituents (other than Pred\(^0\) itself), to the "Ordering Table" at Spell-Out. So even if the syntactic analysis of the RC in (24b) is as in (26a), \( \Theta \) will guarantee that Pred\(^0\) comes first in the linearized string. Other principles will be responsible for ordering the remaining categories and yielding (26b). \((\emptyset\) represents the empty phonological matrix of \( \mathcal{OP}_Q \))

\begin{align*}
(26) & \quad \text{a. } [\text{predP } \text{hangosan} [\text{predP } [\text{predP } \mathcal{OP}_Q [\text{predP } \text{kiáltott } \text{Pred}^0 ]]] [\text{VP fel Mari}]] \\
& \quad \text{b. } \emptyset - \text{kiáltott } < \text{fel } < \text{hangosan } < \text{Mari}
\end{align*}

In order to capture preverbal positions of PredP-adjoined adverbials, as in (22), we follow É. Kiss (2009; 2010, section 7) in assuming that adverb placement in Hungarian reflects a bipartition: preverbal ordering is based on c-command as determined by the attachment site, postverbal ordering occurs according to principles like the already mentioned "Law of Growing Constituents."

\(^{23}\) We have nothing particularly interesting to say about the "VP"-internal base position of \( \mathcal{OP}_Q \) — or the empty category \( \mathcal{OP}_Q \) binds, if assumptions by de Vries (2006, 220) are correct — or the derivational mechanism by which it gets placed in its surface position inside Pred\(^0\). Note, however, that our analysis is compatible with assuming any such base position to be below the upper boundary for incorporable constituents observed by Surányi (2009) between vP, i.e., the base position of the subject, and the remainder of "VP." This is uncontroversial for direct object cases like (4a). The adjunct variety of QI (cf. Suijter 2000, 539) can be analyzed as grounded in a low adverbial or oblique "similative" function (cf. Blake 1930; Dowry 1991, 548, fn.3; Haspelmath & Buchholz 1998; Rett 2013, 4.1). What the so-called "manner demonstratives" thus / így (Hung.) make explicit in Thus spoke Kennedy / Így szólt Kennedy is a similarity relation (LIKE-THIS) (cf. Roussarie & Desmets 2003) to a full "simulation" — in the sense of Clark and Gerrig (1990) — of the reported speaking event, supplied by Q ("Ich bin ein Berliner"). Note that this is different from "just" manner modification (loudly, firmly, enthusiastically, etc.), although manner parameters can (to some extent) be inferred from Q. For formal work on the related phenomenon of Be-Like-Quotatives see, e.g., Haddican and Zweig (2012). Ojibwe appears to be a language that incorporate a counterpart of like into "verbs of speaking" (Rhodes 1986).
Regarding implementation, however, the mechanism proposed here differs somewhat. É. Kiss works on the basis of ordered trees in the syntax, allowing left- vs. right-adjunction of adverbials. In that system, postverbal placement of *hangosan* in (24b) presupposes right-adjunction of the adverb (to PredP). By contrast, our system – like the one by Fox and Pesetsky (2005) – follows Chomsky (1995) in allowing only linearly unordered structures in the syntax. The distinction between left- and right-adjointed adverbials will instead be derived by providing counterparts of the former with a "precedence feature," ≺, which ensures that its bearer precedes the constituent it attaches to. Thus, in a configuration like . . . [XP2 ADV≺] [XP1 . . .], \[24\] the effect of ≺ will be addition of the statement \( ADV < XP1 \) to the "Ordering Table" at Spell-Out. The distinction between (22) and (24) follows if the former contains *hangosan* ≺ while the latter uses undorned *hangosan*. In fact, (24) cannot contain *hangosan* ≺, given that the ordering statement *hangosan* < PredP1 implies *hangosan* < Pred° and thus leads to a contradiction with Pred° < X.\[25\]

In sum, we have seen that a parochial linearization mechanism can guarantee head initaility for the PredP part of RC in QI. We would like to argue that this is where Hungarian QI displays a language-specific "stylistic quirk."\[26\] Section 5 will be devoted to showing that the broader phrase structural issue of how to render FocP and TopP inaccessible can be given a cross-linguistically satisfactory answer. Before tackling this issue, however, we would like to briefly consider evidence in favor of the approach just developed.

### 4.1 Incorporation of Op_Q into Pred°: Independent Motivation

An independent case can be made in favor of the Op_Q-in-Pred° analysis based on morpholexical considerations. These have to do with more explicit assumptions about what Op_Q stands for. Further – more speculative – semantic ramifications are discussed in Appendix B.

Collins and Branigan (1997, 2.4) make a connection between English Op_Q and ("archaic") demonstrative *so* (cf. de Vries 2006, 216 for Dutch). This is exactly the kind of perspective we would like to adopt for Hungarian. Thus note that a Hungarian counterpart of *so*, i.e., *úgy*, is well-attested in (counterparts of) QI in earlier stages of the language, as exemplified in (27) (Dömötör 1988, 291).\[27\]

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24 Segments are numbered from lowest, 1, to highest, n.

25 An alternative one may envisage would be to have Op_Q turn Pred° into a prosodic enclitic and to stipulate that Q, but not adverbials, can serve as its host. This might then be employed in accounting for the unacceptability of (5c). Working out such a proposal would require taking a stance on the difficult issue of how RC and Q exactly combine, a subject matter we have to leave for further research, as already indicated in Section 2.

26 For French, Bonami and Godard (2008, 11f.) extend the role of linearization to postverbal positioning of the subject. We are well aware that, as pointed out by an anonymous reviewer, (local) head-initiality could alternatively be enforced by applying head movement to Pred°. In fact, this is what we proposed in an earlier version of this paper. However, for reasons discussed in Section 5, it is preferable to avoid involving Foc° as a landing site here. It may, of course, turn out that a comprehensive treatment of the syntax of reported speech and clausal complementation provides independent motivation for additional functional projections. We leave that for further research.

27 The source is 16th century bishop Miklós Telegdi (item TelM. 385).
"Ma velem űz"    ugy mond Chritus a' latornac,    "paradicomba"
 today with.me you.will.be so    said Christ    the malefactor.DAT paradise.in
"'To day shalt thou be with me in paradise" said Christ unto the malefactor'

Interestingly, as pointed out by Fónagy (1986, 262), "[i]n literary text of the 18th and 19th centuries we meet a frozen and reduced form of úgy mondja 'he says it like that': úgymond, [...] which always follows the reported clause." We would like to suggest that "freezing" is an indicator of syntactic incorporation. In contemporary Hungarian, úgymond has turned into an adverbial particle meaning 'so-called'. Instead, the form aszongya, which is a contraction of demonstrative azt ('that') and mondja ('he/she says') has taken over (Dömötör 1988, 289; Fónagy 1986, 259, 262). Thus, in spoken ('colloquial') Hungarian, the examples in (4) could be rendered as in (28).

(28) a. "Kedden sikerült a vizsgám" aszongya János
b. "Kedden sikerült" aszongya János "a vizsgám"

Again, contraction chimes well with incorporation. We therefore allow ourselves to interpret the existence of úgymond and aszongya as overt morpholexical evidence for the possibility in Hungarian of incorporating demonstrative operators such as OpQ.

Appendix B provides a semantics of demonstrative incorporation that sheds very interesting further light on exhaustivity effects and QI.

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Footnotes:

28 (i) is an authentic example from the Hungarian National Corpus:

(i) "Dobozos sört boztam csupán" - aszongya - ...
    canned beer.ACC brought.1SG only    say.3SG
    "I only brought canned beer" he says' (http://corpus.nytud.hu/mnsz/index_eng.html)

29 Work on pronoun incorporation is provided, for example, by Baker and Hale (1990) and Espinal (2009). Note that in modern Hungarian, the free-standing demonstratives accompanying direct reported speech are the proximal demonstratives így ('so'; 'like this') (see footnote 22 above) and ezt ('this') rather than the distal ones úgy ('so'; 'like that') and azt ('that') (cf. Kiefer 1986, 201).

30 Contrary to the proposal for Dutch by de Vries (2006, 216, 220) that OpQ uniformly corresponds to ze ('so'), it has to be assumed for Hungarian that OpQ is able to stand for the counterpart of either that or so. The distinction is intricately related with presence vs. absence of the so-called "definite conjugation" (cf., e.g., Bartos 2001, Coppock & Wechsler 2012) on the finite verb in QI. As (i) shows, definite conjugation on Hungarian transitive verbs for which the quote is the only thing that can plausibly be construed as direct internal argument results in incompatibility with így but allows ezt.

(i) "A demokrácia kompromisszumokra épül" (* így)/(ezt) állította
    the democracy compromise.PL.onto built so this claimed.3SG.DEF
    "Democracy is built on compromise" (so) he claimed'

For other transitive verbs things are more complicated. Consider (ii):

(ii) "Nincs legnagyobb prímzám"    magyarázott / magyarázta Erdős
    NEG.exist largest    prime.number explained / explained.DEF E.
    "There is no largest prime" explained Erdős'

With definite conjugation, the fact cited via Q becomes the explanandum, i.e., target of explanation, while without that feature it is the explanans, i.e., means of explanation (of something
5 Quotative Inversion and Head Initiality

Let us return to the issue left unresolved in Section 3, namely, the general question as to how our phrase structural analysis of Hungarian QI guarantees the strict head initiality of RC. (29) combines (18) and (25) to show the full $O^p_{\text{Pred}}$-in-$\text{Pred}^o$ proposal we arrived at in Section 4.

\[(29)\]
\[
\begin{array}{c}
\text{TopP} \\
\text{Top}^o_{\downarrow} \\
\text{FocP} \\
\text{Foc}^o_{\downarrow} \\
\text{PredP} \\
\text{Pred}^o \\
\text{Pred}^o \\
\text{VP} \\
\text{\textit{így mondta} János} \\
\text{\textit{el jános}}
\end{array}
\]

We have seen in (26) how linearization takes care of the head initiality of $\text{PredP}$. But what about FocP and TopP?

Before going into our own account, we would like to very briefly reflect on the cross-linguistic situation regarding head initiality under (varieties of) QI. Most straightforward, it would seem, is the analysis of QI in *Verb Second* (V2) languages. Thus, de Vries (2006, 216) explicitly assimilates the RC of Dutch to V1 constructions such as polar interrogatives and imperatives, whose canonical analysis involves postulating an empty operator in Spec,CP.\(^{31}\) Strict verb initiality therefore reduces to the strictness of (CP-) specifier head adjacency in V2 languages.

Looked at from the same perspective, QI in English and Romance might be expected to be analyzed as one variety of "residual V2" (cf. Rizzi 1990, 1996). This is indeed the direction of the proposal by Roberts (2013, 564) for English. It is unclear, however, how preverbal adverbs like the one in (23) would be accommodated there. Standard V2 languages like Dutch categorically disallow this, as shown in (30).\(^{32}\)

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\(^{31}\) As can be gathered from the discussion by Barbiers (2007), while such an analysis may be upheld for (modern) Dutch, the possibility of topicalization in German imperatives calls for a more flexible approach.

\(^{32}\) Thanks to Eefje Boef for help with the Dutch example. For Swedish, see Holmberg (1986, 119). There are, however, familiar cases of "V3" in Germanic V2 languages, induced, for example, by the addition of hanging topics (cf., e.g., Frey 2004) or the insertion of adverbial conjunctions like German adversative aber ("however") or focus particles like Swedish bara ("only") (cf. Egerland 1998) between constituents in Spec,CP and the finite verb in $C^o$. Although all of these deserve closer attention, we suspect that the information structural constraints they come with may turn out to be incompatible with an RC environment in QI.
A Note on Quotative Inversion in Hungarian

"Raak die toets niet aan!" (*abrupt) zei het TV-scherm (abrupt) reach the key not PRT abruptly said the TV screen abruptly "'Don't touch that button!' said the TV screen abruptly.'

From the discussion by Suñer (2000, 534ff.), it can be concluded that Spanish behaves like Dutch in requiring RC to be strictly verb initial. Formally, however, this is achieved by assuming "that adverbials in Spanish might join either to vP or to VP" (Suñer 2000, 536), while the finite verb is located in T°. The structure of Spanish RCs is shown in (31) (cf. Suñer 2000, 542).

(31) \[ FP_0 [P \ F° [-quill[-foo] \ [TP pro [T [\# V+v ] [\# Su [\# ]]]]]]]

For English, Collins and Branigan (1997, 16) opt for a lower surface verb position between TP and vP, namely, in AgrO°, which leaves enough room to the adjunction of preverbal adverbs, i.e., "Agr[O]P or higher" (Collins & Branigan 1997, 9). This analysis is revised by Collins (1997, 40) and Branigan (2011, 43), such that the finite verb is located in T° and Op in Spec,TP. Collins (1997, 37) speculates on the adjustment necessary for capturing adverb positions by stating that "[i]f we assume that the adverb in [(23)] is adjoined to either TP or T', then that provides one argument that the verb has not moved to C in quotative inversion".

Now, a simple general lesson that can be distilled from the above formal analyses for the issue of verbal positions in QI has been aptly formulated by Suñer (2000, 525): "Essentially, little specific to the syntax of direct quotes is needed to account for the facts in Spanish since the construction partakes of well-established patterns of the language; in English, however, quotative inversion has a rather atypical constituent order that requires construction-specific mechanisms, such as short V movement [...]." We have seen that the analysis of QI in V2 languages like Dutch can equally fall back on "well-established patterns of the language".

For Hungarian QI, we have looked at the two well-established verb positions of the language namely, Foc° and Pred°. Both are capable of inducing the required V°−VM inversion, but independent arguments laid out in Sections 2 and 3 strongly suggest that Pred° is the better choice. In Section 4 it is shown how to make a small adjustment to guarantee (local) verb initiality in the presence of PredP adverbials. This builds on slightly modifying an independently motivated linearization mechanism. However, we still have to address the question of what makes FocP and TopP in (29) inaccessible. Since there is no evidence for residual V2 in Hungarian, assuming construction-specific verb placement in Top° – not to speak of in the head of a construction-specific peripheral...

33 The same approach to finite verb and adverb positioning would seem to be adequate for French (cf. Doeleman 1998, 3.4).

34 A related question arises for the Op-in-Spec,TP approaches to QI in English by Collins (1997, chapter 3) and Branigan (2011, 3.1). Within these frameworks, it has to be shown how the unacceptability of topicalization of the kind in (i) is accounted for.

(i) * "John left" [CP [to Mary]] [TP Op said the student ti]

The following observations about information structure would seem to be relevant here too.

35 There is no historical evidence for anything like a (partial) "V2 stage" of Hungarian (cf. É. Kiss 2013).
functional projection — would strike us as exceedingly *ad hoc*. In fact, it is one of the hallmarks of topics in Hungarian that they don't trigger V°−VM inversion (cf. e.g., É. Kiss 2002, 12). Instead, we will argue that the information structural peculiarities of RCs in QI lead to the "shut-down" of TopP and FocP.

To begin with, it has been observed (cf., e.g., de Vries 2006, 221) that Q in QI is not suitable for expressing standard "information focus."

(32)  


In contrast with (32c) or (32d), (32b) is not a felicitous answer to (32a). Nor does an utterance of Hungarian (4a) constitute a felicitous answer to *Mit mondott el János?* ('What did John say?'). (8a), on the other hand, is the canonical form of an answer to (the Hungarian counterpart of) *Who did John introduce to Mary?* Together with the argumentation in Sections 2 and 3, we thus have sufficient reason to believe that FocP plays no role in Hungarian QI.37

At the same time, as shown in (33) and (34), QI is not a suitable environment for aboutness topics either:

(33)  


The same negative assessment can be made for contrastive topics. Only noninverted subjects can serve this function, as shown by the contrast between (35b) and (35c):38

(35)  


And, construing Q in QI as a contrastive topic is entirely out of the question:

(36)  


Given that these facts carry over — *mutatis mutandis* — to Hungarian, we have a strong case for assuming that TopP, being divested of its core functions, plays no role in QI either.39
In addition, it is reasonable to assume that the inaccessibility of FocP and TopP also rules them out as adjunction sites for adverbials and, as otherwise postulated in the case of FocP (cf. É. Kiss 2010, 520), (overt) "Q(uantifier)-Raising". We therefore conclude that verb initiality of PredP is sufficient to guarantee strictly verb initial RCs for Hungarian QI constructions.  

Let us round the discussion off by noting that it is possible to ground the above observations about information structure and the accessibility of FocP and TopP in a theory about the force of QI constructions. However, our thoughts on this are more tentative and sketchy, so, in order not to unduly stretch the main line of argumentation, we transfer these ideas to Appendix A.

6 Conclusion

This paper has been concerned with Quotative Inversion, QI, in Hungarian, which occurs in a parenthetical reporting clause, RC, when immediately preceded or enclosed by a quote, Q, i.e., a part of (represented) direct speech (or thought). QI manifests itself in Hungarian by inversion of the finite verb and a "verbal modifier", VM, the latter canonically represented by a verbal particle.

As far as phrase structure goes, we argue for incorporation of an abstract operator, $\text{Op}_{Q}$, into Pred°. The resulting shape of RC is repeated here as (37).

(37) \[
\begin{align*}
\text{TopP} & \quad \text{Top}^\circ & \quad \text{FocP} & \quad \text{Foc}^\circ & \quad \text{PredP} & \quad \text{Pred}^\circ & \quad \text{VP} \\
& \quad \text{Pred}^\circ & \quad \text{t} & \quad \text{el János} & \quad \text{mondta} \\
& & & & & & & \\
& & & & & & & \\
& & & & & & & \\
\end{align*}
\]

In Section 2 we argue against phrasal A'-movement of $\text{Op}_{Q}$ to Spec,FocP because QI fails to pattern with Focus Inversion, FI, in three respects: (i) $\text{Op}_{Q}$ does not enter into unbounded (A'-) dependencies, (ii) $\text{Op}_{Q}$ does not license additional postverbal foci, and

39 Güldemann (2008, 63f.) explores the connection between "subject inversion" in QI and "thetic statements", the latter being characterizable as lacking any (standard) information structural topic-comment partitioning (cf., e.g., Jäger 2001). Theticity, however, is clearly insufficient for an account of "subject inversion" in European languages, given its compatibility with preverbal subjects in, for example, English (JOHNSON died) (cf. Lambrecht 1994, 241) and, crucially, Hungarian (Maleczki 2004, 110).

40 A full study of information structural constraints on QI is beyond this paper. Green (1980) building on work by Hermon (1979) offers some pertinent observations concerning the possibility of marking contrast within RC.
(iii) QI does not seem to come with the exhaustive interpretation associated with Hungarian FI environments.

In Section 3 we point out that all of these challenges are met if QI is assimilated to VM-placement, i.e., if one adopts an $Op_Q$-in-Spec,PredP approach. This correctly makes the additional prediction that QI occurs in "VM-climbing" environments roughly identifiable with contexts of restructuring. One major phrase structural shortcoming of the $Op_Q$-in-Spec,PredP solution, however, is the incorrect prediction that manner adverbials, standardly taken to adjoin to PredP, should be able to occur RC initially.

Section 4, therefore, replaces $Op_Q$-in-Spec,PredP by $Op_Q$-to-Pred$^0$ incorporation and adds a linearization mechanism in the spirit of Fox and Pesetsky (2005), which guarantees the strict head initiality of PredP at Spell-Out. In favor of incorporation, Section 4.1 argues that $Op_Q$ is an abstract demonstrative resembling ʽúgy (ʼsoʼ) in ʽúgymond (ʼso s/he saysʼ) and ʽazt (ʼthatʼ) in ʽaszongya (ʼs/he says thatʼ), i.e., in canonical heads of RC of older and contemporary (ʼcolloquialʼ) Hungarian, respectively.

Section 5 addresses the broader issue of what guarantees overall head initiality of Hungarian RCs, given the "low" surface position of the finite verb in Pred$^0$ and limited (PredP bounded) influence on this via linearization. We consider the options available for enforcing V1 configurations in Verb Second languages (placement of $Op_Q$ in Spec,CP) and languages like Spanish with V$^0$-in-T$^0$ (ban on adjunction to TP and higher projections) and decide that for Hungarian, the missing key to V1 under QI can be found in its "discourse configurationality." On the basis of cross-linguistically valid probing of the information structure of QI, an absence of standard focus and topic functions is argued for. Our conclusion is that this means a "shut down" (inaccessibility) of TopP and FocP, the projections otherwise responsible for hosting preverbal constituents.

Two appendices are going to complete the picture. Appendix A provides illocutionary foundations for the information structural impoverishment of RC under QI. Force sensitivity is argued to be a plausible factor in deriving the root nature of QI and, more speculatively, for underlying a mechanism of clausal typing that makes incorporation of $Op_Q$ into Pred$^0$ an obligatory property of RC.

Appendix B sketches a semantics for demonstrative incorporation that structurally mimicks standard noun incorporation and thus vindicates the $Op_Q$-to-Pred$^0$ perspective. What $Op_Q$ does in addition is to introduce a token-indexical component into the RC predicate. This can be shown to independently guarantee that the quote, if it were in focus position, would be interpreted exhaustively. We take this to be an important contribution to future debates on the division of labor between morphosyntax, semantics, and pragmatics in the area of information structural phenomena.

Appendix A: Narrative Force and the Inaccessibility of TopP and FocP

Jacobs (1984, 1988, 1991, 1997) has argued that there is an intimate connection between the information structure of clauses and illocutionary force. One of the technical assumptions this has led to is that "free focus" is bound by illocutionary operators, where formally the latter interact with "structured meanings," i.e., information structurally partitioned meaning representations (cf., e.g., Endriss 2009, chapter 6; von Stechow 1991). Here we will very briefly and sketchily argue that such kinds of tools can be
implemented to govern the "shut down" of TopP and FocP in RC of Hungarian QI dealt with in Section 5.\footnote{A more syntactic approach to rendering TopP and FocP "inactive" may be devisable on the basis of work by Haegeman (2012). This would require assuming that $Q_P$ must be the outermost operator of RC and that the presence of TopP or FocP would create an intervention configuration. In motivating the first assumption, one may want to elaborate on the connection Bonami and Godard (2008; cf. Suñer 2000, 540) draw between RCs in QI and relative clauses.}

To begin with, note that the "highlighting" effect of QI (cf., e.g., Klockow 1980, 120; Fónagy 1986, 261; Suñer 2000, 541) can be attributed to the "figure-ground pattern" arising from combining Q with the parenthetical RC. In line with the observations we made in Section 5, this means that RC-internally, FocP can be "impoverished".

At the same time, the aboutness relation between RC and Q is secondary or derivative. Thus, as is well-known, in standard assertions involving an aboutness topic such as the cat and a comment such as is on the mat, by uttering The cat is on the mat a speaker attributes the property expressed in the comment to the entity denoted by the topic expression. And, the "illocutionary point" of the assertion is canonically taken to be that the speaker commits herself to the correctness of that attribution (cf., among many others, Searle 1969; 1976). By contrast, utterances like (31a)("Ich bin ein Berliner" said Kennedy) constitute (parts of) narratives where (real or "fictional") speech and thought is "demonstrated" in the sense of Clark and Gerrig (1990). This is the role of Q. While such demonstrations could in principle stand alone, it is often useful − in particular when dialogs or complex conversations are portrayed − to "anchor" Q in the sense of providing information about the source (speaker, attitude holder) of Q and its "mode" (speech or thought). This kind of "narrative quote anchoring" (NQA) is what we consider the core function, or "illocutionary point" (broadly speaking), of RC.\footnote{Barra-Jover (2004, 64f.) argues instead that temporal anchoring is the core function of RC. In the literature, the parenthetical RCs involved in QI have sometimes been called "comment clauses" (Quirk et al. 1985, 1023; cf. Suñer 2000, 539, fn.12). This is unproblematic as long as it does not lead to confusion with the standard topic-comment function under assertion discussed here and in Section 5. In speaking of RCs, Green (1980) opts for the term "quotation frame" instead.}

Based on the above idea about the "force" of QI, the analysis of RC provided in (29) (Section 5) can be supplemented with a ForceP-layer (cf. Rizzi 1997) as follows.

\begin{center}
\begin{tikzpicture}
\node (ForceP) {ForceP}
\node (TopP) [below = 1cm of ForceP] {TopP}
\node (FocP) [below = 1cm of TopP] {FocP}
\node (PredP) [below = 1cm of FocP] {PredP}
\node (VP) [right = 2cm of PredP] {VP}
\node (Op) [above = 0.5cm of PredP] {Op_Q}
\node (Pred) [left = 2cm of Op] {Pred°}
\node (t) [right = 2cm of Pred] {$t_i$ el János}
\node (mondai) [left = 2cm of Pred] {mondai_i}

\draw [->] (ForceP) -- (TopP);
\draw [->] (TopP) -- (FocP);
\draw [->] (FocP) -- (PredP);
\draw [->] (PredP) -- (VP);
\draw [->] (Op) -- (Pred°);
\draw [->] (Pred°) -- (t);
\draw [->] (mondai) -- (Pred°);
\node at (ForceP) [above = 0.5cm] {NQA}
\end{tikzpicture}
\end{center}
The inaccessibility of TopP and FocP will then be imposable as a condition on the choice of \([NQA]\) as the value for Force\(^5\).

It is important to note in addition that force-sensitivity correctly predicts that QI is a syntactic "root" or "main clause" phenomenon, an observation made among others by Emonds (1970, 18), Doeleman (1998, 82), Mosegaard Hansen (2000, 306f.), and Bonami and Godard (2008, 9). Evidence for this is given in [2].

\[2\]

\begin{enumerate}
  \item *If "Ich bin ein Berliner" said Kennedy, he probably wanted to please the audience*
  \item *I believe that "Ich bin ein Berliner" said Kennedy*
\end{enumerate}

Finally, with the "transparency" of TopP and FocP in [1], PredP enters the direct influence sphere of force. This opens up the possibility – hinted at in Section 4 – of attributing the obligatoriness of overtly associating Op\(_Q\) and Pred\(^\circ\), which results in QI, to the mechanics of clausal typing. The triggering feature on Pred\(^\circ\) could be a specific variant of the one proposed by Collins and Branigan (1997, 12), Collins (1997, 41), and Suñer (2000, 542), i.e., \([+\text{QUOT}(\text{ATIV})]\).

Independent evidence for the idea that clausal typing in Hungarian involves structurally low positions comes from imperatives and polar interrogatives. As shown in [3], imperatives are marked by V~VM inversion below the attachment site of manner adverbs applying to subjunctive verbs (cf. Farkas 1992, 208).

\[3\]

\begin{equation}
\text{Figyelmesen olvasd el az útmutatót!}
\end{equation}

carefully read the instructions.

Read the instructions carefully!

Polar interrogatives are simply marked by attaching suffix \(-e\) to the finite verb (cf. Kenesei 1994, 340), independently of whether it is placed in Pred\(^\circ\) of Foc\(^\circ\).\(^{46}\)

\(^{43}\) ForceP in [1] must, of course, itself be inaccessible for our account of the verb initiality of RC (Section 5) to be complete.

\(^{44}\) From the perspective of Jacobs, it would also be possible to have Force\(^\circ\) when valued by \([NQA]\) select (or "bind") a particular type of Focus. In line with Searle (1969, 76), who explicitly speaks of linguistic expressions as being "presented" in quotation (cf. Lucy 1993, 95), one candidate would be a subspecies of presentational focus. This could be instrumental in providing an alternative account for the behavior of Q wrt. exhaustivity discussed in Sections 2 and Appendix B. The pragmatic approach to Hungarian focus by Onea and Beaver (2011) could perhaps be refined along similar lines as well.

\(^{45}\) Interestingly, [2b] shows that QI is strictly confined to root environments and does not enter "embedded root" contexts, such as the complement of "assertion-friendly" attitude predicates like believe. As originally shown by Hooper and Thompson (1973), these environments otherwise tolerate root transformations like NEG-inversion:

\[(i)\]

I believe that under no circumstances would they accept the offer

As indicated by Doeleman (1998, section 6), the root restriction may be harder to enforce in systems like the one proposed by Collins (1997, chapter 3), where Op\(_Q\) moves to Spec,TP and therefore does not seem to "activate the CP level" (Doeleman 1998, 81).

\(^{46}\) In root clauses, polar interrogatives are alternatively marked prosodically by placing a rise-fall accent in penultimate position. Semantico-pragmatic differences between these two marking strategies are discussed by Gyuris (to appear). For further discussion of the Hungarian left periphery and clausal typing, see Gärtner and Gyuris (2012) and references cited there. More serious attempts at working
Appendix B: The Semantics of Demonstrative Incorporation and Exhaustivity

OpQ-to-Pred° incorporation has the obvious potential of "modifying" the semantics of the clausal predicate. That would actually seem to be the prediction made by an analysis of OpQ as a (kind of) VM, i.e. a "verbal modifier." Interestingly, such a semantic modification allows us to shed new light on exhaustivity, although only somewhat indirectly. This requires an abstraction from the analysis established in the main text. In particular, we will be concerned with what would be the case if Q were focused, i.e., if Q had to be interpreted exhaustively according to the principles of (narrow) focusing in Hungarian discussed in Section 2.

We begin by adopting the semantics of direct speech sketched by Potts (2007, cf. Maier 2009). Consider a standard non-inverted case like [4].

[4]  *Kennedy said: "Ich bin ein Berliner"*

Intuitively, the meaning of [4] is that Kennedy stands in a direct saying relation to the utterance *Ich bin ein Berliner*. Potts (2007, 410) captures this by splitting the domain of individuals into "normal" ones like Kennedy (D) and utterances like *Ich bin ein Berliner* (DU), the latter taken to correspond to expressions.\(^{47}\) In the formal language, utterances get represented by "utterance terms," i.e., expressions in "corner quotes" like ‘*Ich bin ein Berliner*’. Thus, the translation of [4] is the one in [5].

[5]  \[\text{SAY}\_dd(k, \left[\begin{array}{c}
\text{Ich bin ein Berliner}
\end{array}\right])\]

[5] is true iff the direct saying relation holds between the normal individual Kennedy and the utterance individual *Ich bin ein Berliner*.

Now, what is different under QI is that a demonstrative comes into play, i.e., the one introduced by OpQ. However, as we will see, in order to capture the exhaustivity effect, there has to be pointing not just to an utterance (expression) but to an utterance token. To bring this about, we adopt a variant of the "demonstrative theory of quotation" developed by Davidson (1968, 1979) and discussed in detail by, e.g., Cappelen and Lepore (2007, chapter 10). [5b] applies an informal version of that theory to the QI version of [4] in [6a].

[6]  a.  *"Ich bin ein Berliner" said Kennedy*
   b.  *Ich bin ein Berliner*. Kennedy stands in the direct saying relation to an utterance, of which this is a token.

To implement this, we need yet another domain of individuals, namely, the domain of utterance tokens (Du). Also, there has to be a binary token relation, TOKEN, which is a subset of DU × DU. In the metalanguage we mark utterance tokens by underlining and labeling. Thus, for the utterance *Ich bin ein Berliner* involved in [4] and [6a] there are two tokens: *Ich bin ein Berliner*\(_{\text{4a}}\) and *Ich bin ein Berliner*\(_{\text{6a}}\). In the formal language there will be terms for utterance tokens like ‘*Ich bin ein Berliner*\(_{\text{4a}}\)’. Also, crucially, there will be a specific

\(^{47}\) According to Potts (2007, 12.3), expressions/utterances are to be conceptualized as the kinds of abstract objects linguistics is dealing with, e.g., as (PHON, SYN, SEM) triples.
demonstrative, \( \partial \), of type \( u \), which refers to "demonstrated utterance tokens," the latter to be understood in the sense of Clark and Gerrig (1990), who argue that quotation is a kind of "demonstration." We take these to be context parameters, \( c_{DU} \), like speaker, \( c_{S} \), and addressee \( c_{A} \) (cf. Kaplan 1978, 88). The second part of [6b] will then be expressed formally as in [7].

\[ [7] \quad \exists u[ \text{SAY}_{\partial}(k,u) \land \text{TOKEN}(\partial,u) ] \]

[7] is true in context [6] iff there is an utterance \( u \) to which Kennedy stands in a direct saying relation and \( e^{k}_{DU} (= \text{Ich bin ein Berliner}_{[6a]} \) stands in the token relation to \( u \). Now, clearly, the token \( \text{Ich bin ein Berliner}_{[6a]} \) stands in the token relation to one and only one thing, namely, the utterance \( \text{Ich bin ein Berliner} \). Therefore, if [7] is the interpretation of [6a], QI leads to "trivial" satisfaction of exhaustivity:

\[ [8] \quad \neg \exists u' \in \text{ALT}_{[6a]}(\text{Ich bin ein Berliner}) \]
\[ \quad \text{[u' } \neq \text{Ich bin ein Berliner} \land \text{SAY}_{\partial}(k,u') \land \text{TOKEN}(\text{Ich bin ein Berliner}_{[6a]},u') \]}

This result carries over, mutatis mutandis, to QI in Hungarian. The potential alternative to \( \text{Tizenöt éves ... \text{in (13)(Section 2), i.e., egy gyárban ...} \text{stands not in the token relation to Tizenöt éves ...}_{[13]}, \text{i.e., } \neg \text{TOKEN}(\text{Tizenöt éves ...}_{[13]},\text{egy gyárban ...})! Thus, assuming the semantics for QI just sketched, the effect described in (13)/(14) could be explained semantically. Q in (13) would indeed be interpreted exhaustively without this being detectable from an acceptable continuation built from the same core predicate (elmondta).

What remains to be done is to show how \( Q_{Q} \)-to-Pred° incorporation brings about the desired meaning shift. The trick, of course, will be to let \( Q_{Q} \) introduce the function required, i.e., it takes a binary direct discourse relation and transforms it into a "token demonstrative" predicate:

\[ [9] \quad Q_{Q} \Rightarrow \lambda R_{\text{dd}}. \lambda x. \exists u[ R_{\text{dd}}(u)(x) \land \text{TOKEN}(\partial,u) ] \]

Now consider the composition of Pred° in (25)(Section 4):

\[ [10] \quad \text{a. mondta } \Rightarrow \lambda v. \lambda y. \text{SAY}_{\text{dd}}(y,v) \]
\[ \text{b. } [\text{pred } \text{mondta }] \Rightarrow \lambda x. \lambda y. \text{SAY}_{\text{dd}}(y,v) \]
\[ \text{c. } [\text{pred } Q_{Q} [\text{pred } \text{mondta }]] \Rightarrow \lambda R_{\text{dd}}. \lambda x. \exists u[ R_{\text{dd}}(u)(x) \land \text{TOKEN}(\partial,u) ] (\lambda v. \lambda y. \text{SAY}_{\text{dd}}(y,v)) \]
\[ \equiv \lambda x. \exists u[ (\lambda v. \lambda y. \text{SAY}_{\text{dd}}(y,v))(u)(x) \land \text{TOKEN}(\partial,u) ] \]
\[ \equiv \lambda x. \exists u[ \text{SAY}_{\text{dd}}(x,u) \land \text{TOKEN}(\partial,u) ] \]

48 These particular referential properties of \( Q_{Q} \) qua \( \partial \) are, of course, a stipulation on our part to achieve the right result, and thus to be judged by the overall fruitfulness of the approach. We suggest that this peculiarity is a consequence of "grammaticalization". Alternative theories are more syntacticized in analyzing the relation between \( Q_{Q} \) and Q via an indexing of the kind a relative operator is co-indexed with its "antecedent" (Bonami & Godard 2008, 10; Suñer 2000, 540).

49 Note existential closure of the inner argument, which is a hallmark of "standard" (noun) incorporation (cf., e.g., Farkas & de Swart 2003, 74).
A Note on Quotative Inversion in Hungarian

[10c] is ready to apply to a subject term and derive interpretations of QI analogous to [7].

Let us repeat that all of this is hypothetical. We have reasons to assume that $\text{Op}_Q$ incorporates into $\text{Pred}^\circ$. We also have reasons to assume that $\text{Op}_Q$ corresponds to a demonstrative. And, we have shown that this can be fleshed out semantically in such a way that the exhaustivity issue arising with QI in Hungarian could be dissolved in an independent way if $Q$ were in focus. This kind of result should therefore be of particular interest to "deflationist" approaches to the interface between grammar and information structure like the ones by Surányi (2004, 2011, 2012), Wedgwood (2005, 2007, 2009), and Horvath (2009), which seek to "neutralize" or eliminate designated projections like FocP. The richer the toolbox of precisely stated options the easier the development of viable alternatives.

References


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50 We see no obstacle in applying the same operator to composed predicates like begin to say.


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