When the syntax is not not as simple as it seems

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1. Introduction

A particular type of mismatch between the syntax and the semantics can be found in sentences with *can’t seem* like the one in (1) (cf. Langendoen 1970, Jacobson 2006, and Homer 2011, the latter of which inspired this squib).

(1) I can’t seem to get away from verbal complexes.
   a. Paraphrasable as: It seems that I can’t get away from verbal complexes
   b. Not as: It can’t seem that I get away from verbal complexes.

As the paraphrases of (1) show, *seem* takes scope over *can’t* in (1), not under it. This is surprising as the syntactic structure of (1) looks rather straightforward. *Can* appears to be in T, *not* in POL, and *seem* heads a VP taking an infinitival complement, out of which the subject has raised. The mismatch between the apparent syntactic structure *can’t > seem > to get away* and its interpretation raises the question how it should be accounted for.

I will argue that the surface structure must result from a more complex syntactic derivation, which turns out to account for the scope of (1) in (1a).

The apparent scope reversal is restricted to subject raising *seem to*, ability modal *can*, and *not* or any downward entailing expression. These are all required.

(2) a. No cat/Few cats/Only the mother can seem to figure this out.
   b. They can rarely seem to get enough food.

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*This is for you, my friend. May we continue to enjoy much future time together. I am particularly pleased to honor you by showing that the Germanic OV languages provide crucial insights into the derivation of this English construction. A first version of this squib was written on a beautiful terrace in Buch in Tirol. For comments and feedback on this squib, I thank Nikos Angelopoulos, the students in my winter 2016 seminar at UCLA, Chris Collins, Viola Schmitt, an anonymous reviewer, and your two terrific editors, Clements Mayr and Edwin Williams.
Homer (2011) presents this scope puzzle as follows, with $E_{DE}$ referring to a downward entailment expression, and $CAN$ to an abstract (ability) modal.

\begin{enumerate}
\item Surface order (ignoring V-to-T movement):
\begin{align*}
E_{DE} \ldots & \text{can} \ldots \text{seem}
\end{align*}
\item Scopal relations: $SEEM > E_{DE} > CAN$
\end{enumerate}

The relation between the surface structure in (1) and its interpretation is an issue of the division of labor between the syntactic and interpretative component, and not surprisingly the existing literature present all possible points of view.

In early generative work, Langendoen (1970) argued for a syntactic transformation with can’t raising from below seem in subject raising environments. In this account, there is no scope reversal: the linear order in (1) is derived from an underlying syntactic merge structure that encodes the scope, as in (3b). As I will argue in this squib, there is strong empirical evidence that this is correct, and my analysis is in essence a modern update of Langendoen (1970). Jacobson (2006) also denies there is a scope mismatch. She takes the surface syntax to reflect a not > can > seem hierarchy, and proposes that the semantic composition is based on this syntactic structure. The syntax-semantics mismatch in her account is an illusion. Since her account fails to capture the properties discussed in section 2, I will not further address it here. Homer (2011) focuses on the semantics of the can’t seem to construction. He takes the surface syntax as given, and shows that seem is a PPI, which, he proposes, must raise out of downward entailment contexts in the covert syntax. In his account there is indeed a mismatch between the syntactic representation and its interpretation, with the interpretative component responsible for deriving the observed scope.

Theoretical expectations depend on specific assumptions. Within antisymmetry (Kayne 1994) linear order reflects asymmetric c-command. C-command, as is widely assumed, corresponds to scope. If scopal elements are never interpreted higher than where they occur in the syntax, as argued in Kayne 1998, the linear order should map onto the scope hierarchy (i.e. order of Merge). Given antisymmetry, the expected hierarchy of syntactic merge is therefore $SEEM > E_{de} > CAN$, with the surface order derived from that order, and not from $E_{de} > can > seem > to VP$. This provides a strong motivation to probe the syntax of this construction further and see if there is independent syntactic evidence for a $SEEM > E_{de} > CAN$ hierarchy.

In this squib, I argue that the syntax is indeed not as simple as it seems. Section 2 discusses independent evidence that the syntactic merge order must be the scope hierarchy, as expected in antisymmetry. The linear order must therefore result from a more complex syntactic derivation than Jacobson or Homer assume. In section 3.1, I will argue that crucial insights into the derivation for English come from comparative syntax, in particular from the syntax of close cousins of English, the Germanic OV languages. The analysis I will sketch will show how complex verb formation yielding verb clusters, the shared syntax of infinitival $te$ (Dutch), $zu$ (German), English $to$, and pied-piping parameters, in the sense of Koopman & Szabolcsi (2000), all conspire to yield the properties of this particular construction in English.
2. Establishing the syntactic hierarchy

There are two arguments that abstract can merges with the VP before seem and to do. This means that the surface order is derived by movement, as detailed in section 3.

2.1 Idioms

Idioms provide the first piece of evidence that the VP is the complement of can, not the complement of seem. As shown in Langendoen 1970, ex. (2) and (3), can VP or not can VP can be idiomatic:

(4)  a. Abe can’t (seem to) afford paying the rent.
  b. Sam couldn’t (seem to) stand the sound of jackhammers underneath his bedroom window.
  c. Tevye couldn’t (seem to) tell the difference between right and left.
  d. Harry can’t (seem to) help falling asleep.

The expression can afford in (4a) is an idiom, with the heads can and afford fixed parts of the idiomatic expression, excluding the complement vP pay(ing) rent. Neither *I afford paying rent nor *I don’t afford paying rent are well formed. The same holds for (can stand) in (4b), and (can tell) in (4c). In (4d), we find an idiomatic sequence (DE can help). Idiomatic sequences can seem (to V) with all heads, including V fixed, appear to be untested. What can we conclude? What do we know about the shape of possible idioms? Sportiche (2005), building on Koopman & Sportiche (1991), argues that idioms must minimally contain an uninterrupted sequence of heads. From this it follows that idiomatic can afford or not can help must form uninterrupted sequences of heads at some point in the derivation. Given the standard assumption that idiomatic composition (just like semantic composition) proceeds bottom up on the basis of the syntactic structure, can afford, hence can V or not can help, hence not can V must be uninterrupted sequences of heads in the syntax excluding seem. This fixes the syntactic hierarchy as seem to > DE > CAN > V, which turns out to correspond to the scopal hierarchy. Can takes a bare VP complement, as modals usually do, and a DE merges with can VP. Seem to in turn combines with the result. This means that a further (syntactic) derivation is called for to derive the linear order.

2.2 Aspect

A second argument confirms the relative order of merge of seem to and can, as seem to > DE > CAN. Homer (2011) points out that the can’t seem to construction is exempt from an aspectual restriction that present tense seem otherwise always imposes. The aspect on the main embedded predicate must be stative (or receive a non-episodic reading), with the exception of the can’t seem to construction.

(5)  a. *They seem to sleep.
  b. They can’t seem to sleep.
a. *He seems to swim the butterfly.

b. He can’t seem to swim the butterfly.

This is expected, however, if sleep is directly embedded under \textit{can}, as argued above, and \textit{ASP} is higher than \textit{can}. Then \textit{CAN} should satisfy the aspectual restrictions on the infinitival imposed by present tense \textit{seem} by virtue of the structure, which it does.\footnote{The question of how matrix T in the \textit{seem} clause can “see” the embedded \textit{ASP} can be reduced to locality in the analysis proposed below, as the string \textit{HE NOT ASP CAN} raises past \textit{seem} into the T region.}

\begin{itemize}
  \item a. ...T\textsubscript{pres} \textit{seem} to THEY NOT ASP CAN sleep
  \item b. ...T\textsubscript{pres} \textit{seem} to HE NOT ASP CAN swim the butterfly
\end{itemize}

\section{Idioms: Syntax or LF?}

The argument above is based on the standard assumption that idiomatic composition is based on the syntactic structure. But could idioms be composed at LF instead? If so, this could still be compatible with a syntactic hierarchy \textit{not} \textit{can} \textit{seem to} \textit{V}. Homer (2011), taking \textit{not} \textit{can} \textit{seem to} \textit{V} to represent the syntactic order of merge, assumes that idiom formation of \textit{can} and \textit{V} takes place at LF.\footnote{The same suggestion was made by an anonymous reviewer.} As he suggests, \textit{can} semantically composes with \textit{V} once the PPI \textit{seem}, has covertly moved out of the downward entailment prison in which the syntax has put it (to a yet undetermined position), where it takes scope over \textit{can}. This proposal faces serious issues, as \textit{seem} or its copy structurally intervenes between \textit{can} and \textit{V}, so idiomatic composition must be assumed to be non-local, or syntactically merged elements must be argued to be structurally absent at LF, a non conventional (and undesirable) assumption.

This account in essence mimics the syntactic structure: \textit{seem} or its copy does not count as intervening between \textit{can} and \textit{V}, because it is not merged there, and \textit{seem} always takes scope over a \textit{DE} expression, because that is the hierarchical order to start with. How to derive the linear order and motivate it independently is a syntactic problem, not an issue of covert syntax, or non local semantic composition.

Are there other options to salvage the basic \textit{not} \textit{can} \textit{seem to} \textit{V} syntactic hierarchy that I am arguing against? Forming the idiom by structurally lowering \textit{not can} below \textit{seem} at LF is not allowed. “Lowering” (i.e reconstruction) is only possible if a structurally lower copy in a movement chain is interpreted, as in the syntactic account I am arguing for. The question then is if there some other way to lower \textit{not can} at LF, using known semantic tools. The only real option, as suggested to me by Clemens Mayr, would be some version of neg-lowering via some presupposition of \textit{seem}. However, under such an approach \textit{not can} crucially will not take literal narrow scope with respect to \textit{seem}, and it will be unable to semantically combine with \textit{V} at LF.

I therefore conclude that the syntactic hierarchy of merge \textbf{must} be \textit{seem to} \textit{E}	extsubscript{de} \textit{CAN} \textit{V}. Since this happens to represent the scope hierarchy, there is no syntax LF mis-
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match, nor is any need for a different understanding of the aspectual restriction discussed in 2.2.

3. A sketch of the syntactic derivation – Insights from Germanic OV languages

When *seem* takes a tensed complement clause, the expected surface order and scope in (8a) is found. But when *seem* takes a to infinitival, as in (8b), the syntactic derivation that yields the order in (8c) from (8b) faces non-trivial problems.

(8)  
   a. ...seems that I can no longer get away from verbal complexes
   b. ... seem to I NO LONGER CAN get away from verbal complexes \rightarrow
   c. I can no longer seem to I NO LONGER CAN get away from verbal complexes

A chunk of structure must have raised from the infinitival complement, past *seem* into the T region of the *seem* clause, yielding (8c). Apart from subject raising, and perhaps Neg-raising, raising *can* past *seem* so *can* but not *seem* ends up in T is not a known process for English. The movement of *can*, or a constituent containing it, cannot be head movement because of minimality. It must therefore be achieved by phrasal movement. Since only constituents can move, a phrase containing *can* must move as a phrasal remnant without its VP complement, which ends up preceded by *to*. I assume that the remnant that moves into the *seem* clause does not just contain the ability modal *can*, but also a DE expression *no longer* and the subject.\(^3\) This will account for why each element has a necessary role to play in the converging derivation. Individual elements subsequently extract from the moved remnant. As I show in the next sections, bringing in the syntax of the Germanic OV languages, helps understand how this peculiar and restricted construction can arise from general principles. The first question then is how a remnant is created (properties of *to* play a crucial role), the second is how the remnant containing *can* end up in the *seem* clause (via a verb cluster, or complex predicate formation, as in the Germanic OV languages), and the third is why a DE expression is required (DE expressions raise into the T-region, and pied-pipe *can* bringing it closer to T than *seem*).

3.1 Verbal complexes: a verbal complex in English

Koopman & Szabolcsi (2000) (henceforth K&S) motivate a uniform account for verb clusters (i.e. verbal complexes) in Dutch, German (as well as Hungarian). *Seem* and *can* are typical clustering verbs in Dutch and German, and I will simply extend the (fully specified) analysis to the English *cannot seem to* construction, and show how it can derive the properties of the *cannot seem to* construction (and its restrictions) in English as well.

Here are crucial analytical ingredients of our analysis: (i) complex predicate formation is represented as a specific syntactic configuration (slightly larger than VP, we called it VP+, sometimes labeled as PRED), as in (9). This configuration characterizes particle

\[^3\]In fact any element which can independently appear between *can* and the subject, like adverbs, and aspect, seem to be able to raise in this construction as well.
constructions (opbellen (D), anrufen (G), call up), adjectival small clauses (schoon maken (D), sauber machen (G), (make) clean), “noun incorporation” (piano spelen (D), Klavier spielen (G), play piano), and verb clusters (gaan kan/kan gaan (D), gehen kan (G), can go, op kan bellen/kan opbellen (D), anrufen kan (G), etc.). As is well-known, the verbal part is a separate constituent, as shown by verb second, participle formation, and te/zu infinitives. (ii) Clustering verbs can, seem, appear, want, try, make, etc. must form a complex predicate, i.e. minimally attract a VP+. (iii) Complex predicate formation interacts with language specific pied-piping parameters, yielding different possible outputs, as in (10), and finally (iv) the structures interact with individual requirements imposed by other syntactic atoms (infinitival morphology, to, etc.) These movements, we showed, are overt phrasal (remnant) movements, driven by the need to check features in strictly local configurations (Spec-head, i.e. “upward agree”). The derivations are fully spelled out and obey the extension condition.4

3.2 A derivation

The derivation here starts at the point where CAN merges with a bare vP complement containing a complex predicate \([vP \text{ get } [vP_+ \text{ away } \text{ get }] \ldots]\). Since CAN must form a complex predicate, it minimally attracts this VP+ constituent to its own VP+. VP+ pied-pipes the lexical projection vP, as shown in (11).

\(9\) The complex predicate configuration

\(10\) Can attracts VP+, which could depending on the language, pied-pipe vP.

\(11\)

a. CAN merges with vP
b. CAN attracts VP+ (away get) to form a verbal complex
c. VP+ pied-pipes vP get away...

In the next step of the derivation, a DE expression is merged (12a), as well as the subject DP, as in (12b) (either E(externally) merged, or “I merged” (moved): nothing hinges on this). When the complement of seem includes an infinitive (as opposed to an adjectival small clause), to must appear in the structure. As in Dutch and German to (and inf) attract

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4I depart from K&S in allowing subextraction from a remnant.
an “infinitival VP”. Which VP in (11) is attracted? The vP in Spec, VP+, or, perhaps more expected, the VP headed by can? The output of the latter derivation is excluded: can will fail to combine with to, since can lacks an infinitival form. To will instead attract the local vP (get away from..), which is a licit case of specifier movement, hence simply an option that UG allows. This step creates the desired remnant constituent, with only can remaining in the VP+, which will be attracted by the complex predicate with seem.

In the next step, seem merges, scoping over DE and can. Seem must form a complex predicate, it attracts VP+, now containing only CAN. I assume that VP+ pied-pipes the subject and the DE expression. (V+ heads omitted for convenience).

As we observe, seem is not c-commanded by the DE expression. Note that this step must be the highest point at which scope is calculated: even though cannot ends up marking the polarity of the clause as negative, as the Horn tests show (He can’t seem to do this, can he?), it does not appear to interact with the calculation of relative scope over seem.

In the next step in the derivation POL is merged. POL attracts the DE (which perhaps marks POL as negative). I assume not only negative phrases, but all downward entailment expressions in question end up in the T-region, VP external. If this time DE pied-pipes CAN, we can understand why a DE expression is a necessary ingredient in the construction: it further shifts can to a higher position in the tree, and thus explains why can, but not seem ends up closer to T: movement to POL, brings CAN closer to T than seem through

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5If abstract ability CAN moved to to, this derivation would have to result in to be able to with be required to satisfy the properties of to, and showing the surface distribution of the to complement in which it is contained.

6Many thanks to Chris Collins for discussion of this issue.
pied-piping. When T merges, can is closest to T, and merge with T, as we know it must. Finally, the subject merges in Spec, TP, as shown below, completing the derivation.

(14)

4. Conclusion

The syntax of the can’t seem to construction in English turns out to not be as simple as it seems. Probing the syntactic structure yields independent evidence for the particular syntactic hierarchy that underlies the syntactic derivation, and shows that the syntactic hierarchy is also the scopal hierarchy, as expected under antisymmetry. There is no scope mismatch between the syntactic structure and the interpretation.

I have argued for a derivation in which complex verb formation, as abundantly observed in the sister Germanic OV languages, also underlies the derivation of the surface order in this English construction, which wears its Germanic syntax on its sleeve, and used the assumptions, derivations and parameters argued for in Koopman & Szabolcsi 2000, with pied-piping possibilities (and who pied-pipes who in different combinations) playing an important role in the derivation, as does to, which turns out to be instrumental in forming the remnant. Further restrictions, questions and implications will (have to wait to) be addressed in future work.

References


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