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chapter 2

The overgeneration problem and the case of semipredicatives in Russian*

Steven Franks
Indiana University, Bloomington

Unlike ordinary adjectives, Russian sam ‘alone’ and odin ‘one’ (“semipredicatives”) are in the dative in infinitival non-obligatory control contexts but in obligatory control structures they must agree in case with their antecedents. This paper starts from the puzzle of avoiding overapplication of the mechanism for assigning dative – the standard assumption that dative arises through agreement with a PRO_{DAT} subject introduces a “look-ahead” problem. Approaches of Franks, Babby, Grebenyova, and Landau are considered, with the aim of unifying critical insights. It is argued that (i) there is no need to posit \text{PRO}_{\text{DAT}}; (ii) semipredicatives can be directly assigned dative whereas ordinary adjectives must agree; (iii) arguments have more sensitive case requirements than do adjuncts.

1. Introduction

This paper revisits a classic problem in the syntax of Russian case, drawn to the attention of generative grammarians by Comrie (1974). Comrie focused on the unusual behavior of sam ‘self’ and odin ‘alone’ – “semipredicatives”, to use his original term – in infinitival clause contexts. In configurations of obligatory control (OC) by a subject these items necessarily agree in case with the controller, as in (1). On the other hand, they appear in the dative when there is no obvious controller, as in (2), or there is a controller, but it is somehow inaccessible for case-agreement purposes, as in (3).

(1) On xočet [vse sdelat’ sam/*samomu].
he.NOM wants all do inf self.NOM/*DAT
‘He wants to do all that himself.’

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This phenomenon, dubbed by Comrie (1974) the “second dative” (SD), has since inspired a veritable industry of research. These are the central facts; additional complexities will be introduced in the next section.

A primary issue raised by (1)–(3) is the following: Why does the SD appear in (2) and (3) but not in (1)? That is, once a mechanism is postulated for assigning the dative case, the question arises of why that mechanism is not also available even when there is an accessible antecedent, as in (1). This under-appreciated puzzle, which I call “the overgeneration problem,” will be my point of departure in this paper. The SD mechanism must not be allowed to operate spuriously, since subject OC always induces obligatory agreement. The problem of avoiding overgeneration of the SD is particularly recalcitrant in current minimalist (and other) models, which build syntactic structures from the bottom up and apply syntactic operations in a strictly local fashion. This architecture introduces two related timing issues, at least, if case is assigned or valued on-line (i.e. in a derivational and/or cyclic fashion). First, as noted, given a local mechanism to assign the dative, it becomes difficult to block the SD just in case an accessible antecedent is ultimately going to be introduced into the structure. Second, it is unclear how to determine the case to be assigned before that ultimate accessible antecedent is merged, which could potentially be an unlimited distance from the semipredicative:

(4) My [postarat'sja [delat' eto sami/*samim]].
we.nom decided try.inf do.inf this self.pl.nom/*dat
'We decided to try to do this ourselves.'
the relevant functional category probe has been introduced, even if the relation is not especially local. This may involve postponing determination of feature values until the mapping to PF. I will eventually opt for a feature-sharing version of the latter approach.

In exploring the behaviour of Russian semipredicatives, I first present some additional relevant data and discuss their implications for any adequate solution. The conclusion of Section 2 is that the grammar must allow for two distinct mechanisms for establishing control, one giving rise to the SD and the other to agreement. In Section 3, some alternative approaches to control and the case of predicate adjectives are reviewed. These include (i) the “vertical binding” (VB) system of Babby (1998, 2009), (ii) the “movement theory of control” (MTC) elaborated in Hornstein (2001) and applied to Russian in Grebenyova (2005), (iii) the minimalist multiple probe-goal system of Landau (2008), and (iv) the Government and Binding (GB) caseless PRO system of Franks (1995). These approaches are compared in more depth in Section 4, with the aim of gleaning from them their virtues and identifying likely problematic aspects. Section 5 briefly considers how semipredicatives part from ordinary predicate adjectives; the latter differ from semipredicatives in that their default case is instrumental rather than dative and that the default case is virtually always grammatically possible. It will be argued that semipredicatives can be direct targets of case assignment, whereas ordinary adjectives can only agree. Finally, Section 6 is an effort to unify the critical insights of alternative conceptions of control and the case of predicate adjectives in a way that addresses the facts and provides a convincing solution to the overgeneration and look-ahead problems. An MTC approach will be argued for, although recast in multi-attachment terms to allow for feature-sharing and late valuation of case features.

2. Some empirical and conceptual issues

In this section, additional data are surveyed and the issues for any eventual analysis of the SD are discussed.

2.1 “Divided” control

As pointed out with respect to (1) above, agreement is only possible in OC contexts. Additional examples are similar, in that they all involve infinitival complements to subject control verbs, such as xotet ‘to want’, starať’ja ‘to try’, rešit’ ‘to decide’, ljubit’ ‘to love’ and so on, as in (5), from Comrie (1974). Following GB practice, I represent silent subjects as PRO:

(5) Nadja ljubit [PRO gotovit’ sama].

‘Nadya likes cooking on her own.’
Comrie notes that this extends to infinitival purpose clauses, so long as they are not introduced by the complementiser čtoby ‘in order to’. Compare in this regard the following with (7b) below:

(6) Ljuba priexala [PRO pokupat’ maslo sama].
Lyuba.NOM arrived buy.INF butter self.NOM
‘Ljuba arrived to buy the butter by herself.’

In addition to (2) and (3), the examples in (7) demonstrate the range of syntactic environments in which agreement fails and the SD appears instead; these are cited by Franks (1995) and references therein. In (7a–d), there is an obligatory controller of the infinitive, but agreement nonetheless gives way to the dative. Example (7a) illustrates object control, (7b) involves a purpose clause, (7c) an adnominal infinitive, and (7d) a non-commanding controller. In (7e–g), there is a potential antecedent, but the infinitive can also (to varying degrees) be understood as having an arbitrary human subject. In (7h), and (2) above, there is no (overt) antecedent, so only the arbitrary interpretation is felicitous:

(7) a. Maša ugovorila Vanju [PRO prigotovit’ obed odnomu].
Masha persuaded Vanya.ACC prepare.INF lunch alone.DAT
‘Masha persuaded Vanya to prepare lunch alone.’

b. Ljuba priexala, [čtoby PRO pokupat’ maslo samo].
Lyuba.NOM arrived so_that buy.INF butter self.DAT
‘Ljuba arrived to buy the butter by herself.’

c. Želanie Igorja [PRO pojti odnomu] nas očen’ rasstroilo.
desire Igor.GEN go.INF alone.DAT us very upset.PAST
‘Igor’s desire to go alone upset us very much.’

d. Dlja nas utomitel’no [PRO delat’ èto samim].
for us exhausting do.INF this self.PL.DAT
‘It is exhausting for us to do this on our own.’

e. Ivan ne imeet predstavlenija o tom,
Ivan.NOM not has idea.GEN about it
[kak PRO žit’ samomu].
how live.INF self.DAT
‘Ivan has no idea how to live on his own.’

f. Ivan dumae, čto [PRO pojti domoj odnomu] važno.
Ivan.NOM thinks that go.INF home alone.DAT important
‘Ivan thinks that it is important to go home alone.’

g. [PRO Pojti tuda odnomu] rasstroilo by menja.
go.INF there alone.DAT upset COND me
‘It would upset me to go there alone.’
These data imply that control must be divided into what Landau calls “two routes.” Let us call the obligatory control one “route A” and the other “route B.” Agreement obtains under OC route A and the dative in all other contexts, i.e. route B. Route A is typically described as involving some sort of “case transmission” mechanism, whereby PRO somehow mediates between its ultimate controller and the predicate adjective. As (4) showed, there can be multiple infinitives. Based on (14g) below, (8) is an example with a chain involving four instances of OC PRO, which, although slightly awkward, still only allows nominative:

(8) Ivan xotel [PRO rešit’ [PRO postarat’sja Ivan.nom wanted decide.inf try.inf [PRO dat’ obeščanie [PRO priiti give.inf promise come.inf [pro dat’ očen’ trudno. alone.dat very difficult ‘It is very difficult to arrive alone.’

Presumably, then, the examples in (7) share some structural feature such that they do not meet the syntactic conditions for OC. Any theory of control must make this division, and all approaches to the SD have attempted to accommodate the Russian data in this way. We will examine some of these in Section 3.

2.2 The problem of variation

Before doing so, however, it is necessary to point out that the facts are not as straightforward as typically presented in the literature (including my own work). In particular, in a number of constructions in which the SD is acceptable but there is no other alternative than to interpret a given NP as the antecedent of PRO, agreement is also possible. This is reflected in early debate in the literature over the effects of inserting an NP intervening between the matrix verb and the infinitive (cf. e.g. Greenberg 1983) or embedding the infinitival clause inside an NP (cf. e.g. Franks & Hornstein 1992). Probably the most contested issue concerns the possibility of agreement under obligatory object control. Comrie (1974: 129) reports dative only, and this claim is repeated as recently as Bailyn (2012: 191), who provides:2

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2. Bailyn is citing Madariaga (2006:46) here, but she does not actually offer any judgments about the agreeing forms.
(9) Ja poprosil Tarasa [PRO priji odnomu/samomu
I.NOM asked Taras.ACC come.INF alone.DAT/self.DAT
*odnogo/*samogo].
*alone.ACC/*self.ACC
‘I asked Taras to come alone/himself.’

Babby (2009: §4.7), on the other hand, argues that there is a “change in progress,” citing, for example, (10):³

(10) Ja zakričal čtoby vy ne ostavili menja
I.NOM shouted so_that you not left me.ACC
zdes’ pogibat’ odnogo/odnomu].
here perish.INF alone.ACC/alone.DAT
‘I shouted so that you would not leave me here to perish alone.’

While both are possible, he states that “accusative odnogo is felt to be more natural in spoken Russian than dative odnomu.” Another clear discrepancy between the classic judgments reported by Comrie and those from other sources concerns the possibility of agreement over the complementiser čtoby ‘in order to’. While Comrie provided (6) versus (7b) above, and Bailyn (2012: 170) cites the near minimal pair in (11), the fact is that agreement is not completely ruled out over čtoby. Jakov Testelec (p.c.) draws my attention to examples such as (12), and Babby (2009) offers (13), from Kozinskij (1983: 36), where either nominative or dative is acceptable:⁴

(11) a. Ivan xočet tancevat’ odnogo/*odnomu.
Ivan.NOM wants dance.INF alone.NOM/*DAT
‘Ivan wants to dance alone.’

³ To my knowledge, he first made this point in print in Babby (1998: 34), offering almost the very example tested by Landau (2008), namely (14a) below; Landau adds the adverb zavtra ‘tomorrow’ to rule out the possibility that odnogo is floated off of matrix ego.

⁴ (12) is structurally indistinguishable from (i), which Comrie (1974: 130) cites with the SD:

(i) Volodja ne byl tak samonadejan, čtoby samomu gnat’sja
Volodya.NOM not was so presumptuous so_that self.DAT chase.INF
za ordenom.
after medal
‘Volodya was not so presumptuous as to chase after the medal himself.’

Franks (1995: 280–281) discusses similar facts for Polish (and suggests that agreement over źęby ‘in order to’ is possible with feminine, neuter, or plural antecedents, but that the SD is obligatory when the antecedent is masculine).
b. Ivan prišel čtoby tancevat’ *odin/odnomu.
Ivan.NOM arrived so_that dance.INF alone.*NOM/DAT
‘Ivan arrived in order to dance alone.’

(12) Ona dostatočno vzrosla, čtoby sama vse ponimat’.
she.NOM enough grown_up so_that self.NOM all understand.INF
‘She is grown up enough to understand everything herself.’

(13) Ty uže dostatočno bolšaja, čtoby sama/samoj
you already enough big so_that self.NOM/DAT
xodit’ v kino.
go.INF to cinema
‘You are old enough to go to the movies on your own.’

With his important empirical study, Landau (2008) demonstrated the reality of variation.5 While the SD is never possible with simple subject OC and agreement is never possible in the absence of an obligatory controller, elsewhere judgments are mixed. Here is a summary of his data:

(14) a. Ona poprosila ego ne ezdi’t tuda
she.NOM asked he.ACC not travel.INF there
odnogo/odnomu zavtra.
alone.ACC/DAT tomorrow
‘She asked him not to travel there alone tomorrow.’
Judgments: ACC — 60%; DAT — 90%

b. Ivan vstal čtoby pogovoriti
Ivan.NOM stood_up so_that speak.INF
sam/samomu s toloj.
sam/NOM/DAT with crowd
self.NOM/DAT with crowd
‘Ivan stood up to speak to the crowd on his own.’
Judgments:6 NOM — 60%; DAT — 93%

5. Witkoś (2010) ran a questionnaire with comparable Polish examples. He reports that, although Polish is generally similar to Russian, agreement is never possible with object control.

6. Compare (14b) with (i), without čtoby, where Landau confirms that agreement is obligatory:

(i) Ivan vstal pogovoriti sam/*samomu s toloj.
Ivan.NOM stood_up speak.INF self.NOM/*DAT with crowd
‘Ivan stood up to speak to the crowd on his own.’
c. Ivan pokljalsja druž’jam sdelat’ èto
Ivan.NOM vowed friends.DAT do.INF it
sam/samomu zavtra.
self.NOM/DAT tomorrow
‘Ivan vowed to his friends to do this himself tomorrow.’

d. Ivan prigrozil Tane potratit’
Ivan.NOM threatened Tanya spend.INF
den’gi sam/samomu na sledujuščij god.
money self.NOM/DAT for next year
‘Ivan threatened Tanya to spend the money for the next year all on his own.’
Mean judgments for c. and d.: nom — 73%; dat — 45%

e. Ivan sdelal usilie porabotat’ odin/odnomu nad temoj.
Ivan.NOM made effort work.INF alone.NOM/DAT over topic.INST
‘Ivan made an effort to work on the topic alone.’
Judgments: nom — 72%; dat — 45%

f. Ivan poprosil razrešenija prijti
Ivan.NOM asked permission come.INF
odin/odnomu na večerinku.
alone.NOM/DAT to party.ACC
‘Ivan asked permission to come to the party alone.’
Judgments nom — 37%; dat — 87%

g. Ivan dal’ obeščanie prijti
Ivan.NOM gave promise come.INF
odin/*odnomu na večerinku.
alone.NOM/*DAT to party.ACC
‘Ivan promised to come to the party alone.’

7. Compare with the following, in which no matrix NP separates the verb from its complement clause, and for which Landau confirms that agreement is obligatory:

(i) Ivan pokljalsja sdelat’ èto sam/*samomu zavtra.
Ivan.NOM vowed do.INF it self.NOM/*DAT tomorrow
‘Ivan vowed to do it himself tomorrow.’

(ii) Ivan prigrozil potratit’ den’gi sam/*samomu
‘Ivan.NOM threatened spend.INF money self.NOM/*DAT
na sledujuščij god.
on next year
‘Ivan threatened to spend all the money for next year.’
From (14a) Landau concludes that case transmission from objects is optional, from (14b) he concludes that case transmission over čtoby is optional, from (14c, d) he concludes that case transmission over an indirect object is optional, and from (14e–g) he concludes that case transmission to inside of V+N collocations varies.

Landau’s work thus highlights the existence, often swept under the rug, of mixed judgments in certain constructions. What this means is that, alongside the core OC cases in which only route A is possible and the core arbitrary control cases in which only route B is possible, there is a residue of ambiguous cases in which both routes are available.

3. Some alternative approaches

This section presents some alternative approaches to control and the case of predicate adjectives. This will lay the groundwork for a more detailed comparison in Section 4, from the perspectives of larger issues such as locality, overgeneration, and the mechanics of case, and will also inform the eventual analysis in Section 6. In my view, each approach has much to commend it but also encounters conceptual or mechanical problems. From the vast literature I will consider four different systems. These touchstones are (i) Babby’s vertical binding system, (ii) Hornstein’s movement theory of control, (iii) Landau’s minimalist-oriented approach, and (iv) Franks’s GB-oriented approach.

In broader terms, these can be categorized according to the way they conceive of PRO. For Franks (1995), PRO was necessarily caseless and the SD was directly assigned to the semipredicative. Since then accounts have uniformly adopted a special PRO_{DAT} element; this is explicit for Babby and Landau and implicit (but subsequently confirmed in p.c.) in Grebenyova’s (2005) application of Hornstein’s model to Russian. As we shall see in Section 4.1, the underappreciated problem of how agreement under OC works is where the approaches differ most. For Babby, there is no OC PRO. Instead he extends Williams’s (1994) “Vertical-Binding” (VB) account of control of adjunct modifiers to OC. Under the “movement theory of control” (MTC) there is similarly no OC pronominal either, the subject instead being the trace of A-movement. Under Landau’s minimalist account OC PRO receives its case from the same matrix probe that also values the case of PRO’s controller. In Franks (1995) I did not explicitly address the issue of OC PRO, beyond the assumption that OC PRO, as an anaphor, could (by virtue of a chain of indices) transmit the case of its antecedent to the predicate adjective.

8. I will try to defend these ideas below, but combining them with insights of the MTC model. Note that by Franks (1998) I had moved to a more minimalist “null Case” analysis, which involved checking through movement of PRO’s case features to its controller, curiously presaging the MTC model. Laurençot (1997) was probably the first to posit PRO_{DAT} for Russian.
Another important factor in differentiating approaches is the question of whether all infinitival clauses are of the same size, i.e. CP, or, in the spirit of Wurmbrand (2001), there are several sizes and these enjoy distinct mechanisms for expressing subjects. The earliest account of the SD to argue for different sizes can be found in Franks and Hornstein (1992). There we assumed a PRO subject in all infinitives but contended that PRO could be either an anaphor or a pronoun – the former amounting to OC – and then attempted to derive anaphoric status through government. Since government was blocked by an intervening C, CP-infinitivals forced pronominal PRO whereas smaller TP/IP-infinitivals led to anaphoric (OC) PRO. This size distinction is inherited by MTC approaches, assuming movement of the subject NP is facilitated by being inside a bare TP but inhibited by the presence of CP. Babby (1998, 2009) takes this contrast one step further, rejecting PRO entirely for OC and instead assigning the infinitive’s external theta-role directly to the controller. Landau (2008) on the other hand follows mainstream minimalism in treating all infinitivals as CPs.

3.1 Vertical binding

For Babby (1998, 2009), PRO\textsubscript{DAT} is needed for the semipredicative to agree with in full clauses, but elsewhere, under OC, PRO can be eschewed in favour of smaller infinitival structures. In Babby (1998) these are S and VP. As shown in (15), S has a PRO\textsubscript{DAT} subject and VP does not. Vertical binding means VP passes its external theta role up the tree to be eventually discharged directly to the controlling matrix subject NP (together with the external theta role of the matrix V). What is crucial for agreement with the subject of the matrix verb is thus that the infinitival VP combine directly with that verb, as in (15a).

(15) a. \[
\begin{array}{c}
\begin{array}{c}
S \\
\text{NP} & \text{VP} \\
\text{V\textsubscript{FIN}} & \text{VP\textsubscript{INF}}
\end{array}
\end{array}
\]

b. \[
\begin{array}{c}
\begin{array}{c}
S \\
\text{NP} & \text{VP} \\
\text{V\textsubscript{FIN}} & \text{S} \\
\text{PRO\textsubscript{DAT}} & \text{VP}
\end{array}
\end{array}
\]

---

9. In this respect, Babby’s VB approach is conceptually similar to the LFG model of Neidle (1988), where only “grammatical control” involves a bare infinitive.
Babby (2009) updates this framework to reflect innovations such as functional categories. VP and S are now two different kinds of InfP – his “s-predicate” is an InfP without PRO\_DAT in Spec\_InfP and his “s-clause” is an InfP with a PRO\_DAT in [Spec\_InfP]. Only s-predicates exploit VB. Consider the infinitive in a simple subject control sentence such as (16), where the finite verb xočet ‘wants’ has an external Experiencer role to assign and an internal Theme role, while the infinitive pisat’ ‘to write’ has an Agent and a Theme.

(16) Ivan xočet [pisat’ pismo].
    Ivan wants write.INF letter
    ‘Ivan wants to write a letter.’

The s-predicate pisat’ pismo is treated as an open predicate in need of a subject. Informally, its Agent role is identified with the similar need of the dominating node to discharge its own external theta role. This information is then passed up the tree until it can be appropriately assigned, by merger with a subject NP that will bear the complex of external theta roles. This can be represented as in (17), where external theta roles are underlined and saturated roles are placed within angled brackets:

(17)

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10. The abbreviations are somewhat unfortunate: “s” in s-predicate stands for “secondary” but in s-clause for “small.”
This diagram expresses the assumptions in Babby (2009) that the external argument is not introduced within VP, but rather as the specifier of a higher functional head, \( v \), and that infinitives head functional phrases of type InfP. In (17), InfP is merged as the direct object of the matrix verb, hence satisfies its need for a Theme, indicated by “\( \langle \text{Theme}=j \rangle \)”. The assumption that the external argument is the specifier of some phrase above VP is crucial in distinguishing VPs whose subjects are V-bound from those which are not, but Babby’s use of InfP introduces certain complications.

Consider now how Babby deals with the case of semipredicatives. For him, the external argument of the semipredicative is also V-bound. In a simple finite clause, such as (18a), all this means is that the Theme of \( sama \) is passed up the tree, unified with the external role of \( gotovit \) ‘cooks’, and both are associated with the subject \( Nadja \).

The only difference between this and an OC infinitival, such as (18b), is that here the complex of theta roles ultimately to be associated with the subject NP is larger, since \( Nadja \) is at once the external argument of \( ljubit \) ‘likes’, \( gotovit \) ‘to cook’, and \( sama \) ‘herself’.

\(
\text{(18) a. } \begin{array}{c} \text{Nadja} \ \text{gotovit} \ \text{sama.} \\ \text{Nadya.nom} \ \text{prepares} \ \text{self.nom} \\ \text{‘Nadya cooks on her own.’} \end{array}
\)

\(
\text{b. } \begin{array}{c} \text{Nadja} \ \text{ljubit} \ [\text{gotovit’sama}]. \\ \text{Nadya.nom} \ \text{likes} \ \text{prepare.inf} \ \text{self.nom} \\ \text{‘Nadya likes cooking on her own.’} \end{array}
\)

The system works straightforwardly: the theta role of the semipredicative is V-bound, as far up the tree as necessary, and matches its antecedent in case.

To handle the SD in this system, Babby assumes a PRO_{DAT} to which the V-bound theta role is discharged and with which the semipredicative agrees. Schematically, for an infinitival clause such as \( \text{pojti odnomu} \) ‘to go alone’ we have (19):

\(
\text{(19) } \begin{array}{c} \text{InfP} \{(\text{Agent} & \text{Theme}=\text{PRO})\} \\ \text{PRO}_{\text{DAT}=\text{Agent} & \text{Theme}} \text{Inf} \{(\text{Agent} & \text{Theme})\} \\ \text{Inf} \{(\text{Agent})\} \text{odnomu} \{(\text{Theme})\} \\ \text{Inf} \text{pojti} \text{VP} \{(\text{Agent})\} \text{V} \{(\text{Agent})\} \end{array}
\)
The subtree in (19) reflects the use of InfP in Babby (2009): in addition to providing an adjunction site for the semipredicative, [Spec,InfP] hosts PRO\textsubscript{DAT}. This can be compared to his 1998 analysis, which uses a distinct category, S, to introduce PRO\textsubscript{DAT} as in (15b). I argue below that the more recent system actually obscures an important insight inherent in his original one.

Despite its initial conceptual appeal, Babby’s VB approach raises certain questions. One, as pointed out by an anonymous reviewer, concerns the dubious virtue of eliminating PRO in certain cases but not in others. Does restricting rather than eliminating PRO buy us anything? A second major issue, which Babby’s work shares with all null Case systems, is what it means for PRO to be dative and why it cannot be overt. In particular, how is PRO\textsubscript{DAT} different from an overt dative subject? A third set of problems is more specific to the details of the analysis in his book, because he adopts various functional projections at various points in the presentation and it is unclear how these relate to each other or to more familiar ones. For example, what happens to TP if the system employs InfP (presumably for [–tense] TP), why does Babby employ [Spec, vP] to introduce an overt (lexical) subject but [Spec,InfP] for PRO, and most importantly, what does it mean to have two different kinds of InfP (differing only in whether they have a filled specifier or not)? I will return to this last issue in Section 4, when the various approaches are assessed from the perspective of the overgeneration problem.

3.2 Control as movement

Under the VB approach, the single argument Ivan in (16) bears both the Experiencer role as external argument of xočet and the Agent role as external argument of pisat’. Another way of obtaining this result can be found in the model of control in Hornstein (2001). He proposes that PRO be reanalysed as the trace of NP-movement, under a system that allows movement into theta-positions. His MTC gives (16) a structure as in (20), with the lower copy of Ivan struck through because it is not pronounced:

(20) Ivan\textsubscript{1} xočet [Ivan\textsubscript{1} pisat’ pismo].
Ivan\textsubscript{1} wants (Ivan) write\textsubscript{INF} letter
’Ivan wants to write a letter.’

For current purposes, the difference between Babby’s and Hornstein’s approaches is twofold: (i) whether or not the infinitive has an independent subject position in OC constructions and (ii) whether the multiple theta-roles a single argument receives are assigned at once, or in the course of the derivation. It is the first difference that concerns us here.

Under most bottom-up models of control, including those of Babby and Landau (see Section 3.3), the case of the ultimate OC controller is not available until that
controller is merged. This is true whether the ultimate result is agreement, as in (4) or (8) above, or dative, as in (21):

(21) a. Dlja nas bylo utomitel’no [PRO\_DAT [rešit’
    for us was exhausting decide.INF
    [postarat’sja [delat’ èto *sami/samim]]].
    try.INF do.INF this self.*PL\_NOM/PL\_DAT
    ‘It was exhausting for us to decide to try to do this by ourselves.’

b. [PRO\_DAT [rešit’ [postarat’sja [delat’ èto
    decide.INF try.INF do.INF this
    *sam/samomu]]] važno.
    self.*NOM/DAT important
    ‘It is important to decide to try to do this oneself.’

What this means for the mechanics of case (and also number and gender matching) is that the system must wait until the end of the derivation to determine the features of the semipredicative.

The MTC sidesteps the problem of letting agreement see the entire syntactic structure by introducing the controller in its deepest position. Although the question of how predicate adjectives receive their case under the MTC has been a hotly debated one,11 it is nonetheless clear that in a simple OC situation such as (18b) the MTC enables agreement to apply locally between sama and nominative Nadja before movement takes place:

(22) a. Nadja ljubit [Nadja gotovit’ sama].
    Nadja.NOM likes prepare.INF self.NOM
    ‘Nadya likes cooking on her own.’

b. 

[Diagram of sentence structure]

11. This problem is particularly acute in Icelandic, in which the semipredicative appears in the case the subject of an infinitival would be in if it were overt. See the continuing exchange between Landau and Hornstein (plus colleagues): Landau (2003), Boeckx & Hornstein (2006), Bobaljik & Landau (2009), and Boeckx, Hornstein & Nunes (2010), as well as Sigurðsson (2008). For a careful comparison of the status of oblique subjects in Russian versus Icelandic, see Sigurðsson (2002).
Of course, even local agreement would seem to require checking, in that Nadja in (22) must be merged with nominative features, which can only subsequently be validated (after movement into the matrix clause).12

How would the MTC deal with the SD? For Hornstein (2001), there is no such thing as PRO, even in arbitrary control contexts. But this is terminological, since he still needs an independent pronominal subject in these contexts (although he says little about it). This pronominal, akin to pro, is introduced by a last resort operation when movement fails, something like “do-support.” Non-OC, Hornstein (2001:58) concludes, is “simply ‘pro’ and it is inserted at a cost in the [Spec, IP] of non-finite CP complements.” This leaves much of the details to the imagination and, for the SD, raises similar conceptual issues as does V-binding.

First, recall some representative non-OC examples from (7):

(23) a. Ivan ne imeet predstavlenija o tom, Ivan.nom not has idea.gen about it
    kak žit’ samomu]. how live.inf self.dat
    ‘Ivan has no idea how to live on one’s own.’

b. Ivan dumaet, čto [pojti domoj odnomu] važno. Ivan.nom thinks that go.inf home alone.dat important
    ‘Ivan thinks that it is important to go home alone.’

c. [Pojti toda odnomu] rasstroilo by menja. go.inf there alone.dat upset cond me
    ‘It would upset me to go there alone.’

d. [Prijti odnomu] očen’ trudno. arrive.inf alone.dat very difficult
    ‘It is very difficult to arrive alone.’

It is not clear how the dative pro (or PRO) can be inserted as a last resort operation, if the SD reflects agreement with a dative subject and that agreement takes place locally/on-line. Possibly, adapting the analogy that do-support serves to host tense/agreement features, the pro subject is inserted to host dative features.13 I will in fact eventually

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12. Boeckx and Hornstein (2006), in attempting to assimilate the recalcitrant Icelandic facts into the MTC, must assume case assignment (in the embedded clause) and case overwriting (in the matrix clause) to handle OC of quirky case-assigning infinitives. This system implies that Nadja in (22) is for some reason assigned nominative already in the embedded clause. But, as Bobaljik and Landau (2009) point out, a control movement chain with two structural cases is problematic for Hornstein’s MTC. This is why, again in discussing Icelandic, Boeckx and Hornstein contend that the predicative nominative is default rather than structural.

13. Except that do-support serves a clearly morphological purpose but this operation would not.
argue that the potential for dative features drives the SD independently of considerations of the case of PRO/pro.

Grebenyova (2005) applies Hornstein’s MTC to Russian. Although concerned not with the SD but rather with the choice between “default” instrumental and agreement for regular predicate adjectives, her account should carry over to the semipredicatives as well. For regular adjectives, she argued that the subject of the predicate adjective can either move (under the MTC) or be an instrumental pro subject of a “small clause” (SC). In (24), both options are potentially available, as shown by the two structures in (25):

(24)  Ivan prišel domoj grustnyj/grustnym.
     Ivan.NOM came home sad.NOM/INST
     ‘Ivan came home sad.’

(25)  a.  [TP IvanNOM T-fin [VP IvanNOM V [AP IvanNOM grustnyjNOM]]]
       b.  [TP IvanNOM T-fin [VP IvanNOM V [SC proINST grustnymINST]]]

Following Bailyn (2002, 2012), we could take the SC to be a Pred(ication) Phrase, with instrumental assigned by Pred, presumably to the pro subject with which the adjective then agrees.

It is not easy however to reconcile this with the SD, which does not seem amenable to a parallel account. If (certain) infinitival TPs, like PredPs, have silent cased subjects, i.e. PRODAT, then recasting (24) as an infinitival should introduce a dative adjective as the agreeing equivalent of (25a). Instead, only the instrumental is possible:

(26)  [Prijti domoj *grustnyj/*grustnomu/grustnym] neprijatno.
       come.INF home sad.*NOM/*DAT/INST unpleasant
       ‘It is unpleasant to come home sad.’

The relevant substructure thus cannot be as depicted in (27):

(27)  *[CP C [TP PRODAT T-INF [VP PRODAT V [AP PRODAT grustnomuDAT]]]]

This is a serious problem: if predicate adjectives agree and if cased PRO is a possible controller of that agreement, then the impossibility of dative in (26) is mysterious. There is a conceivable technical solution exploiting case overwriting (cf. fn. 12), with PRO first assigned instrumental by Pred, then, after moving, being reassigned dative as the subject of the infinitival. In this regard, however, consider Przepiórkowski’s (1999:219) slightly marginal Polish example with both dative semipredicative and instrumental adjective:

14. This is clear from Grebenyova’s fn. 3, in which she comments that “for the purposes of exposition” she is extending the analysis of Laurençot (1997), in with the semipredicatives agree with PRODAT, to “a more general paradigm (with the INST occurring in the same environments as the dative does).” Differences in behaviour between the semipredicatives and regular adjectives are examined in more detail in Section 5 below.
Polish, which behaves similarly to Russian in the relevant respects, shows that it is something intrinsic to the adjective, rather than the nature of PRO, which determines whether it defaults to dative or instrumental when agreement is impossible. (28), which involves a coordination of semipredicative and regular adjective, shows that not even a case chameleon PRO would work; instead PRO would have to be simultaneously dative and instrumental. Moreover, if one stacks these forms in Russian, the outer one necessarily has wide scope, again demonstrating that semipredicatives are dative because they are semipredicatives, not because of PRO:

(29) a. Pło xo [by t’ doma o dnomu b o l’ nym]  
bad  be.INF home  alone. DATE sick. INSTR  
‘It is bad to be alone at home (when) sick.’

b. Pło xo [by t’ doma bol’nym o dnomu].  
bad  be.INF home sick. INSTR alone. DATE  
‘It is bad to be sick at home (when) alone.’

In sum, the MTC seems to share certain problems with Babby’s VB. It does avoid postulation of PRO, although having a cased but necessarily silent pro in non-OC contexts does not strike me as an improvement, since it raises similar questions to those noted above for Babby’s use of PRODAT. Moreover, the problem of why ordinary adjectives are not dative is more acute for Grebenyova’s MTC-account than for non-movement solutions. I return to these and related puzzles in Section 5.

3.3 A probe-goal and Agree account

The most traditional approach to control, based in 1980s-style GB, is to treat all infinitival clauses similarly and posit a PRO subject in a consistent position within the clause. This view is retained in its essence in Landau’s (2008) probe-goal and Agree-based system, in which PRO occupies [Spec, TP]. The technical details of Landau’s paper are exceedingly complex and cannot be reviewed here. Briefly, he argues that only OC control is direct from a matrix probe, skipping over C; otherwise – the choice depending on whether or not C is endowed with φ-features – it is mediated by C, which (when it has φ-features) checks/values dative case on PRO. Landau (2008:879) schematizes “PRO-control” as in (30) and “C-control” as in (31):

(30) \[\ldots T/\nu \ldots \text{DP} \ldots [\text{CP} \ C [\text{TP} \ \text{PRO}_{[\phi]} \ T \ldots]]\]

(31) \[\ldots T/\nu \ldots \text{DP} \ldots [\text{CP} \ C_{[\phi]} [\text{TP} \ \text{PRO}_{[\phi]} \ T \ldots]]\]
What this means is that T or v, as the functional categories which assign structural nominative or accusative, respectively, probe multiply, valuing case not just on their goal DP but also on PRO, when C lacks φ-features, or on C, when it has them. Since the semipredicative agrees with PRO, this means that the former gives rise to case transmission and the latter gives rise to dative, valued on PRO by C[φ].

For our present purposes, there are two aspects of Landau’s study worth noting. As discussed in Section 2.2, foremost is his contribution to our understanding of variation in judgments about the viability of agreement in certain traditional SD contexts. Also significant is the fact that in Landau’s system C is crucially involved in assigning dative to PRO. However, because for him the infinitive is embedded within CP even under OC, he needs to posit two types of C, one assigning dative, the other not. One might think that this choice has something to do with the possibility of mixed judgments, but Landau (2008: 898, fn. 17) instead states that the choice is free and that mixed judgments arise whenever T/v is free either to probe C, as in (31), or to skip C and probe PRO directly, as in (30). We will consider his implementation of variation in Section 4, but suffice it to say that, if C is implicated in assigning the dative, a more appealing idea than having two kinds of covert C might be that under OC there is no C at all. That is, there is no reason why control structures should require a full CP. Instead, clauses come in various sizes – for the sake of argumentation as in (32) – with the subject introduced in [Spec,vP]:

\[(32) \quad [CP \ldots C[TP \ldots T[vP PRO v[VP \ldots V \ldots]]]]\]

In keeping with Franks and Hornstein (1992) as well as with Babby’s VB, the dative can only arise if the infinitival is ultimately contained within a CP. I will argue that the SD occurs in CPs, implying that all the constructions in (7) involve CPs rather than smaller clausal projections. Moreover, in instances where there are two options, e.g. Landau’s (14a–f), one explanation will be that there are two competing structures, one with CP and one without.

Finally, Landau’s highly mechanical account raises the same questions other PRO\textsubscript{DAT} systems do, about the nature of null Case and the relationship between dative PRO and overt dative NPs. Landau (2008:898) just stipulates that when “C is chosen .... with case, which is fixed to be DAT in Russian, ... [t]his case feature can only be checked by PRO.”

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15. Franks and Hornstein show, for example, that the SD is not only unavailable in OC infinitivals (which are bare TPs), but that it also cannot appear in infinitival complements to participles or gerunds (which are even smaller, vP or VP).
3.4 A Government & Binding (GB)-account

Our last touchstone is the GB-account put forward by Franks (1995). In this system PRO is caseless, hence the SD cannot arise through agreement with it. Instead, the SD arises through direct case assignment, which, for morphological reasons, only sam and odin (and ves’ ‘all’) are subject to in the modern language. I elaborate on this in Section 5, in the context of distinguishing the semipredicatives from regular adjectives. Although my GB account tackled head on the issue of why PRO does not alternate with a lexical NP, its chief current liability is probably that it is couched in a now outmoded framework, especially with respect to the properties of PRO. Whether or not PRO actually has case, the facts of Icelandic quirky case drawn attention to by Sigurðsson (1991, 2008), show that even the PRO of OC infinitival clauses behaves as if case-marked in that it can contribute the case which it would bear if overt to a presumably agreeing clause-mate predicate adjective. While it is true that, for verbs taking quirky case-marked subjects, quantifiers and semipredicatives track the potential case this subject would have if the clause were finite, the Icelandic situation is quite different from the Russian one. For example, a survey of the inventory of relevant Icelandic verbs shows that none of them is truly transitive. Not just Icelandic but no language countenances quirky case-marked canonical (Agent) subjects (see Bhaskararao & Subbarao 2004), from which I conclude that all quirky case-marked arguments are underlingly VP-internal, even if they raise to the canonical subject position in Icelandic. Moreover, Slavic putative PRO_{DAT} is not idiosyncratic, but rather completely regular with any infinitive. It applies freely to Agents and corresponds to nominative overt subjects. Cross-linguistically, it is very doubtful that external arguments which are assigned lexically determined quirky case in fact exist. Thus, despite the Icelandic facts, the argument for a null Case PRO_{DAT} in Russian and Polish remains un compelling.

This being said, there are significant questions to be raised about the account in Franks (1995). As pointed out by an anonymous reviewer, one still wonders why elements other than the semipredicatives, and in particular incontrovertible NPs, cannot also be directly assigned dative. My answer was the same as why PRO is not assigned dative in contexts where the semipredicatives are: the relevant contrast is one which distinguishes arguments from adjuncts. In diverse languages, time, frequency, and distance phrase nominal adjuncts can freely receive structural case in contexts where argumental expressions cannot. Consider the following Russian examples, based on Franks (1995: 33), which show that accusative is viable on an adjunct even for verbs that never take accusative arguments:

(33) a. Ivan spal vsju noč’ /*dolgiy son.
    Ivan slept all night.\text{ACC} /*long sleep.\text{ACC}
    ‘Ivan slept all night/*a long sleep.’
b. Direktor upravljal fabrikoj/*fabriku vsego  odin god.
   director managed factory:INST/*ACC altogether one ACC
   ‘The director managed the factory for one year in all.’

The idea is that the structurally appropriate case is licensed on non-argument NPs even when argument NPs are not possible targets. We see this extending, in Russian and Polish, to the genitive of negation and, in languages such as Finnish and Korean, to nominative as well. With regard to the SD, my contention was that the same contrast is at work here: the subject cannot receive structural dative but the semipredicative can. This being said, it remains a question why nominal adjuncts, such as time and distance phrases, are accusative (or genitive under negation) rather than dative when they occur in infinitival clauses, although my guess is that this is because they are lower, i.e. in the domain of a v probe rather than C.

Landau (2008:899) draws attention to another problem with accounts which connect the SD with presence of C and the absence of a lexical C with case transmission. While in Franks (1995) I did not actually use C to assign dative (instead, it was in the “sister to I” configuration), I would have if case valuation under probe were around at the time, and more importantly CP was argued to block agreement. Landau objects that sometimes a lexical C does not necessarily prevent agreement, as in the čtoby ‘in order that’ examples where judgments vary (although agreement is never acceptable over čto ‘that’). In the final section of this paper, I speculate on what čtoby (or Polish żeby) is and why it might admit agreement.

16. One fascinating overt dative adjunct NP appears in the following paradigm from Babby (2009:190–193). This involves kak ‘like’ -phrases, which are Pred heads (in Bailyn’s system) and can be transparent for case purposes. They can agree as in (i):

   (i) a. My tèsnilis’ v vagone kak sel’di v bočke.
      we.NOM squeeze.PAST.RFL in car like herring.NOM in barrel
      ‘We got squeezed in the car like herrings in a barrel.’
   b. Narodu nabilos’ kak sel’dej v bočke.
      people.GEN crowded like herring.GEN in barrel
      ‘People crowded like herrings in a barrel.’

But when the antecedent of the simile is the subject of an infinitive, the dative sel’djam ‘herrings’ becomes possible:

   (ii) Nas zastavili tèsnit’sja v vagone kak sel’djam v bočke.
        us make.PAST3PL squeeze.INF in car like herrings.DAT in barrel
        ‘We were made to squeeze in the car like herrings in a barrel.’

17. His other objection to CP-less accounts of OC—“this solution is theoretically dubious (given the uniformity of clausal projections)”—strikes me as circular.
4. **Comparison of approaches: Overarching issues**

In this section the various approaches are compared from the perspective of three potentially problematic areas. These are (i) how agreement/case transmission is handled, (ii) how they (might) deal with the issue of variation, and (iii) how the overgeneration problem is addressed.

4.1 **Agreement in case**

Other than Grebenyova (2005), which is about regular adjectives, the general focus of the works surveyed in Section 3 is on the SD. On the other hand, the mechanics of case transmission are typically brushed aside. Although the implicit assumption is that OC implies agreement in case, not just phi features, how this actually works is not discussed. Although I will eventually concur with Bondaruk’s (2013) treatment of copular clauses in Polish that the facts warrant a feature-sharing solution, it is worth considering what, if anything, previous investigators have said about this.

For Babby, the semipredicative takes on the case of whatever NP eventually gets assigned the external theta-role of its VP. The question is how far back (i.e. up the tree) the adjective can look to find its case. In his original 1998 VB system, the domain of agreement is S rather than VP. In the 2009 version, in which an InfP with a PRO\text{DAT} specifier corresponds to earlier S and an InfP with no specifier corresponds to earlier VP, the distinction is not so easily formalized in terms of domain. Rather, it seems to me, one would have to treat all InfP the same, ignoring InfP as a possible boundary, but blocking agreement over a PRO\text{DAT} subject, as schematized in (34):

\[(34) \ \text{a. agreement: } [\text{TP-FIN} \ \text{NP} \ \text{V FIN} \ [\text{InfP} \ \text{V INF} \ \text{semipredicative}]] \]

\[
\text{b. no agreement: } [\text{TP-FIN} \ \text{NP} \ \text{V FIN} \ [\text{InfP} \ \text{PRO DAT} \ \text{V INF} \ \text{semipredicative}]]
\]

The idea that an intervening potential antecedent blocks agreement accords well with Babby’s account, since the variation in (35) follows from the assumption that, for speakers who accept agreement, the presence of a PRO\text{DAT} in [Spec, InfP] is optional:

\[(35) \ \text{Pavel poprosil Ivana } [\text{ne idti na prazdnik odnogo/odnomu}]. \]

\[
\text{Pavel asked } \text{Ivan.ACC not go.INF to party one.ACC/DAT}
\]

’Pavel asked Ivan not to go to the party alone.’

Agreement in (35) shows that the matrix object is accessible, but this fact introduces a new problem, since the presence of an intervening object does not necessarily block agreement in case. This is shown by transitive subject control verbs such as *promise,*
vow, or threaten, as in (14c)–(14d) above. It thus seems that, while the idea that an intervening controller blocks agreement is appealing, a solution that does not rely on locality for case agreement faces problems.

Hornstein and Grebenyova do not have the domain issue raised by (34a), since under the MTC there is always a local antecedent to agree with. Once again, the adjective will get the case of whatever NP it is predicated of, but there is a look-ahead problem because when that NP is introduced its eventual case is not yet known. As noted above, checking is one way to address the problem: simply merge the lexical NP with the right case, agree with it, then move it. This might work for Russian, but, as already noted, for Icelandic it requires case overwriting. The potential for agreement in (35) may also be problematic.

Landau does not discuss how the semipredicative receives its case, but his assumption is clearly that it always bears the case of PRO. Moreover, since every infinitival clause has a PRO subject in the same position, as in the MTC-system, agreement is always local. The problem, however, is the same: we cannot know what that case will be until the relevant probe has been merged. Once again, one could merge OC PRO with the correct features (which for Landau are special null Case features, whereas under MTC they are the case features of ordinary overt elements), agree with it, and then have the probe check rather than value, but this does not seem to be what Landau wants to do. Instead, “PRO-control” as in (30) can look over as many CPs as needed, so long as C lacks φ-features. Apparently this renders them defective; Landau (p.c.) explains that “for my own Agree system to work, infinitives should not count as strong phases.”

Within a clause, intervening potential controllers of agreement also do not interfere. Consider the following examples from Grebenyova (2005), where agreement identifies who was sad:

(i) Pavel vstretil Ivanu grustnogo/grustnym.
   Pavel.NOM met Ivanu.ACC sad.ACC/INST
   ‘Pavel met Ivan sad.’

(ii) Pavel vstretil Ivanu grustnyj/grustnym.
    Pavel.NOM met Ivanu.ACC sad.NOM/INST
    ‘Pavel met Ivan sad.’

Agreement with the object in (i) shows Ivan to be a potential source for case, but this possibility fails to block agreement between Pavel and grustnyj in (ii). I thus conclude that a domain-based approach to locality is called for, in keeping with Babby’s (1998) insight that two distinct categories of infinitival clauses are involved. This conclusion concurs with that of Bobaljik (2008:321), who, in discussing so-called “defective intervention” effects in Icelandic, observes that “apparent defective intervention does not arise in mono-clausal configurations. This alone should suggest a domain-based, rather than an intervention-based, account of the facts.”
Finally, in my earlier work I did not really say anything explicitly about the mechanism of agreement, but it was presumably again local, the result of co-indexing (of the adjective) with anaphoric PRO, which in turn is in a chain of locally co-indexed PROs, up to the head of that chain, which bears case. In this way, PRO itself does not have case, but can transmit it. Similar look-ahead problems obtain as with the MTC and probe-goal accounts, and similar checking solutions are possible, except that for Franks (1995) it would have to be the case on the semipredicative that is checked, since PRO had none. In sum, since semipredicatives can agree with an NP much higher in the tree, the only ways around look-ahead are either to reject an assignment model in favour of checking or to postulate an assignment domain in which certain infinitival clauses do not count. My own view about how to implement clause-internal agreement, which will be elaborated in Section 6, is that we need the kind of “co-valuation” mechanism that is afforded by feature sharing.

4.2 Variation

In this brief section I ask the following question: What do (or would) the various approaches to SD have to say about the possibility of mixed judgments? Recall that I refer to OC (agreement) as route A and the alternative (dative) as route B. The issue of choosing between route A and route B leads directly to the next subsection. For Babby, route A is VB, which is a matter of whether or not there is PROdat in [Spec, InfP]. This would have to be sometimes optional, sometimes impossible, and sometimes obligatory. While unclear how to implement, one idea is that the VB route should in general be taken if available, but that whenever both routes are viable there are two competing structures, as suggested above for (35).

Similarly, for MTC approaches, movement would have to be sometimes optional, sometimes impossible, and sometimes obligatory. It is similarly unclear how to implement this, beyond the possibility of two competing structures, one which allows for movement and the other which does not. Of course, this reduces to the larger general problem of how optionality of movement is dealt with under minimalism.

For Landau, although his research does more than any other to highlight the reality of mixed judgments, it seems to me that these arise only by virtue of various stipulations. Since there is only one structure – namely, with a full CP – the effect of having both route A and route B available derives primarily from the interaction of the following two assumptions (Landau 2008: 900): “in Russian, null C is a clitic, a lexical C is not” and “when dominated by light v, C is an inaccessible goal for Agree.” These conspire to give the required results, given particular additional assumptions about the specifics of various constructions.
Finally, in previous work I basically denied the existence of variation, at least with respect to Object Control, arguing (along with others) that the agreement possibility under obligatory Object Control was actually a matter of floating off the semipredicative. Franks (1995) did however point out the problems posed by variation in case transmission for Polish ęzyb ‘in order to’ and Russian V + N collocations.

4.3 Avoiding overgeneration

I now return to the question of how the approaches (would) treat the look-ahead puzzle introduced by bottom-up syntax (bearing in mind that not all of these approaches were formulated in bottom-up terms). After examining the issue, I suggest an approach which combines elements of each.

We saw that in Babby’s (2009) InfP system the difference between agreement and the SD reduces to whether there happens to be a PRODAT in [Spec,InfP]. It is the PRODAT possibility that creates the overgeneration problem, since once InfP is postulated, there is no obvious way to prevent it from having a filled specifier, circumventing further V-binding and leading, in turn, to the SD. To be fair, Babby (2009: 185–6) notices this problem and suggests the following principle: “An infinitive s-predicate complement is used whenever V-binding is possible; when it isn’t, an infinitive s-clause complement is used instead.” While this expresses precisely the correct generalization, it does not derive from anything in his model. Babby notes that “it remains to be seen whether this principle can be shown to be a special case of a more abstract, universal syntactic principle.” But an explanation was already implicit in his 1998 version. The only difference between the two types of infinitivals in 2009 was whether PRODAT merges in [Spec,InfP] or not, but in 1998 there were two distinct categories, VP and S. This gives us an immediate handle on a possible principled solution to the overgeneration and look-ahead problems, i.e. to project an S only when VB fails with VP. An updated instantiation of this idea will be described at the end of this section.

With respect to MTC approaches it is difficult to say much about overgeneration, since Grebenyova (2005) puts the SD aside. However, my assumption is that there would be a silent dative PRO/pro subject of the infinitive only when a lexical/overt subject is not viable. This is presumably a matter of whether movement from subject position is going to succeed or not. Of course, knowing whether or not something is going to be in an island involves look-ahead, which as noted is a persistent problem for bottom-up approaches. On the other hand, if [Spec,TP] is occupied by PRO/pro when TP merges with C, but lexical when TP merges with V, the solution to look-ahead for MTC approaches may reduce to minimizing projection, as under VB. Equally problematic is the possibility of SD under Object Control, as in (7a), repeated in (36):19

Moreover, as noted above, agreeing accusative is an increasingly viable option in (36).
The overgeneration problem and the case of semipredicatives in Russian

(36) Maša ugovorila Vanju [prigotovit' obed odnomu].
    Masha persuaded Vanya.acc prepare.inf lunch alone.dat
    ‘Masha persuaded Vanya to prepare lunch alone.’

Based on their case overwriting approach to Icelandic chains (cf. fn. 12), Boeckx and Hornstein (2006) would presumably derive (36) by (i) assigning dative to Vanya in the lower clause, (ii) having odin agree in case with it, (iii) moving Vanya to the upper clause, then (iv) assigning accusative to Vanya (which overwrites the original dative). One wonders, however, why in a bottom-up syntax without look-ahead, the same cannot happen in (37):

(37) Vanja rešil [prigotovit' obed odin/*odnomu].
    Vanya.nom decided prepare.inf lunch alone.nom/*dat
    ‘Vanya decided to prepare lunch alone.’

To avoid overgeneration, the dative option must not be available here. Somehow, the MTC must ensure that route B not be taken in OC contexts. Another way of putting this is: What prevents a CP–over–TP structure and an arbitrary interpretation in (37)? In short, it is not easy to see how a pure MTC approach could circumvent look-ahead in avoiding overgeneration.

Landau (2008) was the first to identify the overgeneration problem in print. Recall that he assumed that an infinitival clause could either have a PRO subject with which the semipredicative agrees and which can either be dative (“local, independent case”) or “transmit” case from some controlling NP. Landau (2008: 881) thus states the issue as follows: “First, how can the local, independent case of PRO be ‘suspended’ in favor of the non-local, transmitted case? Second, how can the decision whether to assign the local case in the complement clause be informed by the structure of the matrix clause…?”

For Landau, whether or not there is a PRO_{DAT} inside a CP infinitival depends on the features of non-finite C (and T), which, as noted earlier in this section, are freely generated. While this works in that it is formalisable and is indeed able to determine what is going to happen without look-ahead, it seems to me that picking the right features to do the right work is circular. This is really the same kind of solution as checking, in that a correct guess leads to convergence and a wrong one leads to crash. Note also that, although choosing between routes A and B seems to involve a global decision, since the entire structure needs to be examined in order to determine whether PRO is eligible to transmit case or must receive it locally, Landau is able to exploit technical aspects of phase theory to address the timing problem. The trick is that the local (dative) case is necessarily going to prevail only when its CP is a non-defective phase. So whenever route A is an option, or required, so that the larger structure needs to be evaluated, this means that there is no smaller non-defective phase containing the T (or v) probe and PRO. So far as the form of the semipredicative is concerned, Landau is not explicit about this but from his presentation my impression is that here checking is inescapable.
Finally, in my published work I did not recognize the overgeneration problem, nor do I currently have any idea how to restrict the sister of infinitival I’ characterization of the SD context from applying in OC contexts. Franks (1995) was however written under the view that case was a highly local Spec-head or sisterhood relation. With minimalism’s probe-goal system, one can instead invoke C (or C+T) as implicated in assigning the dative. This easily avoids the look-ahead problem, provided (as assumed by Franks, Hornstein, and Babby) that OC involves a smaller projection than CP.

What can we take from this overview? Recall the fundamental problem: assuming a bottom-up or cyclic syntax in which PRO is evaluated for case and the semipredicative agrees with it, the local dative should prevail or at least always be an option, overgenerating dative semipredicatives even in OC structures. It would seem that only by looking-ahead to determine whether PRO indeed has a controller, can it be decided whether to assign PRO dative locally. Moreover, if PRO does not get case until its cased controller enters the structure, then the case of the predicate adjective cannot be determined until that point in the derivation. In short, (and putting aside optionality) we need PRO\textsubscript{DAT} not to be available under OC. We saw above that this can be accomplished under VB if route A – which means V merges directly with VP – is taken whenever possible. Let us reject Babby’s InfP in favour of a more traditional hierarchy of verbal projections, including at least CP, TP, VP, and VP, as in (32). One enticing possibility within the VB-system is then that a theta-role can only be passed up the tree, for subsequent discharging, from a lexical projection, never a functional one.\textsuperscript{20} For the ambiguous cases, where for some speakers both routes are viable, we would need to claim either that there are two possible structures, one with a mediating functional category (which forces the SD) and one without, or that some heads can be analysed either as lexical or a functional.

Note that this still does not explain why VB trumps the merger of a functional head, allowing SD even when not required. The problem remains of ensuring that route A is taken whenever available (assuming as above and contra Landau that the possibility of taking either route implies two distinct structures). One way to make this a principled choice under bottom-up syntax might be constructed along the following lines. First, adopt Bošković’s (1997:37–39) “Minimal Structure Principle” (MSP), which states that only independently required phrase structure is projected.\textsuperscript{21} His particular derivation of the MSP is as follows:

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\textsuperscript{20.} Assuming v is functional, what this means is when v merges with VP, then v’ must discharge its role onto whatever merges into [Spec, vP]. Alternatively, if v counted as lexical, the restriction might be reworded “a theta-role can only be passed up the tree to a lexical projection.”

\textsuperscript{21.} Bošković’s MSP is based on Law (1991), as well as proposals by a diverse list of syntacticians including Speas, Radford, Grimshaw, Doherty, Safir, and Chomsky, and finds its conceptual origins in Pesetsky’s (1982) theory of selection.
The overgeneration problem and the case of semipredicatives in Russian

(38) a. The Numeration contains lexical elements only.
   b. Functional categories are selected from the Lexicon as needed.
   c. Access to the Lexicon is a Last Resort operation.

Then, since there are (at least) two sizes of infinitivals and structure is built from the bottom up, VP will merge with the matrix V if it can. Only if it cannot will functional material (eventually leading to C and the SD) be introduced into the structure.

Putting aside these speculations about how to resolve the overgeneration problem under VB, let us return to the MTC model. Given that dative cannot be assigned in the absence of CP and OC involves a bare TP, the paramount issue here is for all intents and purposes identical to that encountered by VB: How can projection of CP be avoided when not required? The solutions appear the same as well, in that the OC structure must be chosen when possible and superfluous structure should be eschewed. It seems to me that for a V to merge with a VP and absorb VP’s external theta-role along with its own (Babby’s VB) is no different than saying V is an OC verb and can merge directly with TP (Hornstein’s MTC). Another way of putting it is this: an OC verb is one whose subject can be assigned multiple theta-roles at once (VB) or an OC verb is one whose subject can be in an A-chain bearing multiple theta-roles (MTC). While in Section 6 I will attempt to elaborate a movement account, it seems to me that there may not be much of substance differentiating the two models.

In sum, we want OC infinitivals to be smaller than other infinitivals, so that only the latter, larger structure, can accommodate PRO. But the choice of infinitival size, hence the presence or absence of PRO, must be made locally, i.e. without looking ahead to subsequent structure. This can be done on the basis of what the infinitival clause merges with. Considerations of economy then dictate that if the smaller structure, which does not allow for PRO, is viable, then that more economical structure should be used.

5. Semipredicatives versus other adjectives

In order better to understand the peculiar properties of semipredicatives, it is useful to compare them to ordinary predicate adjectives. While they generally pattern similarly, there are some important differences which need to be addressed. The most striking of these is that, whereas we have seen that when semipredicatives cannot agree, they appear in the dative, ordinary adjectives are instrumental in what seem to be the same contexts. A proposal is made that, unlike ordinary adjectives, the

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22. There is a great deal of descriptive and analytical work on the syntax and semantics of predicate adjectives. See for example Franks (1995: Chapter 6), Pereltsvaig (2007), and Richardson (2007), as well as Bailyn (2012: §5.1). Madariaga (2006) tackles the question of
semipredicatives can receive case through direct assignment. It is this that renders them potential targets for the SD.

5.1 Some data and puzzles

This section outlines the basic predicate adjective data and identifies potentially key puzzles for their analysis. In describing ordinary predicate adjectives I borrow heavily from Grebenyova (2005). Recall her (24) above, repeated as (39), which shows that these can either agree or appear in the default instrumental. In Russian, the latter option is always potentially available.23

(39) Ivan пришел домой грустный/грустным.
    Ivan.NOM came home sad.NOM/INST
    'Ivan came home sad.'

In general, where agreement is obligatory for semipredicatives it is possible for ordinary adjectives as well. Here are some additional examples:24

(40) Pavel встретил Ивана грустного.
    Pavel met Ivan.ACC sad.ACC
    'Pavel met Ivan sad.'

(41) Ivan не хочет [идти на праздник грустный].
    Ivan.NOM not wants go.INF to party sad.NOM
    'Ivan does not want to go to the party sad.'

(42) Pavel попросил Ивана [не идти на праздник грустного].
    Pavel asked Ivan.ACC not go.INF to party sad.ACC
    'Pavel asked Ivan not to go to the party sad.'

What this shows is that clause internal agreement parallels that for semipredicatives, as does subject OC in (41). The impossibility of agreement in object control (42) raises however additional questions, especially when compared to otherwise identical

what differentiates the semipredicatives from predicate adjectives. Her concern is with the absence of default instrumental, which she associates with their quantificational status, and which in her view forces them always to agree.

23. In Polish, predicate adjectives typically agree, except in the absence of a controller for agreement (and, as in Russian, then they are instrumental). Witkoś (2010:209) contends dative is also a default case, but just for the semipredicatives: "Dative on semi-predicates and instrumental on predicate adjectives…. are default cases."

24. Instrumental variants are not given, since in Russian these are always acceptable, hence this is the only possibility in (42).
sentences with a semipredicative instead of an ordinary predicate adjective. As noted above, alongside the SD, here agreement is a possibility:25

(43) Pavel poprosil Ivana [ne idti na praznik odnogo/odnomu].
    Pavel asked Ivan.ACC not go.INF to party one.ACC/DAT
    ‘Pavel asked Ivan not to go to the party alone.’

This is a puzzling contrast, one that has not been previously recognized in the literature. There is clearly something special about semipredicatives that requires closer examination.

Given these simple data there are at least the following five central questions which need to be addressed: (i) Why is it that ordinary adjectives are not assigned dative in SD contexts?; (ii) Similarly, why is it that semipredicatives are not assigned instrumental (in their ‘alone, by oneself’ meanings)?; (iii) Why do regular adjectives always have instrumental as an option?; (iv) Why must semipredicatives necessarily agree in contexts where regular adjectives can agree (or be instrumental)?; and (v) Why is it that agreement is not possible under obligatory Object Control for ordinary adjectives, even when it is for semipredicatives? I suggest answers to these questions in Section 6.

5.2 Direct assignment

Before doing so, however, let us consider seriously an alternative to the standard approach in which the SD arises through agreement with a silent PRODAT subject of the infinitive. In Franks (1995) I argued that dative case is directly assigned to semipredicatives. While my reasoning was couched within GB concerns about the nature of PRO, direct assignment has I believe enough to recommend it that I will resurrect that account in this paper.

My point of departure was the curious fact that, although SD surely relates to the possibility of expressing the subject of certain infinitival clauses, this remains true even when no actual dative subject is viable. Thus, if one reconsiders the SD structures in (7), it is not generally possible to insert an overt dative (neither an NP disjoint from the understood controller of the infinitive nor a pronominal coreferential with it):

(44) a. Maša ugovorila Vanju [*Bore/*emu obedat’].
    Masha persuaded Vanya.ACC Borya.DAT/he.DAT dine.INF
    ‘Masha persuaded Vanya [*for Borya/*for him to have lunch’.

25. While not all speakers accept agreement for the semipredicatives under Object Control, my point is those who do still do not accept agreement in this context for ordinary adjectives (other than in an irrelevant floated modifier reading). Interestingly, the other contexts of variation do elicit parallel judgments. The reason, I contend, is because these all involve subject antecedents.
b. Ljuba priexala, čtoby [*Borya/*ej obedat’].
   Ljuba.nom came so that Borya.dat/she.dat dine.inf
   ‘Ljuba came [*for Borya/*for her to have lunch].’

c. Želanie Igorja [*Bore/*emu pojti] nas očen’ rasstroilo.
   desire Igor.gen Borya.dat/he.dat go.inf us very upset
   ‘Igor’s desire *for Borya/*for him to go upset us very much.’

d. Dlja nas utomitel’nogo [*Bore/*nam rabotat’].
   for us exhausting Borya.dat/we.dat work
   ‘It is exhausting for us [*for Borya/*for us to work].’

e. Ivan dumaej, čto [*vsem /*emu /*nam
   Ivan.nom thinks that all.dat/he.dat/we.dat
   pojti domoj] nam važno.
   go.inf home we.dat important
   ‘Ivan thinks that it is important to us [*for all /*for him/*for us to go
   home].’

f. [*Tebe/*mne ostat’sja doma] rasstroilo by menja.
   you.dat/I.dat stay.inf home upset cond me
   ‘[For you/*for me to stay at home] would upset me.’

Working within GB, in which PRO could not bear case and, moreover, it was specifically case features which allowed NPs to be overt, I was forced to regard the problem that the SD occurs even in environments where no overt dative subject is possible as damning for the agreement account, despite its intuitive appeal. Consider also examples such as (45), which should be acceptable if there were an independent source of dative case within the infinitive:

\[(45) \textit{Mne važno [(vam) žit’ odnomu].} \]
   I.dat important you.dat live.inf alone.dat
   ‘It is important for me [(for you) to live alone].’

Yet there is a correlation between the potential in Russian for a dative subject and the existence of the SD. Franks (1995:256–259) therefore opted for a “direct assignment” model, in which the SD was assigned to a (pronominal declension) adjective in the same general configuration as that germane to dative subjects, but under looser licensing conditions. Specifically, (argument) subjects and (adjunct) semipredicatives are similar enough structurally to be targeted by the same case-assignment rule, and this rule requires an additional licensing factor when it applies to arguments but not to adjuncts. Restating these ideas somewhat, I argued that: (i) Infl(ection) assigns case to its specifier; (ii) when Infl is [+agreement] that case is nominative and when it is [–agreement] that case is dative; (iii) this only applies to subject NPs when Infl is also [+tense]; and (iv) adjuncts that happen to occupy specifier position are insensitive to the [+tense] licensing requirement. Thus, in most instances where overt dative subjects
of infinitives can occur in Russian, there is the concomitant possibility of inserting (in the past or future) a finite, non-agreeing copula to mark tense.

Although it is not the aim of this paper to resolve the status and distribution of (overt) dative subjects in Russian, it is clear that these do not simply depend on the presence of an infinitive. Rather, it seems that the infinitive must be embedded into some kind of larger structure. These are typically contexts in which the copula has the potential to be overt. Schein (1982:236), building on Brecht (1974), thus argues that there is a hidden copula whenever dative subjects appear, citing Brecht’s example in (46):

(46) 

<table>
<thead>
<tr>
<th>Vam</th>
<th>ne</th>
<th>{∅/bylo/budet}</th>
<th>idti</th>
<th>na</th>
<th>pljaž.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YOU.DAT</td>
<td>not</td>
<td>{is/was/will be}</td>
<td>GO.INF</td>
<td>to</td>
<td>beach</td>
</tr>
</tbody>
</table>

‘There is no way you could/could have gone/would be able to go to the beach.’

In such examples there is always a modal meaning, implying that the infinitival is the complement of a hidden modal, which usually admits an overt copula. If so, it may be this modal which licenses a dative subject, probably in combination with other functional heads (such as C and/or T). Babby (2009:176), who calls these “independent infinitive clauses,” states the following, which I will assume to be correct (although the issue is orthogonal to the SD): “these sentences all have a deontic modal interpretation, explained in terms of a higher modal projection mP, whose head m is normally null.”

On the other hand, it is not always the case that a copula is tolerated in infinitival clauses with overt datives. Examples such as (47a), from Babby (2009:164), or (47b), with two independent dative subjects, show that tense is not always essential in the licensing of overt dative subjects:

(47) a. 

<table>
<thead>
<tr>
<th>[Tebe</th>
<th>ujti</th>
<th>na pensiju]</th>
<th>značilo by</th>
</tr>
</thead>
<tbody>
<tr>
<td>YOU.DAT</td>
<td>GO.INF</td>
<td>on pension</td>
<td>mean.PAST COND</td>
</tr>
<tr>
<td>kapitulirovat’</td>
<td>pered</td>
<td>vragom.</td>
<td></td>
</tr>
<tr>
<td>capitulate.INF</td>
<td>before</td>
<td>enemy.INST</td>
<td></td>
</tr>
</tbody>
</table>

‘For you to retire would mean to capitulate before the enemy.’

26. Consider the following fascinating example, from Babby (2009:283):

(i) 

<table>
<thead>
<tr>
<th>Ploščad’</th>
<th>požara</th>
<th>byla takoj, čto odnomu ne potušiš.</th>
</tr>
</thead>
<tbody>
<tr>
<td>area</td>
<td>fire.Gen</td>
<td>was such that one.DAT not put_out.PRES2SG</td>
</tr>
</tbody>
</table>

‘The fire was so big that there was no way to put it out on one’s own.’

Here we find the SD, despite the fact that the verb is finite rather than an infinitive. Although Babby suggests that it is the finite verb which imparts a modal meaning, speakers report sensing a pause, as in odnomu — ne potušiš. Clearly, however, the SD is not agreeing with the subject, which, if overt, would be nominative.
b. [Emu sest’ v t’jurmu] to že samoe, čto
he.DAT sit.INF in jail the same as
[mne pokončit’ žizn’ samoubijstvom].
I.DAT finish.INF life suicide.INST

‘For him to go to jail would be the same as for me to commit suicide.’

Here, as with most occurrences of the SD, there does not seem to be any semantic reason to invoke a higher modal. Babby (2009: §5.1) offers more such examples, claiming that “when an infinitive clause with an overt dative subject functions as an argument of a matrix lexical verb, it will not have a modal reading since the mP is not licensed here.” This leaves unresolved the question of what exactly distinguishes such examples from those in (44).

Be that as it may, the fact that structure above VP seems appropriate in overt dative constructions still does not tell us if comparable structure is needed for the semipredicative to receive dative case. Surely, in most of the SD cases in (7) there is no semantic reason to invoke a higher modal; indeed, the impossibility of an overt dative correlates with absence of modality, yet this has no bearing on the availability of the SD. So we are still left with the questions of why, under the traditional agreement approach, PRO_{DAT} occurs in contexts where overt datives cannot and why the (semipredicative) agreement target can be overtly dative whereas the controller of agreement (PRO_{DAT}) cannot. Under the alternative direct assignment approach advocated here, the questions are why the SD can be assigned to (adjunct) semipredicatives but not to (argument) subject NPs and why the dative cannot be assigned to ordinary predicate adjectives.

I contend that the key lies in the last question: the semipredicatives sam and odin belong to a special mixed “pronominal” declensional type. They are defective adjectives in that, although in the oblique cases they have ordinary adjectival endings, in the direct (non-oblique) cases their form is that of nouns. It is for this reason that they can be assigned case directly. Historically, long form adjectives were constructed by adding pronouns to adjectives with nominal endings, so that there were both short and long form cased adjectives. The former lost case features and are now archaic, hence can only function in a (caseless) predicative capacity. The semipredicatives, however, remain nominal remnants in the direct cases (e.g. odin, odna, odni, odnu instead of *odnij, *odnaja, *odnie, *odniju). It is this property that makes them special and enables them to be assigned case directly, unlike true adjectives, which can only receive case by virtue of the mediation of some nominal with which they agree. These are thus two different routes for the valuation of case features.

Some corroboration for this idea can be found in the fact that the historical loss of oblique short forms correlates with the limitation of the SD to the semipredicatives. Short forms of adjectives in modern Russian are caseless and morphologically
identical to verbal \(l\)-participles. Because they cannot participate in concord relations – matching only in \(\phi\)-features but not case – they cannot modify. But Comrie (1974) cites the examples in (48) from Pushkin:

(48) a. Ja bojal'sja odnogo: [byt’ ostavlenu na doroge]. I.NOM feared one.GEN be.INF left.DAT on road ‘I was afraid of one thing: to be left on the road.’

b. Prisudili ego [byt’ posaženomu na kol]. condemn.PAST.PL him be.INF impaled.DAT on stake ‘He was condemned to be impaled on the stake.’

The opposition between short form, as in (48a), and long form, as in (48b), was not one of case-marked versus caseless: both \(ostavlenu\) and \(posaženomu\) were equally dative. The SD was thus much more pervasive when case-marked short form adjectives were still viable. Like predicate nominals but unlike modern adjectives, these could be assigned case directly. Moreover, the viability of the SD on any given adjective diminishes hand-in-hand with its cased short form.

As was observed by Madariaga (2006), the special status of the semipredicatives is related to their quantificational phrase (QP) nature. With this in mind, consider Russian \(’vsem’\) ‘all’, which, although not usually cited as an exemplar of the SD, also belongs to the pronominal declension and also exhibits the SD:27

(49) a. \[CP Pojti tuda vsem] udivilo by menja. go.INF there all.DAT surprise.PAST cond me ‘To go all there would surprise me.’

b. \[CP (*Ivanu) pojti tuda] udivilo by menja. Ivan.DAT go.INF there surprise.PAST cond me ‘(*For Ivan) to go there would surprise me.’

There is no agreement source for dative in (49a) and the ungrammaticality of (49b) with overt \(Ivanu\) shows that \(vsem\) here is not a dative subject. It is rather assigned dative directly. Another example is the ordinal \(pervyj\) ‘first’, as in (50), found in a recent webpost:

(50) tex, kto gotov otdat'\(sja\) pervomu za those who prepared surrender.\(INF\) first.\(DAT\) for opredelennuju summu specific.ACC sum.ACC ‘those who are prepared to surrender first for a set fee’

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27. Judgments in (49) are due to Maria Shardakova (p.c.). Landau (2008:908–909) provides examples which demonstrate the obligatoriness of the SD \(vsem ’all.DAT’\) under partial control.
Regardless of the precise mechanism assigning the dative, the question identified above of course remains: Why is it that, in identical contexts, the dative can be assigned to a semipredicative but not to a subject NP? Also remaining under the direct case assignment scenario are the questions listed at the end of Section 5.1, and of course the overgeneration problem: How do we prevent the SD from applying in OC contexts? I return to these and other issues in Section 6, which draws upon the collective insights in the SD literature in an attempt to devise a unified workable approach.

6. Components of a solution

This final section seeks to bring together as many strands of reasoning about the SD as possible.

6.1 Some leading ideas

I begin by briefly cataloguing some leading ideas which will guide the account to be laid out below.

6.1.1 Agreement versus assignment

Whereas adjectives agree, nouns are assigned case. The reason that ordinary adjectives do not enter into the SD construction is because this dative is the result of direct assignment rather than agreement (e.g. with a PROdat). As argued above, the semipredicatives can be directly assigned case, but ordinary adjectives cannot. The fact that adjectives are not a target for probe-goal case feature valuation can also be seen in the contrast in case behaviour between predicate adjectives and nouns in Polish. Whereas in Russian there is a choice between agreement and instrumental for both nouns and ordinary adjectives, in this language in copular sentences nouns must be in the instrumental and adjectives must agree; see Bondaruk (2013) for references and details:

(51) a. Jan był / chce być szczery/*szczerym. 
Jan.NOM was/ wants be.INF sincere.NOM/*INST
‘Jan was/wants to be sincere.’

b. Jan był / chce być *szczery człowiek
Jan.NOM was/ wants be.INF *sincere.NOM person.NOM
/szczerym człowiek/ie."m.
/sincere.INST person.INST
‘Jan was/wants to be a sincere person.’

Polish thus wears the agreement versus assignment contrast on its sleeve.
6.1.2 Dative versus instrumental
A second leading idea concerns the source of the non-agreeing cases. As with all accounts, going back as far as Comrie (1974), I concur that the SD is parasitic on the possibility of having dative subjects. I also follow Landau (2008) and others in that C is crucially involved in assigning dative subjects. I differ, however, in taking C also to be the direct source of the SD on the semipredicative (rather than mediated by PRO). While I have much less to say about the instrumental, this is I assume associated with Pred(ication), following Bailyn (2002) or Madariaga (2006).28

6.1.3 Arguments versus adjuncts
In Section 3.4 above it was pointed out that case assignment to arguments is sensitive to additional conditions from which adjuncts are immune. Thus in (33), repeated as (52), we saw that adjunct time phrases can be accusative even with verbs that do not admit accusative direct objects:

(52) a. Ivan spal vsju noč’ /*dolgij son.
   Ivan slept all night.ACC /*long sleep.ACC
   ‘Ivan slept all night/*a long sleep.’

   b. Direktor upravljal fabrikoj/*fabriku vsego odin god.
      director managed factory.INST/*ACC altogether one year.ACC
      ‘The director managed the factory for one year in all.’

Similarly, as shown by comparing (44) with (7), the SD arises even in contexts which disallow dative subjects. While I cannot develop a full-blown account here of the factors at work, the intuition is that the power to value case on an NP must be split into two components, akin to the “licensing” and “identification” tradition for null subjects under GB. Assignment of case to NPs is instantiated in a way comparable to minimalism’s probe, match, and valuation, with some functional head valuing case on a goal in its domain. This valuation must however be done in such a way that case assignment to structurally appropriate non-arguments can succeed even where assignment to arguments fails.

Metaphorically, we can think of licensing as the potential to assign case in some structural context, whereas identification demands something extra for implementation. That extra information allows for recovery of relevant semantic information, i.e. the theta-role of the argument receiving case so that it can be appropriately interpreted in its particular predicate-argument structure. No identification factor is however needed for an adjunct, the interpretation of which is always purely

28. Another possibility is that the instrumental is simply a default case.

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compositional—it is never a function of the meaning of the lexical item which heads the phrase to which it adjoins. Thus, for (51) one might imagine that some functional head (whatever immediately dominates VP, e.g. $v$ or Asp or AgrO) values case on complements to verbs, which is accusative everything else being equal. However, when V combines its properties with those of that functional head, V adds its own specific information. For example, V can impart the information that it assigns no object theta-role in (52a) or that it assigns “quirky” instrumental in (52b). I call the addition of features from the V head “fertilization.” The crucial idea here is that the next head down needs to fertilize a traditional functional category probe (and I remain agnostic as to whether this is head movement, morphological merger, or even if there is a difference) in order to empower that probe to value case on an argument. Extending these ideas to the SD, and assuming that dative is valued by C, since the semipredicative is not an argument it should be able to be assigned dative in any CP, whether or not a dative subject argument can occur. And just as with accusative direct objects, the possibility of valuing the subject as dative depends on properties of the head below C (e.g. Mod or Inf/T_{INF}). Using C in this way allows us to connect overt dative subjects in Russian with the SD. The same probe, C, values dative on overt subjects of infinitives in (44) as on the semipredicatives in (7). The only difference is that the latter, as non-arguments, do not care if C has been fertilized or not. That is why the SD typically appears freely in infinitival clauses even when these do not tolerate overt dative subjects.

6.1.4  *Predicate adjective agreement is local*

The most conservative hypothesis is that controllers of agreement must be in a tight structural relationship with their adjectival targets. Case valuation by probes, on the other hand, is not so constrained. For ordinary predicate adjectives, this means that whenever the controller does not seem to be local the relationship must somehow be reduced to a local one. In Section 3.2 we saw one straightforward way of accomplishing this, namely, by movement of the controller. That is, any apparently non-local agreement relation implicates movement and, consequently, standard restrictions on movement should be at play. For the SD, on the other hand, case is directly assigned to the semipredicative, so the relevant C probe can be some distance away. Since ordinary adjectives can only get case through agreement, a MTC-account, as in (25a) based on Grebenyova (2005), seems sensible.

This leaves us however with two problems: (i) How can the instrumental on ordinary adjectives be analysed as agreement? – and, the flip side of this, namely, (ii) How can the nominative (or accusative) on semipredicatives be analysed as direct assignment? There are various ways one might solve these problems. For the first, one could either adopt Grebenyova’s proposal of assuming an instrumental *pro* with which the adjective agrees or one could let instrumental be a true default case here, as suggested
in fn. 28. For the second, one could let the relevant probe target a distant semipredicative, so that for example main clause T_{FIN} in (4), repeated as (53), would value nominative case not just on the matrix subject my ‘we’ but also on embedded sami:

(53) My rešili [postarat’sja [delat’ èto samī/*samīm]].

‘We decided to try to do this ourselves.’

Alternatively, one could argue that, because of their ambiguous nature, the semipredicatives can also agree in case, like ordinary adjectives. Examples such as (53) then reduce to local agreement under the MTC:

(54) My rešili[m my postarat’sja [my delat’ èto samī]].

6.1.5 Structure is parsimonious

The last leading idea is that otiose structure is not projected. As discussed above, if C is implicated in the SD, then we want to avoid projection of C when not motivated. One way of accomplishing this was Bošković’s MSP, as in (38). There are (at least) two sizes of infinitivals, which is how OC subjects and non-OC subjects are distinguished: only the latter are contained within CP. This provides a general strategy of attack for the overgeneration problem, in that the larger structure is avoided in favour of the more parsimonious smaller one.

Of course, as discussed in Section 2.2, there is still some optionality and variation in the case behaviour of semipredicatives. Assuming a MTC approach to OC and that C values dative, agreement implies movement and the SD implies a CP. Variation can then be construed either as a competition between two structures, one in which movement of the subject succeeds and the other in which it does not, or as the result of one structure in which movement is optional. I speculate on some specifics in Section 6.3 below.

6.2 Semipredicatives versus ordinary adjectives

This section returns to the differences described in Section 5.1 between semipredicatives and ordinary adjectives. The questions identified at the end of that section are considered in turn.

6.2.1 Why ordinary adjectives do not enter into the SD

Blocking more pervasive assignment of the SD is problematic if one assumes a PRO_{DAT} subject for infinitives and adopts an MTC approach, as in Grebenyova’s system. That is, what prevents (27), repeated as (55), with the SD applying to an ordinary adjective in an infinitival clause?

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Under my account this follows automatically from the hypothesis that the SD only arises through direct assignment, since ordinary adjectives cannot receive case in this way. Also important is the rejection of PRO\text{dat} as a possible source of case features, otherwise one might expect agreement in structure (55).

6.2.2 Why semipredicatives are not default instrumental
Similarly, one needs to prevent instrumental case from being assigned to the semipredicatives (in their ‘alone’ and ‘by oneself’ meanings). Here my speculations adapt the structural account of Madariaga (2006). If instrumental is due to Pred, then, elaborating on (25b), Pred must select a small clause of the AP (or NP) type, but not of the QP (or DP) type. This is schematized in (56a), with the SC represented as functional head F (just to give it a name). This structure however raises the question of how AP (and NP) receive instrumental case. Assuming APs agree and Pred values instrumental, we need to modify (56a) as in (56b).

\begin{align*}
(56) & \quad \text{a. } [\text{PredP PRO Pred } \text{F } [\text{AP/NP/*QP/*DP}]] \\
& \quad \text{b. } [\text{PredP Pred } \text{F } [\text{PROINST F } \text{AP/NP/*QP/*DP}]]
\end{align*}

If so, AP would agree locally in case with PRO\text{inst}, whereas NP would be assigned instrumental (by the Pred probe, through \textit{Multiple Agree}, just like the post-copular nominative). This is depicted in (57):

\begin{align*}
(57) & \quad \text{a. } [\text{PredP Pred } \text{F } [\text{PROINST F } \text{AP\text{inst}}]] \\
& \quad \text{b. } [\text{PredP Pred } \text{F } [\text{PROINST F } \text{NP\text{inst}}]]
\end{align*}

One conceptual issue with this analysis is that it resurrects cased PRO, in the familiar sense of a category which cannot be overt but which can be agreed with. Given the well-studied Icelandic facts, this may be inevitable. Moreover, given the contrast between predicate adjectives and nouns in Polish (51), it may be advantageous to treat instrumental on adjectives and nouns differentially.

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29. Copular NPs thus receive case from Pred, whereas DPs receive case through multiple agree. See Perelstvaig (2007) for extensive arguments distinguishing post-copular NPs, which are instrumental, from post-copular DPs, which are nominative.

30. If the PredP approach proves untenable, “instrumental as default” can always be invoked, so long as it can be ensured that the semipredicatives never happen to receive default case.
### 6.2.3 Why ordinary adjectives always have an instrumental option

Assuming a PredP, the reason why ordinary adjectives always have an instrumental option has to be that a structure with Pred such as (57a) is always possible for predicate APs. The agreeing structure, on the other hand, does not involve Pred, but rather just a small clause FP. Adopting the MTC then gives us something like (59) for the two variants in (24), repeated as (58):

(58) Ivan prišel domoj grustnyj/grustnym.
   Ivan.NOM came home sad.NOM/INST
   'Ivan came home sad.'

(59) a. [Ivan\_NOM prišel domoj [FP Ivan\_NOM F [AP grustnyj\_NOM]]]  
   b. Ivan\_NOM … [PredP Ivan\_NOM Pred [FP PRO INST F [AP grustnym\_INST]]]

Agreement is thus impossible whenever movement is,\(^\text{31}\) but instrumental is always available. Of course, the presence of PredP has semantic implications (at least, when both options are viable) and there are much investigated interpretative differences between the two structures, with and without a Pred. I put these aside in this paper, referring the reader instead to studies such as Pereltsvaig (2007), Richardson (2007), Bailyn (2012), or Bondaruk (2013).

Returning in this light to Polish (51), the case facts suggest that FP (whatever the identity of F) is absent in this language. Thus Pred cannot select for FP in Polish, which means its complement must agree when adjectival, as in (60a), but is assigned instrumental when nominal, as in (60b):

(60) a. [Jan\_NOM był [PredP Jan\_NOM Pred [AP szczery\_NOM]]]  
   b. Jan\_NOM był [PredP Jan\_NOM Pred [NP szczerym człowiekiem\_INST]]

The opposition in (60) is a simple consequence of APs agreeing but NPs being assigned case directly.

### 6.2.4 Why semipredicatives must agree where ordinary adjectives can

The question of why semipredicatives always agree in contexts where ordinary adjectives can agree (or be instrumental) was the point of departure for Madariaga (2006). It also subsumes the overgeneration problem. In the system outlined above, agreement for ordinary adjectives is a local relation. It should be the same for the semipredicatives, which, following Madariaga, I take to be QPs. Since QP is not an admissible complement of Pred, the semipredicatives have no choice but to agree in a structure

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\(^{31}\) In (59b), movement is not possible from [Spec, FP] directly to [Spec, TP], i.e. over [Spec, PredP].

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comparable to (59), i.e. one without PredP. The difference in structures could be that the semipredicatives are adjoined rather than introduced using FP:32

(61) \([\text{Ivan}_{\text{NOM}} \text{prišel domoj}\ [\text{DP Ivan}_{\text{NOM}} \text{[QP sam]}]])]

Note that since Polish lacks FP, (61) can also apply to semipredicatives in that language. In sum, semipredicatives can agree like APs in addition to being assigned case like NPs, and they do not involve PredP.

6.2.5 Why agreement under obligatory Object Control is only possible for semipredicatives

Recall the contrast in (42) versus (43), repeated below:

(62) ‘Pavel asked Ivan not to go to the party sad.’

(63) ‘Pavel asked Ivan not to go to the party alone.’

While some speakers accept agreement for the semipredicative in (63), none do for the adjective in (62). The question here is why, under the assumption that ‘odnogo’ has the option of agreeing with ‘Ivana’ in (63), that same option is not similarly available to ‘grustnogo’ in (62). This puzzle is resolved by rejecting agreement with ‘Ivana’ as the source of accusative case on the semipredicative in (63). If the MTC does not allow movement of ‘Ivana’ from the embedded clause to matrix object position, there has to be an alternative structure in which direct assignment of accusative case takes place both to the matrix object and to the semipredicative. Crucially, this structure is not available for ordinary adjectives (and does not exist in Polish at all), since these cannot be directly assigned case. Whatever assigns accusative case to ‘Ivana’ also assigns it to the semipredicative; I leave the details of the account for further research.33

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32. An adjunction structure for semipredicatives is argued for by Despić (2011: ch. 4), although his structure is somewhat different.

33. Note that this is not unlike Landau’s (2008:879–80) “PRO-control” version of OC, in which the main clause case assigner (for him, T for nominative or v for accusative) assigns case to a DP within its own clause, and, over C, to PRO in the embedded infinitival clause (with which the semipredicative then somehow agrees). Witkoś (2010) also adopts a “[+multiple] probe” approach. By restricting that feature to T in Polish (versus Russian) he is able to prevent agreement in the Polish version of (63), although this leaves him with no explanation of the contrast between the two Russian examples.
6.3 Brief thoughts on variation

Since C values dative on the semipredicative, the SD implies a CP. Similarly, since agreement is a local relation, under the MTC agreement in case generally implies movement. Variation in judgments then is expected to result from whether or not movement is available (or VB, in Babby’s system). This in turn should be the consequence of there being two competing structures. Here I speculate on some possibilities.

Variation under object control is perhaps the most mysterious, since a movement account of agreement is faced with differentiating (62) from (63). Consider first the SD. One possible structure adapts Landau’s (2008:902) use of an Applicative Phrase (ApP):

When the semipredicative is accusative like the direct object, CP must be missing, perhaps as in (65):

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Alternatively, one might reject the multiple probe account in favour of movement of *Ivana*\textsubscript{ACC} out of [*dp\_Ivana*\textsubscript{ACC} [*qp\_odnogo*]] to [Spec,ApP], except that it is not clear to me how to allow this movement but at the same time block movement out of [*fp\_Ivana*\textsubscript{ACC} F [*ap\_grustnogo*\textsubscript{ACC}]]\textsuperscript{34}.

The problem of variation over an indirect object, as in (14c–d), could be handled similarly, with two competing structures. The dominant agreement one would be like simple OC, with the embedded subject moving to the main clause. The SD possibility would necessarily involve a CP, perhaps with an ApP structure as in (64).

As for variable case transmission to inside of V + N collocations, as in (14e–g), it seems to me the issue is whether the clause is treated as a complement to the noun, in which case it is necessarily a CP and the SD ensues, or it is treated as a complement to a complex verb [*v\_V + N*], in which case, like other infinitival complements to V, it is treated as a TP and agreement through the MTC ensues.

Lastly, consider the observation that čtoby only optionally blocks case transmission (similarly Polish żeby), as in (11)–(13) and (14b); cf. also fn. 4. Here I suggest that čtoby is either analysable as a C head, inducing dative, or as a Modal head (so no CP is projected and no dative can be assigned), leading to OC and agreement. Another possibility is that the variation relates to the possibility of movement out of čtoby ‘in order to’-clauses, as in (66), from Bailyn (2012: 101), since čto ‘that’-clauses are islands in Russian.

\textbf{(66)} Komu ty xоčеš’ [čtoby Ivan pozvonil___]?  
\texttt{who.dat you want so\_that Ivan called}  
‘Who do you want Ivan to call?’

\section*{6.4 Movement, multi-attachment, timing, and feature sharing}

In this final section, we step back from the details and consider some larger architectural issues.

First of all, although the literature is silent about how to implement clause-internal agreement, a reasonable assumption is that some kind of “co-valuation” mechanism is needed. That is, multiple items share a single set of features, which once valued are realized on those items for purposes of vocabulary insertion. The advantage to feature sharing in the context of the present paper is that the case of one item can be made to depend on the case of another before that case has even be determined in the derivation. This provides a simple way of dealing with the look-ahead problem.

\textsuperscript{34} One thought is that the adjunction structure does not entail domination.
Such feature sharing can be easily implemented through multi-attachment or multi-dominance, as in Frampton (2004) or Citko (2011), among many others.\footnote{Feature sharing is proposed in Frampton and Gutmann (2000) and used in Pesetsky and Torrego (2007) \textit{inter alia}. An actual implementation of these two models to sharing case and \textit{phi}-features in Polish copular clauses is provided in Bondaruk (2013).} This has been applied with much useful insight to the analysis of movement. The basic idea is that there are no autonomous copies; “movement” is instead a metaphor for multiple occurrences, i.e. distinct nodes in the tree are linked to the same item (they “call up” or “point” to the same address). Thus, (5) could be represented roughly as in (67):

\begin{equation}
(67) \quad [\text{TP1} \ T_{\text{FIN}} \ ljubit \ [\text{TP2} \ T_{\text{INF}} \ gotovit' \ sama]]
\end{equation}

Whereas under the MTC account the lower copy of \textit{Nadja} lacks case and the upper one is nominative, under the multi-attachment model there is only one \textit{Nadja}, which becomes nominative by virtue of its higher occurrence, infinite [Spec,TP].

Of course, \textit{Nadja} (like all syntactic items) is a collection of features. So to represent feature sharing between \textit{Nadja} and \textit{sama} we can show each of these items drawing its morphological features from the same source:

\begin{equation}
(68) \quad [\text{TP1} \ T_{\text{FIN}}ljubit \ [\text{TP2} \ T_{\text{INF}} \ gotovit' \ sama]]
\end{equation}

Bullets in (68) are addresses of information structures (i.e. data sets). The diagram is meant to indicate the network of addresses pointing to the information at other addresses, with square brackets containing feature subsets, just before $T_{\text{FIN}}$ values \textit{Nadja} as nominative. (The dotted arrow from $T_{\text{FIN}}$ indicates this.) So \textit{sam} shares \textit{phi} and case features with \textit{Nadja}, and whereas the former are feminine singular intrinsically, the latter can only be determined syntagmatically. So \textit{sama} is co-valued with...
Nadja in TP2, even though the fact the Nadja is nominative only becomes available when T_{FIN} is merged in TP1. Note however that the feature sharing model raises familiar issues about timing and how predicate adjectives get case. Nadja in (68) only has its nominative features valued upon introduction of T_{FIN} into the structure, so the semipredicative sama can agree with Nadja locally but cannot be sent to PF until it has its case features set. What this means is that Spell–Out must be delayed until the end of the derivation. Given the nature of co-valuation this seems inevitable in a bottom-up model of grammar, and in Franks (2014) I argue for late Spell–Out on completely different grounds.

In an SD situation, such as (7d) repeated in (69), samim again shares features with the subject, this time PRO. I assume that PRO comes specified with phi features and that NPs must match in phi features in order to be construed as coreferential. In this instant, PRO is plural in order to be interpreted as ‘we’. PRO, unlike a lexical subject, lacks case features. Instead, these are directly valued on samim by C, as in (70).

(69) Dlja nas utomitel’no [CP [PRO del’ eto samim]].
for us exhausting do.inf this self.pl.dat
‘It is exhausting for us to do this on our own.’

(70) [CP C [TP2 T_{INF} gotovit’ ]]

Here the SD agrees in phi features with PRO but has its case valued only upon merger of C into the structure.

This study of predicate adjective agreement and the second dative construction in Russian is a work in progress. I have considered various alternatives and weighed their assets and liabilities. The overgeneration problem – the need to prevent spurious assignment of dative to OC semipredicatives and to ordinary adjectives – led to an approach which rejected agreement with a dative PRO in favour of direct assignment from C to the semipredicative. This raises more general questions about the features of PRO and whether the theory of grammar should countenance case-marked PRO at all.
References


Frampton, John & Gutmann, Sam. 2000. Agreement is feature sharing. Ms, Northeastern University. (http://www.math.neu.edu/ling/lingindex.html)


Kozinskij, Icxak Š. 1983. O kategorii “podležaščee” v russkom jazyke. Moscow: Institut russkogo jazyka AN SSSR.


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