NEW INSIGHTS INTO POLISH CONTROL:
EVIDENCE FROM PREDICATION, NP-ELLIPSIS, AND CASE

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N  neuter
NEG  negation
NOC  non-obligatory control
NOM  nominative
NP  noun phrase
NPE  noun phrase ellipsis
OC  obligatory control
PASS  passive
PAST  past
PC  partial control
PERF  perfective
PF  phonological form
PL  plural
PP  prepositional phrase
PredP  predicational phrase
PRES  present
PRT  participle
REFL  reflexive pronoun
RP  relator phrase
SG  singular
SLP  stage-level predicate
SP  semantic plurality
Spec  specifier
TP  tense phrase
TTTC  two-tiered theory of control
VP  verb phrase
Summary

This study is an investigation into Polish control structures embedding adjectives, and all of the modules and principles which play their part in projecting these control structures, namely case theory, the module of predication, and the process of NPE. The starting point for this investigation is the data in (1):

(1) a. Jan próbuje być mił-y.
    Jan.NOM tries be.INF nice-NOM
    ‘Jan tries to be nice.’

b. Jan próbuje być mił-ym.
    Jan.NOM tries be.INF nice-INST
    ‘Jan tries to be a nice one.’

The data in (1a) show the embedded adjective *miły* ‘nice’ surfacing with nominative case marking. This shows case agreement with the subject *Jan*. The data in (1b) show the same adjective appearing in instrumental case marking, thereby creating an apparent case mismatch between adjective and subject. We observe the same case possibilities in (2).

(2) a. Piotr marzy, żeby być bogat-y
    Peter.NOM dreams so-that be.INF rich-NOM
    ‘Peter dreams to be rich.’

b. Piotr marzy, żeby być bogat-ym.
    Peter.NOM dreams so-that be.INF rich-INST
    ‘Peter dreams to be a rich one.’

The data in (2) show the same OC characteristics attested for the data in (1) as well. We observe the same case possibilities as in (1) as well. The only difference between the two data sets is that in (2), we have an overt lexicalization of the C-head, namely by the complementizer *żeby* ‘so that’.

In Polish predication, we observe a similar pattern when it comes to case markings of predicative elements, see (3).

(3) a. Marek jest genialn-y/*genialn-ym.
    Mark.NOM is brilliant-NOM / brilliant-INST
    ‘Mark is brilliant.’
In (3b), which I call DP predication, we have a noun in predicative position (*student*) which has to appear in instrumental case marking. In (3a), we have an adjectival predicate which surfaces with matching, i.e. nominative, case marking; instrumental is not possible. It is vital to understand the properties and underlying mechanism of the data in (3), as these are relevant for control structures. For (3a), I propose that a CopP is projected establishing predication (in the sense of den Dikken (2006)). CopP introduces AP in its complement position and the subject Mark in its specifier. These two elements share their features (Frampton and Gutmann 2000; Pesetsky and Torrego 2004); once Mark is assigned nominative case by T, this case then percolates to the adjective as well, thereby deriving case agreement between these two elements. For (3b), the proposed structure is more elaborate. I assume that *student* constitutes a DP. As DPs cannot act as predicates (Zamparelli 1995), I assume a type-shifting operation that turns the DP into a predicate (Partee 1986); this is reflected in the syntax by the projection of an FP (standing for functional projection) on top of DP. FP also, presumably as a by-product, assigns instrumental case to the DP. CopP takes FP in its complement position and Jan in the specifier. No feature matching is assumed here, as the DP was fully saturated in the first place. Jan receives nominative case in the same fashion as Mark in (3a) with the sole difference being that case is not copied onto the predicate. The ideas are sketched in (4).

\[(4) \text{a. } [\text{TP Mark T } \text{[CopP Mark is [AP brilliant]]}] \]

\hspace{1cm} \text{nominative (via T)} \hspace{1cm} \text{nominative (via feature sharing)}

\[(4) \text{b. } [\text{TP Jan T } \text{[CopP Jan is [FP F [DP a student]]]}] \]

\hspace{1cm} \text{nominative (via T)} \hspace{1cm} \text{instrumental (via F)}

For control, I propose that it embeds predication, and since Polish has two types of predication (4), these may be projected in control as well, thereby deriving the case pattern – see (5) for an illustration of the data in (1).
(5) a. \[[TP \text{ Jan \[vP Jan \text{ tries \ldots [FinP \text{ PRO [TP PRO [CopP PRO be [AP PRO nice]]]]}]\]}}\]

nominative all the way

b. \[[TP \text{ Jan \[vP Jan \text{ tries \ldots [FinP \text{ PRO \ldots [CopP PRO be [FP DP nice person]]]]}]\]}}\]

nominative nominative instrumental

When we have an adjective that shows case agreement with the subject, we embed AP predication, as in (5a). There, PRO and the adjective share their features, PRO moves up to Spec,FinP via operator movement (Landau 2015), and once little v is merged with the subject Jan in its specifier, the little v head establishes predication, thus the features of PRO and the controller are shared. PRO now has valued features as well as nominative case and these features are copied onto associated elements, including the embedded adjective. For (5b), I assume that we do not embed a predicative adjective, hence no AP predication, but a full DP. By extension, the embedded adjective is not predicative, but it is an attributive modifier to the noun, which I assume is of a generic nature like człowiek ‘man’. DP Predication is therefore merged. PRO is merged in Spec,CopP with the Cop-head establishing predication between the two elements. PRO moves up to Spec,FinP (Landau 2015), and predication via little v with Jan is created. By syntactic predication, PRO gets its features valued, including nominative case. This case value does not percolate down to the adjective, as the adjective has its phi-features valued by the generic noun and its case feature by F.

Note that by assuming a structure as in (5b), we have to say something about the noun which is elided by the end of the derivation. As a residual of this noun, we have instrumental case on the adjective. By assuming these two different structures in (5), we may account for the different interpretations that the data in (1a) and (2a) have in comparison with (1b) and (2b). Consider that the elided noun may also be overtly realized and must appear in instrumental case; nominative is impossible, see (6).

(6) Jan próbuje być miłym człowiekiem/*miłym człowiekiem.

Jan,NOM tries be-INF nice-INST man-INST/*nice-INST man,NOM

‘Jan tries to be a nice man.’
We still need to regulate this process of NPE. There, I follow Alexiadou and Gengel (2012) in assuming that the function that allows NPE to take place is encoded as a ClassP in the syntactic derivation. ClassP is projected in structures that are potentially partitive in that the elements in question form a subset of a bigger set (Sleeman 1996). In (6), the string *nice man* is a subset of *man*. Whenever we have this subsective operation, we project ClassP, which in turn allows NPE to take place, correctly predicting NPE to be possible in (6) and impossible in (7).

(7) Piotr nie chce być rzekom-ym *(morderc-ą).
    Peter:NOM NEG wants be.INF alleged-INSTR murderer-INSTR
    ‘Peter does not want to be an alleged murderer.’

In (7), the string *alleged murderer* is not a proper subset of *murderer*, therefore NPE is not licensed, as predicted.

In addition to control structures of the type in (1) and (2), we also have structures as in (8), which do not allow a variation in case.

(8) Piotr pytał jak być *uczciw-y / uczciw-ym.
    Peter:NOM asked how be.INF honest-NOM / honest-INSTR
    ‘Peter asked how to be honest.’ (Witkoś 2008: 266)

The complementizer *jak* ‘how’ is also present in control, however, only instrumental is licit on the embedded adjective; nominative is not possible. In the proposed analysis, this means that DP predication is fine, whereas AP predication may not be projected. I propose that the structure in (8) does not display OC but shows the NOC signature. That is, it displays certain NOC characteristics not to be found in OC structures as in (1) and (2). Furthermore, I assume (in line with Witkoś 2010a) that interrogative C when filled with *jak* is a phase (Chomsky 2001), and therefore the complement domain of C remains inaccessible once little *ν* is projected. Thus, no nominative case is derived. As a side effect, we also derive the fact that NOC only ever comes with instrumental case markings, that is DP predication, see (9).

(9) Być mil-ym /*mil-y to być glup-im /*glup-i.
    be.INF nice-INSTR / nice-NOM TO be.INF stupid-INSTR / stupid-NOM
    ‘To be nice is to be stupid.’ (Przepiórkowski 2004a)

In (9), we also have a case of NOC, namely arbitrary control. There, instrumental case is licit, whereas nominative case is out. While it is striking that NOC always comes with instrumental
case, it is not always the same mechanism that is responsible for this. In (8), nominative is not possible, as the C-head is a phase, whereas in (9), nominative is not possible, as there is no nominative case assigner (and no controller) for the adjective to appear in nominative. As a consequence, only DP predication may be projected in these structures.

However, we also observe no variation in some cases of OC, namely object control, see (10).

(10) Piotr kazał Tomk-owi być *mił-emu / mił-ym.
     Peter.NOM ordered Tom-DAT be.INF nice-DAT / nice-INST
     ‘Peter ordered Tom to be nice.’

Polish object control is characterized by not allowing a variation in case on the embedded adjective, which means that only instrumental case is fine, but agreeing case (dative in (10)) is impossible. Please note that it is not the lexical case status of the dative case that makes transmission impossible (as it is the pattern in Russian and Czech), as we observe the same pattern when structural cases, like the accusative, are involved. For (10), I assume in addition to Landau’s (2015) underlying structures for control and the predicational rules presented here, an additional rule when it comes to the properties of PRO, see (11).

(11) PRO AND CASE
     At PF, when PRO’s case needs to be morphologically realized, this must not signal conflicts with independent requirements of the language.

Since PRO is a subject (Landau 2015) and subjects are never marked dative in Polish (Bondaruk and Szymanek 2007), we would encounter a paradox at PF if we embed AP predication in (10). In order not to spell out this contradiction, (dative) case is not transmitted to the adjective, thus the case feature of the adjective remains unvalued and the derivation crashes.

As a last challenge, control data involving numeral controllers is taken as a good testing ground for the presented analysis, consider the data in (12).

(12) Pięć dziewczyn chce być mił-e / ??mił-ych / mił-ymi.
     five.ACC girls.GEN want.3SG.N be.INF nice-ACC / nice-GEN / nice-INST
     ‘Five girls want to be nice.’

Higher numerals (5+) in Polish are marked accusative (Przepiórkowski 2004b). This case is structurally assigned inside the DP by little p (Miechowicz-Mathiasen 2012). The numeral itself assigns genitive to its complement. When projected as controllers in subject control, the
embedded adjective may appear in accusative, marginally in genitive, and in instrumental case. The latter case is the result of projecting DP predication, and accusative case is the result of projecting AP predication. Consider that these numeral phrases as in (12) constitute real subjects, which means, they carry subject properties even though they are not marked nominative. In turn, accusative assigned by p inside the numeral DP is a case found on subjects. This case may then be transmitted to the embedded adjective (unlike in the example in (10)) without creating a conflict with (11). It is thus nothing about nominative case itself that makes it possible to be transmitted, but rather what it signals on a deeper level, namely certain subject properties. Since accusative by p signals the same properties as nominative by T, these two cases may be transmitted.

Keeping the focus on numeral DPs as controllers, let us now consider them in object position. Object control with numeral controllers does not form a homogeneous class when it comes to the case possibilities of the embedded adjective, see (13):

(13) a. Piotr kazał pięć-ju facet-om być mił-ymi / *mił-ym.
    Peter.NOM ordered five-DAT/ACC guys-DAT be.INF nice-INST / nice-DAT
    ‘Peter ordered five guys to be nice.’

      b. Piotr uczył pięć-ju facet-ów być mił-ymi / ??mił-ych.
    Peter.NOM taught five-ACC guys-GEN be.INF nice-INST / nice-GEN/ACC
    ‘Peter taught five guys to be nice.’

When the numeral phrase is projected in a position where dative case is assigned (13a), dative may not be transmitted to the adjective. Consider that the numeral phrase is attached to object position with all of the internal structure of a complex DP, that is, with little p assigning accusative. However, when a second case is assigned (dative in (13a)), dative appears on the DP, as dative is more complex than accusative (Caha 2009). Dative is never a subject case, and therefore the rule in (11) forbids transmission of dative case at PF. DP Predication is still an option that accounts for the instrumental case marking. Interestingly, when the numeral phrase remains accusative (13b), accusative case transmission is a marginal possibility. I assume this is possible, as the object still carries the accusative case assigned by p. This case may also be found on subjects (12), and therefore this seems to be enough for some native speakers to allow the (marginal) transmission of accusative case. However, for most speakers transmission is not fine, presumably because the object still lacks clear subject properties. In
any case, however, dative is never allowed to be transmitted, and so is accusative if the object controller is not a complex DP with a higher numeral.

This was a short summary of the study presenting the proposal in a nutshell. Many more aspects, challenges, and ideas are discussed in what follows.
Deutsche Zusammenfassung

In dieser Studie werden Kontrollstrukturen mit eingebetteten Adjektiven untersucht, sowie alle Module und Prinzipien, die ihren Teil zu Kontrollstrukturen beitragen, diese sind Prädikation, die Kasustheorie und der Prozess der Nominalphrasenellipse. Den Ausgangspunkt der Untersuchung stellen die Daten in (1) dar.

(1) a. Jan próbuje być mił-y.
    Jan.NOM versucht sein.INF nett-NOM
    ‘Jan versucht nett zu sein.’

    b. Jan próbuje być mił-ym.
    Jan.NOM versucht sein.INF nett-INST
    ‘Jan versucht ein netter zu sein.’

In (1a) erscheint das eingebettete Adjektiv mit Nominativkasus. Somit zeigt es die gleiche Kasusmarkierung wie das Subjekt Jan. In (1b) sehen wir das gleiche Adjektiv, nur diesmal erscheint es im Instrumental und somit ist eine scheinbare Kasusdiskrepanz zwischen Adjektiv und Subjekt entstanden. Die gleichen Kasusoptionen können in (2) beobachtet werden.

(2) a. Piotr marzy, żeby być bogat-y
    Peter.NOM träumt dass sein.INF reich-NOM
    ‘Peter träumt davon, reich zu sein.’

    b. Piotr marzy, żeby być bogat-ym.
    Peter.NOM träumt dass sein.INF reich-INST
    ‘Peter träumt davon, ein reicher zu sein.’

Die Daten in (2) zeigen die gleichen OC Charakteristika, die sich auch bei den Daten in (1) beobachten lassen. Zugleich sehen wir, dass in beiden Datensets, die gleichen Kasusoptionen möglich sind. Der einzige Unterschied zwischen den Daten in (1) und (2) ist, dass Letztere den C-Kopf overt realisieren, nämlich durch das Element żeby ‘dass. Wir beobachten ein ähnliches Muster, wenn es um Kasusmarkieren in Prädikationsstrukturen geht, siehe (3).

(3) a. Marek jest genialn-y /*genialn-ym.
    AP Prädikation
    Mark.NOM ist brilliant-NOM / brilliant-INST
    ‘Mark ist brilliant.’

(4) a. \[ [TP Mark T [CoP Mark ist [AP brilliant]]] \]

\[
\begin{array}{c}
\text{Nominativ} \\
\text{(durch T)}
\end{array}
\begin{array}{c}
\text{Nominativ} \\
\text{(durch Featureteilung)}
\end{array}
\]

b. \[ [TP Jan T [CoP Jan ist [FP F [DP Student]]]] \]

\[
\begin{array}{c}
\text{Nominativ} \\
\text{(durch T)}
\end{array}
\begin{array}{c}
\text{Instrumental} \\
\text{(durch F)}
\end{array}
\]
Für die dargestellten Kontrollstrukturen nehme ich an, dass diese die Prädikationsstrukturen in (4) einbetten. Da Polnisch zwei Prädikationsstrukturen hat, leiten wir so die zwei Kasusoptionen her; siehe (5) für eine Illustration dieser Idee.

(5) a. \[vP \text{Jan versucht} \ldots [\text{FinP PRO [TP PRO [\text{CopP PRO sein [AP PRO nett]]]]}]\]

\[\text{Nominativ}\]

b. \[vP \text{Jan versucht} \ldots [\text{FinP PRO \ldots [\text{CopP PRO sein [FP F DP eine nette Person]]]]}\]

\[\text{Nominativ} \quad \text{Nominativ} \quad \text{Instrumental}\]


Wenn wir die Struktur in (5b) annehmen, müssen wir mehr über das eingebettete Nomen sagen, welches am Ende der Derivation elidiert wird. Als ein Residual des Nomen sehen wir Instrumental am Adjektiv. Durch die zwei unterschiedlichen Strukturen in (5) können wir die zwei Interpretationen, die die Daten in (1a) und (2a) im Vergleich zu den Daten in (1b) und (2b) haben, herleiten. Es ist zu beachten, dass das elidierte Nomen overt realisiert werden
kann und wenn dies der Fall ist, muss es im Instrumental erscheinen, Nominativ ist nicht möglich, siehe (6).

(6) Jan próbuje być mil-ym człowiekiem / *mil-ym człowiek.
     Jan.NOM versucht sein.INF nett-INST Person-INST / nett-NOM Person.NOM
     ‘Jan versucht eine nette Person zu sein.’

Der Prozess der Nominalphrasenellipse (NPE) muss natürlich reguliert werden. Hierfür folge ich Alexiadou and Gengel (2012), indem ich annehme, dass die Funktion, die NPE ermöglicht durch die Projektion einer ClassP in der syntaktischen Derivation entsteht. Die ClassP wird in Strukturen projiziert, die potenziell partitiv sind, was bedeutet, dass die entsprechenden Elemente Untersets von größeren Sets darstellen (Sleeman 1996). Für (6) heißt dies, dass eine nette Person ein Unterset von Person darstellt. Wenn wir diese Relation von Sets und Untersets haben, wird eine ClassP projiziert, die zeitgleich NPE ermöglicht. Dies macht die Vorhersage, dass NPE in (6) gut ist, in (7) aber nicht.

(7) Piotr nie chce być rzekom-y / *mordercą.
     Peter.NOM NEG möchte sein.INF angeblicher-INST Mörder-INST
     ‘Peter möchte kein angeblicher Mörder sein.’

Die Kette angeblicher Mörder ist kein angemessenes Unterset von Mörder, dadurch wird NPE nicht lizensiert, wie vorhergesagt.

Zusätzlich zu den Kontrollstrukturen des Typus in (1) und (2), weiβ das Polnische auch Strukturen wie in (8) auf, die Kasusvariationen nicht erlauben.

(8) Piotr pytał jak być *ućzw-y / ućzw-y m.
     Peter.NOM fragte wie sein.INF ehrlich-NOM / ehrlich-INST
     ‘Peter fragte, wie man ehrlich ist.’ (Witkoś 2008: 266)

Das Element jak ‘wie’ kann in Kontrolle projiziert werden, allerdings erlaubt es keine Kasusvariationen, sondern nur Instrumental am eingebetteten Adjektiv. In der vorgestellten Analyse würde das heißen, dass DP Prädikation funktioniert, AP Prädikation aber nicht. Ich werde in dieser Arbeit zeigen, dass die Struktur in (8) keine OC, sondern NOC Charakteristika aufzeigt. Dies bedeutet, sie weiβ Züge von NOC auf, die die OC Daten in (1) und (2) nicht aufzeigen. Des Weiteren nehme ich an (nach Witkoś 2010a), dass ein interrogativer C-Kopf eine Phase (Chomsky 2001) darstellt. Somit ist die Komplementdomäne von C nicht mehr verfügbar, sobald klein v projiziert wird. Aufgrund
dessen kann Nominativ nicht ans Adjektiv transferiert werden. Als Nebeneffekt leiten wird auch her, dass NOC immer nur Instrumentalmarkierungen aufweist, sprich DP Prädikation einbettet, siehe (9).

(9) Być * mił·y to być głup·im / * głup·i.
    sein-INF nett·INST / nett·NOM TO sein-INF dumm·INST / dumm·NOM
    "Nett zu sein, heißt dumm zu sein."  (Przepiórkowski 2004a)


Wir können jedoch beobachten, dass es auch Fälle von OC gibt, in denen Kasusvariationen ebenso nicht möglich sind; Objektkontrolle ist ein solcher Fall, siehe (10).

(10) Piotr kazał Tomk·owi być * mił·emu / mił·ym.
    Peter.NOM befahl Tom·DAT sein-INF nett·DAT / nett·INST
    "Peter befahl Tom net zu sein."

Charakterisierend für polnische Objektkontrolle ist, dass diese keine Kasusvariationen am eingebetteten Adjektiv zulässt. Es ist nur Instrumental erlaubt, Kasuskongruenz (Dativ im Falle von (10)) ist unmöglich. Es ist zu beachten, dass dies unabhängig der Tatsache ist, dass Dativ einen lexikalischen Kasus darstellt, da wir dasselbe Muster beobachten, wenn ein struktureller Kasus (wie der Akkusativ) transferiert werden soll (und Polnisch sich somit nicht wie Russisch und Tschechisch verhält, wo strukturelle Kasus transferiert werden können). Es wird angenommen, dass zusätzlich zu Landau’s (2015) Kontrolltheorie und der hier dargestellten Prädikationsstrukturen, ein weiteres Prinzip aktiv ist, dass die Eigenschaften von PRO regelt, siehe (11).

(11) PRO UND KASUS
    Wenn PRO’s Kasus auf PF morphologisch realisiert werden muss, darf dies keinen Konflikt mit unabhängigen Prinzipien der Sprache signalisieren.
Da PRO ein Subjekt darstellt (Landau 2015) und Subjekte niemals mit Dativmarkierung im Polnischen auftreten (Bondaruk and Szymanek 2007) würden wir ein Paradox auf PF kreieren, wenn AP Prädikation in (10) eingebettet würde. Damit ein Widerspruch nicht overt realisiert wird, wird Kasus (Dativ) nicht auf das Adjektiv kopiert, wobei dessen Kasusfeature nicht valuiert wird und die Derivation somit zusammenbricht.

Als letzte Herausforderung werden Kontrolldaten, die Numeralphrasen als Kontrolleure projizieren als Testgelände für die vorgeschlagene Analyse verwendet.

(12) Pięć dziewczyn chce być mił-e / ??mił-ych / mił-ymi.  
  fünf.ACC Mädchen.GEN will.3SG.N sein.INF nett-ACC / nett-GEN / nett-INST  
  ‘Fünf Mädchen wollen nett sein.’


Wir bleiben bei diesen komplexen DPs, projizieren sie nun aber in Objektkontrolle. Objektkontrolle mit komplexen DPs formt keine homogene Klasse, wenn es um Kasusvariationen am eingebetteten Adjektiv geht.

(13)  a. Piotr kazał pięć-iu facet-om być mił-ymi / *mił-ym.  
  Peter.NOM befahl fünf-DAT/ACC Typen-DAT sein.INF nett-INST / nett-DAT  
  ‘Peter befahl fünf Typen nett zu sein.’

Dies war eine kurze Zusammenfassung der Studie. Es wurde die Analysis wurde kurz und bündig vorgestellt. Es werden mehrere Aspekte, Herausforderungen, und Ideen dieser in der vorliegenden Arbeit beleuchtet.
PART 1: BACKGROUND, DATA,
AND PREVIOUS ANALYSES
1. Introduction

This work is about variation. To be more precise, it is about variations in case markings observed in various Polish control constructions, see (1) for an illustration.

(1) a. Jan próbuje być mił-y / mił-ym.
   Jan.NOM tries be.INF nice-NOM / nice-INST
   ‘Jan tries to be nice.’

   b. Piotr kazał Tomk-owi być *mił-emu / mił-ym.
      Peter.NOM ordered Tom-DAT be.INF nice-DAT / nice-INST
      ‘Peter ordered Tom to be nice.’

The data in (1a) show a subject control sentence, where the adjective miły ‘nice’ may appear in nominative case, thus matching the case of the controller Jan, or it can appear in instrumental case. The data in (1b) show object control data where the adjective miły ‘nice’ must appear in instrumental and cannot show case agreement with the controller, here dative. Previous approaches (Bondaruk 2004, 2007; Przepiórkowski 2004a; Witkoś 2008, 2010a, 2010b) take the data in (1b) to analyze the instrumental case as a default or elsewhere case, while the instrumental case in (1a) is subject to various degrees of acceptability in the previous approaches. I will argue that the instrumental case is not a default and follows regular syntactic case assignment rules. I will argue that the embedded structure in control resembles structures of simple predicational configurations as in (2).

(2) a. Jan był student-em /*student.
    Jan.NOM was student-INST / student.NOM
    ‘Jan was a student.’

   b. Marek jest genialny /*genialn-ym.
      Mark.NOM is brilliant.NOM / brilliant-INST
      ‘Mark is brilliant.’

The data in (2a) show that predicative nouns always appear in instrumental case, whereas adjectives agree with their subject in case (2b). I propose that the data in (2) mirrors the control data, see (3).
(3) a. Jan próbuje być mił-y
    Jan.NOM tries be-INF nice-NOM
    ‘Jan tries to be nice.’

b. Jan próbuje być mił-yzm człowiek-em.
    Jan.NOM tries be-INF nice-INST man-INST
    ‘Jan tries to be a nice one.’

The control data in (3a) embeds AP predication of the type in (2a) and follows its predicational rules of case assignment. (3b) embeds DP predication and also follows its rules of assigning cases. For (3b) then, I assume that the embedded predicate is not a predicative adjective but a predicative noun with an adjectival modifier. The noun is elided in a process of optional NP-ellipsis. Consider also that interpretative differences between the structures in (3) may be derived by assuming two different structural configurations.

In addition to deriving subject control and object control data of the type in (1), this thesis will also aim to derive the pattern of arbitrary control (4), subject control with overt complementizers (5) and complex subject and object control involving numeral phrases as controllers (6).

(4) Być mił-y/*mil-y to być głup-im/*glup-i.
    be.INF nice-INST/nice-NOM to be.INF stupid-INST/stupid-NOM
    ‘To be nice is to be stupid.’
    (Przepiórkowski 2004a)

(5) a. Piotr marzy, żeb y być bogat-y/bogat-yzm.
    Peter.NOM dreams so-that be.INF rich-NOM/rich-INST
    ‘Peter dreams to be rich.’
    (Witkoś 2008: 265)

b. Piotr pytał jak być *?uczciw-y/uczciw-yzm.
    Peter.NOM asked how be.INF honest-NOM/honest-INST
    ‘Peter asked how to be honest.’
    (Witkoś 2008: 266)

(6) a. Pięć dziewczyn chce być mił-e/*mił-yech/*mił-ymi.
    five.ACC girls.GEN want.3SG.N be.INF nice-ACC/nice-GEN/nice-INST
    ‘Five girls want to be nice.’
b. Piotr kazal pięć facet-exom być mił-ymi / *mił-yjm.
Peter.NOM ordered five-DAT/ACC guys-DAT be-INF nice-INST / nice-DAT
‘Peter ordered five guys to be nice.’

c. Piotr uczył pięć facet-ów być mił-ymi / ??mił-ych
Peter.NOM taught five-ACC guys-GEN be-INF nice-INST / nice-GEN/ACC
‘Peter taught five guys to be nice.’

In arbitrary control (4) only instrumental case is licit, nominative is impossible. When control involves the complementizer żebym ‘so that’ two case possibilities have been attested (5a) and the data thus mirrors the data in (1a). The complementizer jak ‘how’ does not allow for a variation in case, only instrumental case is licit (5b).

Numeral controllers (6) pose an interesting challenge to any theory of case assignment and control. It has been argued that higher numerals (5+) are actually accusative (Przepiórkowski 2004b) taking a genitive marked complement. Putting these complex DPs into control yields an array of case possibilities: For subject control, accusative and instrumental are fine, whereas genitive is already rated lower (6a). Numerals phrases as object controller fall into two classes – when the object controller is marked with a lexical case (6b) only instrumental is licit on the adjective, however, when the controller is marked with a structural case (6c) instrumental is still licit and preferred, but somewhat marginally the structural case may appear on the predicate.

The thesis is split into three parts:

Part 1 deals with the phenomenon of control in general. In chapter one I will introduce control in general as well as Landau’s (2015) two-tiered theory to derive the Polish control patterns. I will also introduce some characteristics of Polish as well as the various Polish control constructions involving adjectives and their behavior (chapter three). In chapter four, I will introduce three previous approaches to analyzing case markings in Polish control and which insights from these analyses I will use for my proposal.

Part 2 will be devoted to the ingredients of my proposal: As case is a pivotal topic in the discussed data, we will be looking at the aspects of case theory which will be of vital importance for the analysis, that is, the status of the instrumental case in Polish and the nature of default case (chapter five). As I have argued that predicational structures are projected in Polish control, we need to take a look at the properties of Polish predication and see how
these rules can already derive the presented paradigms (chapter six). And finally, in chapter seven, I will present what analysis of NP-ellipsis I follow in order to correctly predict and derive its occurrence in control (and elsewhere).

Part 3 is then about bringing all of the theoretical implications of part 2 together to derive the patterns presented in part 1. Chapter eight is devoted to deriving all of the presented control configurations presented in chapter 2 on the basis of Landau’s (2015) model. It will be derived in which cases both case possibilities (case agreement/instrumental) are expected, and when and why only one optional is available. Chapter nine deals with numeral phrases in and out of control. Chapter ten presents an outlook into adjacent topics of the structures discussed here, but which have been excluded from an in depth treatment for space reasons.

This thesis should be understood as a contribution to the hotly debated topic of control; the Polish structures presented and analyzed in this thesis might shed new light onto the mechanisms that underlie control. In addition, new approaches and ideas are presented for the structure and interpretation of predication, which are tightly connected to control configurations. This thesis also aims to contribute to case theory with new insights into the status of default case in Polish and the status of the instrumental case in general.
2. The Phenomenon of Control

2.1 The General Picture


(1) a. John tries _ to play the piano.
   b. Mary regrets _ to leave the country.
   c. Peter continued _ to stay at home.
   d. Volker managed _ to go on vacation.

In (1), we see cases of so-called subject control. The understood subject of the events in the subordinate infinitival clause is identified as the subject of the finite clause. In (1a), John is the subject of the playing event, in (1b), Mary is understood to leave the country, and the same is true for Peter and Volker in (1c) and (1d), respectively. Therefore, the subject of the finite clause controls the interpretation of the subject in the non-finite clause. We observe the same mechanism with objects (2).

(2) a. John forces Peter _ to play the piano.
   b. Jennifer persuades Mary _ to buy a house.
   c. Alex orders Andreas _ to pay the bills.
   d. The teacher encourages the student _ to go to university.

For the data in (2), the underlying subject of the non-finite clause is not understood as the respective subject of the finite clause, but rather the object. In (2a), the one who should play the piano is Peter, not John. In (2b), Mary is the one who is supposed to buy the house, not Jennifer. The same applies to the data in (2c) and (2d). Thus, the data in (2) display object control, where the object in the finite clause controls the subject of the non-finite clause.

In the framework of Government and Binding (GB), the challenge has been solved the following way: There is an empty element in the structure, which was dubbed PRO; the interpretation of this silent element is controlled by an overt element occurring in the matrix clause, either by the subject (subject control) or object (object control). See (3) for an illustration of the assumed underlying structure of the non-finite clause.
The insertion of PRO solves two problems that control structures pose, namely what is the status of the external theta-role of *play* given the theta-criterion,\(^1\) and how can we ensure that the Extended Projection Principle (EPP) is satisfied. With the insertion of PRO the problems are solved. The verb *play* assigns its external theta-role to PRO. After being theta-marked, PRO moves to Spec,TP to satisfy the EPP (Koopman and Sportiche 1991).

When introducing an empty element like PRO, one must make sure not to overgenerate the distribution of it, i.e. how can we rule out structures like (4)?

\[
\text{(4) a. *PRO eats apples.}
\]
\[
\text{b. *John eats PRO.}
\]
\[
\text{c. *PRO tries John to play the piano.}
\]

PRO’s distribution must include its ban of appearing in any position of finite clauses, be it the subject (4a) or object (4b) position. In addition, something like backward control (4c) must be excluded.\(^2\) Chomsky (1981, 1986) proposes that this is linked to Case Theory. He stipulates that PRO is a nominal element that rejects case, and must therefore be exempt from positions where case is assigned. In (4a) and (4c) nominative case is assigned by finite T under government in a spec-head relation, i.e. PRO would be assigned case when in Spec,TP. In (4b), accusative is assigned by the verb under government to the complement, where PRO is projected; in

\[1\] The Theta-Criterion is defined the following way:

\[
\text{(i) \hspace{1cm} \textsc{the theta-criterion:}}
\]

Each argument bears one and only one theta-role, and each theta-role is assigned to one and only one argument. (Chomsky 1981: 36)

\[2\] This is language-specific. Cases of backward control are well-established, see Polinsky and Potsdam (2002) for data and discussion of backward control in Tsez; Tsakali, Anagnostopoulou, and Alexiadou (2016) for an empirical study on the availability of backward control in Greek, and Alexiadou et al. (2010) for data and discussion of backward control in Greek as well as in Romanian. The topic of backward control will not be dealt with in this study.
consequence PRO gets case. Excluding PRO from case positions has then been formulated as the PRO Theorem, see (5).

(5) **THE PRO THEOREM**

PRO must be ungoverned.

The principle in (5) states that PRO should not be in a position where it is governed. As government is a precondition for case assignment, PRO cannot have case as a consequence. Consider that PRO’s rejection of case does not contradict the Case Filter (6), which has been proposed to govern the distribution of noun phrases in general.

(6) **THE CASE FILTER**

*NP if NP has phonological content and has no case.

(6) has been a very important tool in GB to motivate movement in passives and unaccusatives, as well as the distribution of PRO. As PRO is an NP without phonological content, case should not be available to it. Case assignment was assumed to happen under government. So, one must make sure that PRO is in an ungoverned position and the fact that no case is assigned follows automatically. This position, where no case is available, was assumed to be Spec,TP\textsubscript{non-finite}. However, how can one make sure that the matrix verb does not govern into the non-finite TP? After all, non-finite T is not assumed not to be a barrier for government (Chomsky 1981), therefore government should be expected. To avoid this, a CP projection was assumed to be projected atop of non-finite T, thereby creating a barrier for government, see (7).4

(7) John tries [cp [TP PRO to [vp PRO play the piano.]]]

In (7), we can see that the verb *try* cannot govern into the Spec,TP\textsubscript{non-finite} due to the CP-layer and therefore this position cannot be a case position (if government is a precondition for case assignment). The inclusion of CP was further motivated by the observation that if a language allows overt complementizers for control, it does not so for raising.

(8) a. Marek marzył, żeby wyjechać za granicę.

Mark.NOM dreamt so-that go.INF behind border

‘Mark dreamt of going abroad.’ (Bondaruk 2004: 216)

---

3 The framework of GB is not strictly cyclic; PRO actually starts out in a governed position (Spec,VP), but at the very end of the derivation, it must be in an ungoverned position. In a strictly cyclic model, rules and principles must be adhered to at any point in the derivation.

4 One could actually say that assuming a CP atop of embedded clauses is the default scenario.
b. Marek zaczął (*żeby) być mił-y.
Mark.NOM started so-that be-INF nice-NOM
‘Mark started to be nice.’

In (8a), we see that the complementizer *żeby* ‘so-that’ can be overtly realized in control in Polish. However, in raising, constructions which look superficially similar to control, the complementizer is not licensed (8b). The conclusion to be drawn here is that there is a CP in control, but not in raising. The distribution of PRO is derived.

In the minimalist program (MP), Chomsky and Lasnik (1993) observe that PRO’s distribution actually mirrors the distribution of other case-marked DPs, see (9).

(9) a. John tried [PRO, to be arrested PRO,]
    b. Johni was arrested Johni
    c. *John tried [PRO, to seem to PRO, that the problem is unsolvable].
    d. *Johni seemed to Johni that the problem is unsolvable.

What the data in (9) show is that the behaviour of a DP like John and PRO is actually not so different. If they exhibit the same syntactic behaviour, the distribution of these two elements should also not be too different. As a consequence of this line of thinking, Chomsky and Lasnik (1993) abandon the PRO Theorem entirely and state that PRO should also get case, just like any other DP. In this line of research, the question arises whether PRO could absorb any kind of case, or whether it is more selective than other DPs. Chomsky and Lasnik (1993) and Chomsky (1995) pursue the latter idea that there is a special kind of case for PRO, which they dub null case (see also Martin 2001). This special kind of case is assigned by non-finite T to its specifier, exactly the position in which we only find PRO.

While PRO carrying case has been empirically tenable, it might be called into question whether it is only null case that PRO can receive. This seems to be a language specific quirk, as in other languages PRO could carry different kinds of cases, see (10).

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5 There is some discussion in the literature about whether verbs like start/begin are control or raising verbs. Alexiadou and Anagnostopoulou (2002) argue that aspectual verbs like arhizo ‘to start/begin’ are actually ambiguous between control and raising. Nevertheless, with a clear raising predicate, the picture remains the same.
The data in (10) show a control structure from Icelandic. There, the quantifier báð ‘both’ appears in dative marking, while the matrix subject við ‘we’ appears in nominative case. The dative case on the former is expected if agreement takes place with PRO, the subject of the non-finite clause. If PRO carries dative, this case marking is expected and predicted on the quantifier. That is to say, an apparent case mismatch can be resolved if PRO carries case. In the same fashion, dative case marking on the semi-predicate odin ‘alone’ in Russian in (11) can be explained. As Landau (2008) shows, these semi-predicates always have to agree in case with the element they modify; as the semi-predicate appears in dative in (11), the conclusion is that PRO carries dative case. The topic of case in control will be a central topic in this thesis and will be dealt with in greater detail in chapters five and eight.

Once we dig deeper into the subject of control, we will soon see that that are many more different control constructions than just subject and object control, see (12).

(12) A Typology of Control

<table>
<thead>
<tr>
<th>Control</th>
<th>Obligatory</th>
<th>Non-Obligatory Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaustive</td>
<td>Partial</td>
<td>Long-Distance</td>
</tr>
</tbody>
</table>

(Landau 2000: 3)

Landau (2000) distinguishes between two types of control, namely obligatory (OC) and non-obligatory control (NOC). This split in control is generally assumed in the literature across different frameworks and analyses (Hornstein 1999; Landau 2000 et seg.; Przepiórkowski 2004a); the details differ when it comes to the different characteristics and tests being used to distinguish between the two types.\(^6\) OC is further split up into exhaustive (EC) and partial

\(^6\) Obligatory control is characterized as follows: it disallows arbitrary and long-distance control and forces a de se reading of PRO as well as a sloppy interpretation (Landau 2000: 31). Hornstein (1999) adds that a local, c-
control (PC). Generally, the examples of subject control given so far fall into the class of EC. It is exhaustive as the interpretation of PRO is exhaustively determined by the features of the subject in the finite clause. PC crucially differs in an important aspect – the interpretation of PRO is not exhaustively, but only partially determined by the antecedent, see (13).

(13)  
a. Peter\(_i\) wants PRO\(_{i+}\) to meet soon.

b. Mary\(_i\) hopes PRO\(_{i+}\) to go to the cinema.

c. The chair\(_i\) preferred PRO\(_{i+}\) to gather in the conference room.

The predicates in (13) are PC predicates, i.e. they allow a partial control reading. In (13a), the meeting event necessarily involves Peter but at least one other entity which is usually determined contextually. In (13b), the data can be exhaustively interpreted, however, a PC reading is available as well. In (13c) a PC reading is dominant. That Peter in (13a) partially determiners the interpretation of PRO can be seen by the data in (14).

(14) * Peter\(_i\) wants PRO\(_{i+}\) to meet soon [without him\(_i\)].

A pronoun (him) is not licensed in (14). This can be easily explained if this results from a Principle B effect. The pronoun seems to be bound by Peter, however, overtly Peter is outside the binding domain. Thus, we can conclude that Peter is indeed a part of PRO in the non-finite clause, therefore part of the binding domain binding the pronoun.

There is an extensive discussion in the literature on how to treat PC data (Landau 2000, 2008, 2015, 2016b; Boeckx, Hornstein and Nunes 2010b; Sheehan 2012, 2014a, 2014b; Pearson 2016; Pitteroff et. al. 2017) as the data pose great challenges for theories assuming strict identity between controller and controllee. For the remainder of this thesis, PC will only be addressed when it is relevant for different case phenomena; however, apart from this, the topic of PC will not play a significant role in this thesis and will therefore not be addressed.

NOC is characterized as having either a non-local antecedent (long distance control) or no antecedent at all (arbitrary control).\(^7\) Examples for these two types are given in (15) and (16) respectively.

(15) We\(_i\) thought that it would help Mary\(_j\) [PRO\(_{ij}\) to expose herself/ourselves].

(Landau 2013: 38)

\(^7\) Moreover, it allows both, a de se and de re reading of PRO as well as sloppy and strict readings (Landau 2000: 31).
To be nice is PRO\textsubscript{arb} to be stupid.\(\) 

In (15), the antecedent \textit{we} may control PRO across a phrase boundary. However, this is an NOC signature, as certain behaviours of OC are not detectable in this example (see fn. 6). In (16), we have arbitrary control: here there is no antecedent for PRO at all, so that PRO gets an arbitrary interpretation. The sentence thus reads as follows: \textit{it is stupid to be nice for anyone or one is stupid if one is nice}. In consequence, we are not talking about a specific person, i.e. a specific antecedent, but the sentence is true for anyone in this situation.

This is a simplified picture of the phenomenon of control; there are many more different control constructions, like implicit control (van Urk 2013; Pitteroff and Schäfer 2017) or finite control (Terzi 1992; Rodrigues 2004) that display interesting and peculiar behaviour. These however will play no role in the investigation of this thesis.

In the next section, we will take a closer look at Landau’s (2015) newest theory of control, which we will use to derive the respective Polish control data.

2.2 The Two-Tiered Theory of Control (Landau 2015)

In this section, I will outline Landau’s (2015) most recent approach to control which he calls the Two-Tiered Theory of Control (TTTC). Understanding Landau’s model is crucial for this work, as I will attempt to derive the presented Polish control within the TTTC.

Landau starts off by reinstating the split of control verbs into EC and PC predicates. For Landau (2015) the distinction between EC/PC and their different selectional properties are crucial. However, in this thesis, it will be argued that the phenomenon under investigation is independent of such a split. That is, regardless of whether we have an EC or PC verb, we observe the same outcome when it comes to the case marking of an embedded adjective. Therefore, very little emphasis will be put on the EC/PC distinction. However, since the EC/PC split is reflected in the syntactic structure, I will present Landau’s complete line of thinking here.

Landau (2015) adds a new factor into the split of verbs into an EC or PC category, namely ‘whether the complement is selected by an attitude predicate or not’ (Landau 2015: 18). Landau proposes to redefine the split of EC/PC as a split between attitude and non-attitude contexts.
EC predicates select non-attitude context, whereas PC predicates select attitude context. The contrast is shown in (17) and (18), taken from Landau (2015: 19).

(17)  
a. Bill started to talk to Ralph.  \hspace{1cm} EC  
b. Bill started to talk to the new boss.

(18)  
a. Bill planned to meet Ralph soon.  \hspace{1cm} PC  
b. Bill planned to meet the new boss soon.

In (17), the control predicate selects for a non-attitude context, i.e. Bill’s epistemic or bouletic state is not relevant. Therefore, the data in (17a) can be rephrased as (17b) even if Bill is not aware that Ralph is actually his new boss. The same operation cannot be applied to attitude contexts as in (18). (18a) cannot easily be paraphrased as (18b); in order for (18b) to be true, Bill would need to know that Ralph is his new boss. That is, Bill’s bouletic state must be considered, which is not necessary for (17b).

The attitude/non-attitude distinction is then used to restate the EC/PC split. Exhaustive control is re-named predicative control, and PC is now called logophoric control. Let us investigate the one element the two structures, EC and PC, have in common, namely PRO. Landau (2015: 21-22) specifically claims that both structures, EC and PC, involve the same element PRO and their different behaviour should not be derived by imposing two different empty elements, as this would have very little explanatory value, but he rather assumes the same element with different interpretations arising from different syntactic configurations. Landau proposes to treat PRO as a reference variable (Sigurðsson 2008) or minimal pronoun (Kratzer 2009) with the definition in (19).

(19)  A MINIMAL PRONOUN
X is a minimal pronoun iff X = [D, uϕ]  \hspace{1cm} (Landau 2015: 23)

Depending on the respective structure X finds itself in, it will be realized as a reflexive pronoun, a bound lexical pronoun, a resumptive pronoun, a relative pronoun, pro or PRO. That is, PRO is no longer a distinct primitive element, but emerges as the realization of a more general element, namely a minimal pronoun. What all of these items, the realized elements of a minimal pronoun, have in common is that they obligatorily inherit the ϕ-features from its binder or

---

8 Attitude contexts are defined by being evaluated against the attitude holder’s bouletic or epistemic state, and not against facts from the real world. Non-attitude contexts are agnostic w.r.t the attitude holder’s state.

9 In this thesis, EC and PC will still be used and may be understood as predicative control and logophoric control respectively.
controller. In the following, I will concentrate on the cases of EC (predicative control) only. As I have stated before, this investigation of Polish control has nothing to add to the EC and PC split. Therefore, we will concentrate on examples of EC only as the respective differences between EC and PC seem to have no effect on the investigated phenomenon in this thesis.

2.2.1 Predicative Control (EC)

Recall, EC predicates are found in non-attitude contexts; that is contexts where the bouletic or epistemic state of the attitude holder is irrelevant. Landau (2015) proposes that predication is the underlying principle that enables the control relation. For predication, the two indispensable elements are a referential element and the predicate. In control, the former would be the controller, while the latter is the infinitival clause. This is special, as the predicate is not a lexical projection, but rather functional (TP, CP, or something more elaborate depending on the respective control theory), therefore we need a mechanism that enables the projection to act as the predicate. Landau proposes the notion of operator movement as $\lambda$-abstraction. The idea is that PRO may act as this operator. PRO moves from the infinitival TP into the functional projection that is selected by the control verb. Landau calls this projection FinP, however, he mentions that nothing crucial rests upon the label Fin.\(^{10}\) Fin attracts a nominal operator to its specifier. Following the Minimal Link Condition, PRO is attracted to Spec,FinP having a D-feature.\(^{11}\) FinP is then merged into a predicate. This FinP is then merged as the complement of the control verb and predication may be established between controller and FinP. Let us illustrate the complete derivation via the example in (20).

(20)  
\begin{align*}
a. & \text{Mary began to paint the wall.} \\ b. & [\text{TP Mary} [\text{vp Mary} [\text{vp began} [\text{FinP PRO} [\text{TP PRO} [\text{vp PRO} paint the wall]]]]]]
\end{align*}

In the infinitival clause PRO (or the minimal pronoun) is merged as the external argument of to paint. We have predication here between two lexical projections (namely PRO and the wall). PRO moves up to Spec,TP checking the EPP. FinP is merged and as it has an uninterpretable D-feature pulls PRO into its specifier.\(^{12}\) As this step constitutes operator movement, FinP is now a predicate. FinP is merged as the complement of the control verb to begin. Predication is established between Mary and the FinP and the control relation is thus created. Due to the syntactic predication process, Mary and PRO agree in phi-features. Landau (2015: 46-53)

---

\(^{10}\) Landau chooses Fin to distinguish it from C which is reserved for logophoric control.

\(^{11}\) At this point of the derivation, there would be a minimal pronoun and not PRO per se. For convenience, I will continue to refer to this element as PRO.

\(^{12}\) Landau (2015) rejects the possibility that Fin might have a [+pred]/[+Op] feature but that it is a [d]-feature that is responsible for PRO moving to Spec,FinP.
assumes that agreement happens at PF, that is, the relations have to be established in the syntax (e.g. via predication), and then at PF the respective morphology is inserted. The lower copy of PRO then gets its phi-features valued by the virtue of movement, see (21) for an illustration.

(21) Phi-agreement in predicative control

\[
\begin{array}{c}
\text{by predication} \\
\text{by movement}
\end{array}
\]

[John_{3SG,M} managed-v [FinP PRO_{[\phi; 3SG,M]-1} Fin [TP PRO_{[\phi; 3SG,M]-1} to stay healthy]]]

(Landau 2015: 48)

The structure for object control is a bit more elaborate. Landau (2015) follows den Dikken (2006) in introducing an RP into this structure. RP (standing for Relator Phrase) introduces the (object) controller and being a functional projection can establish predication in the same fashion as vP can in the case of subject control; see (22) for an example and derivation, taken from Landau (2015: 29).

(22) a. John forced Bill to stay home.

b. \[
\begin{array}{c}
\text{TP} \\
\text{John} \\
\text{T'}
\end{array}
\]

\[
\begin{array}{c}
\text{T} \\
\text{vP} \\
\text{John} \\
\text{v'}
\end{array}
\]

\[
\begin{array}{c}
\text{v} \\
\text{VP} \\
\text{force} \\
\text{RP} \\
\text{Bill} \\
\text{R'} \\
\text{Rel} \\
\text{FinP} \\
\text{PRO}_{3} \\
\text{Fin'}
\end{array}
\]

\[
\begin{array}{c}
\text{Fin}_{[\alpha D]} \\
\text{TP} \\
{\{D, \phi:\} = PRO}_{3} \\
\text{T'}
\end{array}
\]

\[
\begin{array}{c}
\text{to} \\
\text{vP} \\
\text{\triangle}
\end{array}
\]

\text{(37)}

\text{to stay healthy}
As one can see, the only difference to (20) is that the controller is introduced by Rel, and not by little v, where also predication is established. By extension, syntactic predication makes sure that these two elements agree at PF.

When deriving control constructions, we will make use of Landau’s model. As stated before, the syntax of PC predicates differs; however, it will be argued that the case phenomena observed in Polish control are independent of the EC/PC split and therefore, we will only concentrate on the cases of EC.
3. Polish

3.1 Some Background on Polish

3.1.1 General Characteristics

Polish, an Indo-European language, belongs to the family of Slavic languages, more precisely to the West Slavic languages, being thus closely related to Czech, Slovak, Sorbian, Kashubian, Slovincian, and Polabian, with the latter two being extinct members of the family. The broader family includes the East Slavic languages, which include Ukrainian and Russian, and the South Slavic branch which includes Slovenian and Serbo-Croatian.

Contemporary Polish is characterized as an SVO language (1), head-initial (2), pro-drop (3), and synthetic (4). Due to the high level of inflection, constituents may be freely moved around in the syntax creating other possibilities than SVO. Note however, that these orders are already marked (5). In addition, Polish does not have a determiner system, but may employ demonstrative pronouns (6).

(1) a. Piotr kocha Kasię.
    Peter.NOM loves Kate-ACC
    ‘Peter loves Kate.’

   b. Ja wiem, że Piotr kocha Kasię.
    I.NOM know that Peter.NOM loves Kate-ACC
    ‘I know that Peter loves Kate.’

(2) a. [VP kochać Marię]
    love-INF Mary-ACC
    ‘to love Mary’

   b. [PP obok ciebie]
    next you.GEN
    ‘next to you’

---

1 This is not an uncontroversial claim. Usually, with neutral intonation, the preverbal position is interpreted as the subject, and the postverbal as the object when case syncretism is involved (see also Fisiak et al. 1978; Willim 1989; Błaszczak 2001a; Witkoś 2003). It has been argued that word order is not completely free but plays a role for the interpretation (Grzegorek 1984). The interested reader is referred to Derwojedowa (1998) and Kubinski (1999) for a thorough analysis of Polish word order.

2 There is some discussion on how Polish (and related Slavic languages) may express definiteness and specificity overtly. The details are not of great importance here, the interested reader is referred to the respective literature (Szwedek 1974, Topolińska 1981, Weiss 1982, Błaszczak 2001a).
(3) a. (Ja) kupi-l-em samochód.
   I.NOM buy-PAST PRT.M-1SG car.ACC
   ‘I bought a car.’

   b. Wie-my, że wyszed-l.
   know-1PL that left-PAST PRT.SG.M
   ‘We know that he left.’

(4) a. z- robi- ła - by
   PRF-do- PAST PRT.SG.F-COND
   ‘she would have done’

   b. z- robi- ło-Ø - by
   PRF-do- PAST PRT.SG.N-COND
   ‘it would have done’

   Peter-NOM give-PAST PRT.SG.M Kate-DAT book-ACC
   ‘Peter gave Kate a book.’

   d. Kas-i Piotr książk-ę da-l.
   e. Książk-ę Kas-i Piotr da-l.
   g. Książk-ę Kas-i da-l Piotr.
   h. Piotr Kas-i da-l książk-ę.
   i. Piotr książk-ę da-l Kas-i.
   j. Piotr Kas-i książk-ę da-l.

   Mother.NOM sees neighbour-ACC
   ‘A/The mother sees a/the neighbour.’

---

3 I follow Błaszczyk (2001a) and gloss the l-participle not as PAST, but as PAST PARTICIPLE. The reason for this is that this participle also appears in certain future constructions. Dornisch (1997:185) argues that the l-participle conveys gender information, whereas the inflectional ending carries information on person and number.
b. Matka widzi tego sąsiad-a.
Mother.NOM sees that.ACC neighbour-ACC
‘A/The mother sees that neighbour.’

3.1.2 Nouns

Nouns come in three genders: masculine, feminine, and neuter. The gender of a noun is generally visible on the noun’s ending – if the noun ends in the vowel a, it is feminine, in an o it is neuter, and if it ends in a consonant, it is masculine. It has actually been argued in the literature that Polish might have more than three genders (Mańczak 1956; Czuba 1997). The core for this claim lies in the different morphological and syntactic behaviour of some masculine nouns, that is why it has been proposed to split masculine nouns into two groups – animate and inanimate nouns (Przepiórkowski 1999). The distinction is shown in (7) and (8).

(7) a. Piotr widzi Kasi-ę.
Peter.NOM sees Kate-ACC
‘Peter sees Kate.’

b. Kate widzi Piotr-a.
Kate.NOM sees Peter-ACC
‘Kate sees Peter.’

c. dom Piotr-a
house.NOM Peter-GEN
‘Peter’s house’

(8) a. Stół był w pokoj-u.
table.NOM was in room-LOC
‘The table was in the room.’

b. Kate widzi stół.
Kate.NOM sees table.ACC
‘Kate sees the table.’

4 This is a very simplified picture. There are nouns ending in a consonant that are feminine (krew ‘blood’) or that end with ie and are neuter (cycie ‘life’). There are also nouns ending in the vowel a that are masculine (artysta – ‘artist’, pianysta – ‘pianist’, poeta ‘poet’).
c. Kate nie widzi stól-u.

Kate.NOM NEG sees table-GEN

‘Kate sees the table.’

In (7), we see the case of a masculine animate noun, Piotr ‘Peter’. There, accusative and genitive endings are syncretic (7b) and (7c), while nominative is different from the two (7a).

In (8), the masculine noun stół ‘table’ is inanimate; there we have syncretism between nominative and accusative, see (8a) and (8b), but genitive differs from the other two case forms, see (8c).

Let us look more closely into the important notion of case, as it is one core aspect of our study here. Contemporary Polish has retained all seven cases from the Old Polish period and uses them productively. Their morphological marking depends on the gender and number features of the noun. Here are some examples of case declension in the Polish nominal system.

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINATIVE</td>
<td>chłopak</td>
<td>chłopaki</td>
</tr>
<tr>
<td>GENITIVE</td>
<td>chłopaka</td>
<td>chłopaków</td>
</tr>
<tr>
<td>DATIVE</td>
<td>chłopaku</td>
<td>chłopakom</td>
</tr>
<tr>
<td>ACCUSATIVE</td>
<td>chłopaka</td>
<td>chłopaków</td>
</tr>
<tr>
<td>INSTRUMENTAL</td>
<td>chłopakiem</td>
<td>chłopakami</td>
</tr>
<tr>
<td>LOCATIVE</td>
<td>chłopaku</td>
<td>chłopakach</td>
</tr>
<tr>
<td>VOCATIVE</td>
<td>chłopaku</td>
<td>chłopaki</td>
</tr>
</tbody>
</table>

Table 1: Declension of chłopak ‘boy’ (masculine virile)

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINATIVE</td>
<td>stół</td>
<td>stoły</td>
</tr>
<tr>
<td>GENITIVE</td>
<td>stołu</td>
<td>stólów</td>
</tr>
<tr>
<td>DATIVE</td>
<td>stołu</td>
<td>stolom</td>
</tr>
<tr>
<td>ACCUSATIVE</td>
<td>stół</td>
<td>stoły</td>
</tr>
<tr>
<td>INSTRUMENTAL</td>
<td>stolem</td>
<td>stoami</td>
</tr>
<tr>
<td>LOCATIVE</td>
<td>stole</td>
<td>stolach</td>
</tr>
<tr>
<td>VOCATIVE</td>
<td>stole</td>
<td>stoły</td>
</tr>
</tbody>
</table>

Table 2: Declension of stół ‘table’ (masculine non-virile)

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOMINATIVE</td>
<td>matka</td>
<td>matki</td>
</tr>
<tr>
<td>GENITIVE</td>
<td>matki</td>
<td>matek</td>
</tr>
<tr>
<td>DATIVE</td>
<td>matce</td>
<td>matkom</td>
</tr>
<tr>
<td>ACCUSATIVE</td>
<td>matkę</td>
<td>matki</td>
</tr>
<tr>
<td>INSTRUMENTAL</td>
<td>matką</td>
<td>matkami</td>
</tr>
<tr>
<td>LOCATIVE</td>
<td>matce</td>
<td>matkach</td>
</tr>
<tr>
<td>VOCATIVE</td>
<td>matko</td>
<td>matki</td>
</tr>
</tbody>
</table>

Table 3: Declension of matka ‘mother’ (feminine)
Noun phrases have to appear with case marking, however semantically this case marking is unpredictable. Some verbs assign accusative, others genitive or instrumental. There have been attempts to link semantics with certain case morphemes, which could derive their distribution (Jakobson 1971). The idea is that each case comes with a core meaning which should be available in all languages that employ this case, and it addition, it can add certain features and meanings to this case (Wierzbicka 1986). However, this is not unproblematic, as there are scenarios where the same meaning can be expressed by the different cases (9). In addition, there are cases where one case can convey very different meanings (10).

(9) a. pro kni-g-u
    about book-ACC

    b. o kni-g-ie
    about book-LOC

‘about (a/the) book’  (Przepiórkowski 1999: 46)

(10) On el oktr-u reben-om / pud-am/ lozk-oj / dorog-oj /
He.NOM ate caviar-ACC child-INST / pood-INST / spoon-INST / road-INST /
utr-om / gresn-ym
morning-INST / sinful-INST
‘He ate caviar as a child / by the pool / with a spoon / on the road / in the morning / to our regret.’  (Przepiórkowski 1999: 46)

In this work, the idea of semantic case (see also Babby 1986) will not be pursued, due to a lot of morphological evidence showing that a certain case cannot really be decomposed on semantic grounds (see also Baker 2015).
3.1.3 Adjectives

Adjectives in Polish agree with the noun they modify in number, gender, and case. They can appear in attributive and predicative position, and surface in both positions with the same morphology, i.e. they always agree in phi-features and case (11).5

beautiful-3SG.F.NOM girl-NOM sees new-ACC.SG neighbour-ACC
‘The beautiful girl sees the new neighbour.’

b. Dzieczyn-a jest ładn-a /*-y.
girl-NOM is beautiful-2SG.F.NOM / 2SG.M.NOM
‘The girl is beautiful.’

The full paradigm is shown in Table 5, taken from Lewicki (2012).

<table>
<thead>
<tr>
<th>SINGULAR</th>
<th>PLURAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case</td>
<td>Masculine</td>
</tr>
<tr>
<td>Nom</td>
<td>mądr-y</td>
</tr>
<tr>
<td>Gen</td>
<td>mądr-ego</td>
</tr>
<tr>
<td>Dat</td>
<td>mądr-emu</td>
</tr>
<tr>
<td>Acc</td>
<td>=G/N⁶</td>
</tr>
<tr>
<td>Inst</td>
<td>mądr-yym</td>
</tr>
<tr>
<td>Loc</td>
<td>mądr-yym</td>
</tr>
<tr>
<td>Voc</td>
<td>mądr-y</td>
</tr>
</tbody>
</table>

Table 5: Case declension for Polish adjectives, mądry (smart, intelligent)

As can be seen in Table 5, there is a lot of syncretism in Polish. The instrumental form of masculine singular is the same as for neuter, and also matches the locative marking of both genders. Vocative is syncretic with nominative in all cases. While these syncretic form pose interesting questions and warrant more research, this thesis will not be concerned with case syncretism (see Przepiórkowski 1999 for a thorough study of this phenomenon). In addition, very little will be said about the locative and the vocative. The former is a lexical case that only appears with a corresponding preposition. The latter is a form of address and is probably subject to semantics or pragmatics rather than syntax.

5 I will gloss over the issue of so-called short adjectives. There are only a handful of short adjectives left in contemporary Polish; interestingly they only seem to be able to appear in predicative position.
6 When the corresponding noun is masculine virile, the adjective’s accusative marking mirrors genitive morphology. When the noun is masculine non-virile, the morphology on the adjective matches nominative.
3.1.4 Verbs

In this subsection, I will give a brief overview of the verbal system in Polish. Verbs agree with the subject in person, number, and in gender. Polish has two tenses, present and past.\(^7\) Complex tenses like the past perfect (12), are no longer productively used in contemporary Polish.

(12) \[\text{pisa -l -em by-ł} \]
\[\text{wrote-PAST PRT.M-1SG be- PAST PRT.SG.M} \]
\[\text{‘I had been writing.’} \quad \text{(Rothstein 1993: 711)}\]

Examples like (12) are rare in contemporary Polish as the simple past tense has taken over the function of the past perfect (Fisiak et al. 1978: 106). Migdalski (2006: 49) mentions that while this form is gone from contemporary Polish, it may be found in stylistic environments.

Table 6: Paradigm of gotów ‘to cook’ (imperfective verb)

<table>
<thead>
<tr>
<th>SG.</th>
<th>PERSON</th>
<th>PRESENT TENSE</th>
<th>PAST TENSE (M)</th>
<th>PAST TENSE (F)</th>
<th>FUTURE(^8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ja ‘I’</td>
<td>gotuję</td>
<td>gotowałem</td>
<td>gotowałam</td>
<td>będę gotować</td>
<td></td>
</tr>
<tr>
<td>ty ‘you’</td>
<td>gotujesz</td>
<td>gotowaleś</td>
<td>gotowałaś</td>
<td>będziesz gotować</td>
<td></td>
</tr>
<tr>
<td>on ‘he’</td>
<td>gotuje</td>
<td>gotował</td>
<td>gotowała</td>
<td>będzie gotować</td>
<td></td>
</tr>
<tr>
<td>ona ‘she’</td>
<td>gotuje</td>
<td>gotowala</td>
<td></td>
<td>będzie gotować</td>
<td></td>
</tr>
<tr>
<td>ono ‘it’</td>
<td>gotuje</td>
<td>gotowało</td>
<td></td>
<td>będzie gotować</td>
<td></td>
</tr>
<tr>
<td>Pl.</td>
<td></td>
<td>MASCULINE-HUMAN (VIRILE)</td>
<td>NON MASCULINE-HUMAN (NON-VIRILE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>my ‘we’</td>
<td>gotujemy</td>
<td>gotowaliśmy</td>
<td>gotowałyśmy</td>
<td>będziemy gotować</td>
<td></td>
</tr>
<tr>
<td>wy ‘you’</td>
<td>gotujecie</td>
<td>gotowaliście</td>
<td>gotowałyście</td>
<td>będzicie gotować</td>
<td></td>
</tr>
<tr>
<td>oni ‘they’</td>
<td>gotują</td>
<td>gotowali</td>
<td></td>
<td>będą gotować</td>
<td></td>
</tr>
<tr>
<td>one ‘they (only women)’</td>
<td>gotują</td>
<td></td>
<td>gotowały</td>
<td>będą gotować</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Paradigm of gotów ‘to cook’ (imperfective verb)

---

\(7\) I follow Błaszczak et al. (2014) in assuming that future tense is morphologically present tense, that is, future is not a separate tense form in Polish, but is rather built from present tense forms. Błaszczak et al. (2014) provide diacronic evidence for their claims.

\(8\) Polish can construct two different types of future forms, simple future and the periphrastic future. The former is formed with the present tense form of a perfective verb. For the latter, we have two options: either one takes an infinitive complement to the auxiliary będzie (see Table 6) or one combines the auxiliary with an l-participle, see (i); see Błaszczak et al. (2014) for discussion and data.

(i) \[\text{Ja będę gotowa-I} \]
\[\text{I.NOM be.AUX.1SG cook-PAST PRT.SG.M} \]
\[\text{‘I will cook.’} \]

For reasons of space, I will only represent the future form with the infinitival complement in Table 6.
From Table 6, we see that the difference between masculine, feminine, and neuter is only important in the singular past tense form. In the plural, it makes a difference whether we are talking about a group of just masculine-human nouns (virile), or not (non-virile).

Polish distinguishes between perfective and imperfective verbs, that is to say, Polish has a rich aspectual system. Table 6 shows the paradigm for an imperfective verb, Table 7 displays the paradigm for the same verb, only in the perfective form.

<table>
<thead>
<tr>
<th>Sg.</th>
<th>Person</th>
<th>Present Tense / Future</th>
<th>Past Tense (M)</th>
<th>Past Tense (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ja  ‘I’</td>
<td>ugotuję</td>
<td>ugotowałem</td>
<td>ugotowałam</td>
<td></td>
</tr>
<tr>
<td>ty ‘you’</td>
<td>ugotujesz</td>
<td>ugotowales</td>
<td>ugotowalaś</td>
<td></td>
</tr>
<tr>
<td>on ‘he’</td>
<td>ugotuje</td>
<td>ugotował</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ona ‘she’</td>
<td>ugotuje</td>
<td>ugotowala</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ono ‘it’</td>
<td>ugotuje</td>
<td>ugotowalo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pl.</td>
<td></td>
<td>Masculine-Human</td>
<td>Non Masculine-Human</td>
<td></td>
</tr>
<tr>
<td>my ‘we’</td>
<td>ugotujemy</td>
<td>ugotowaliśmy</td>
<td>ugotowalyśmy</td>
<td></td>
</tr>
<tr>
<td>wy ‘you’</td>
<td>ugotujecie</td>
<td>ugotowaliście</td>
<td>ugotowalyście</td>
<td></td>
</tr>
<tr>
<td>oni ‘they’</td>
<td>ugotują</td>
<td>ugotowali</td>
<td></td>
<td></td>
</tr>
<tr>
<td>one ‘they (only women)’</td>
<td>ugotująja</td>
<td>ugotowaly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Paradigm of ugotować ‘to cook’ (perfective verb)

In contrast to imperfective verbs, perfective ones cannot form the future tense with the auxiliary być ‘to be.’ Instead, present tense perfective serve as future forms. It should be noted that the perfective form of a verb can be formed using different morphological processes; usually a perfective verb is created by the attachment of a prefix (jechać – pojechać ‘to drive’, pisać – napisać ‘to write’, robić – zrobić ‘to do’), but it can also involve internal change (zamawiać – zamówić ‘to order’, wstawać- wstać ‘to get up’) or suppletion (brać – wziąć ‘to take’, mówić – powiedzieć ‘to say’).⁹

In addition to tense and aspect, verbs also inflect for mood (see Table 8).

---

⁹ The situation is simplified here. Please consult Młynarczyk (2004) and Błaszczak et. al. (2014) for a more thorough discussion of forming perfectives in Polish.
Table 8: Mood Paradigm for gotować ‘to cook’

<table>
<thead>
<tr>
<th>SG.</th>
<th>PERSON</th>
<th>CONDITIONAL (VIRILE)</th>
<th>CONDITIONAL (NON-VIRILE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ja ‘I’</td>
<td>gotowalbym</td>
<td>gotowałabym</td>
</tr>
<tr>
<td></td>
<td>ty ‘you’</td>
<td>gotowalbys</td>
<td>gotowalbys</td>
</tr>
<tr>
<td></td>
<td>on ‘he’</td>
<td>gotowalby</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ona ‘she’</td>
<td></td>
<td>gotowałaby</td>
</tr>
<tr>
<td></td>
<td>ono ‘it’</td>
<td></td>
<td>gotowałoby</td>
</tr>
<tr>
<td>PL.</td>
<td>my ‘we’</td>
<td>gotowaliśbymy</td>
<td>gotowałyśbymy</td>
</tr>
<tr>
<td></td>
<td>wy ‘you’</td>
<td>gotowaliśbyście</td>
<td>gotowałyśbyście</td>
</tr>
<tr>
<td></td>
<td>oni ‘they’</td>
<td></td>
<td>gotowaliby</td>
</tr>
<tr>
<td></td>
<td>one ‘they (only women)’</td>
<td></td>
<td>gotowałyby</td>
</tr>
</tbody>
</table>

Mood morphology falls into two classes, namely virile vs. non-virile. The former concerns masculine-human entities, whereas the latter corresponds to the elsewhere case.

Having now concluded a brief glimpse into the grammar of Polish, let us now turn to the pivotal control data.

3.2 Control in Polish

Control in Polish has been given some attention in the literature with diverging proposals (Przepiórkowski 2004a; Bondaruk 2004, 2007; Przepiórkowski and Rosen 2005; Witkoś 2007, 2008, 2010a, 2010b; Slodowicz 2008). In this section, I will present the Polish control data which are under investigation in this thesis. In the next chapter, I will present three very different analyses that have been proposed for these data: Przepiórkowski (1999, 2004a) and Przepiórkowski and Rosen (2005) propose an analysis within HPSG. Bondaruk (2004) offers a generative approach using Landau (2000)’s Agree model, and Witkoś (2008, 2010a, 2010b), who also offers a generative approach, siding with Hornstein’s (1999) model of movement and control.

During my research on these constructions, I conducted several formal and informal studies with native speakers. I will present the results of one of the formal studies in the following sections. In this study, participants were asked to rate a sentence based on how natural it sounds. They could choose between three ratings: Good, Bad, and something in between. The latter rating was explained as serving as a ‘not good, but also not bad’ rating. The survey was presented in writing, and interspersed with some fillers. Twelve native speakers participated in this study. The participants were of all ages; some of them lived in Poland, some lived in Germany. I will report the results of this study in the next sections when presenting the respective data.
3.2.1 Simple Obligatory Subject Control

Polish is a language that displays a large array of control constructions. (13) shows a typical EC structure in Polish.

\[(13)\quad \text{Jan próbuje grać na pianin-i-e.} \quad \text{EC} \]
\[
\text{Jan.NOM tries play.NINF on piano-LOC}
\]
\[\text{‘Jan tries to play the piano.’} \]

The data in (13) can in principle be dealt with any theory of control that is currently on the market, and will not shed any more light onto the nature of control. However, we can expand our sample set of control and include the data in (14), which show interesting case properties not available in English and other languages.

\[(14)\]
\[
\begin{align*}
a. & \quad \text{Jan próbuje być mił-y / mił-ym.} \\
& \quad \text{Jan.NOM tries be.NINF nice-NOM / nice-INST} \\
& \quad \text{‘Jan tries to be nice.’} \\

b. & \quad \text{Piotr musi być mił-y / mił-ym.} \\
& \quad \text{Peter.NOM must be.NINF nice-NOM / nice-INST} \\
& \quad \text{‘Peter must be nice.’} \\

c. & \quad \text{Piotr zaczął być mił-y / mił-ym.} \\
& \quad \text{Peter.NOM started be.NINF nice-NOM / nice-INST} \\
& \quad \text{‘Peter started to be nice.’}^{10}
\end{align*}
\]

<table>
<thead>
<tr>
<th>Case</th>
<th>Nominative</th>
<th>Instrumental</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 9: Results simple subject control\(^{11}^{12}\)

The data in (14) show an OC structure with a case-bearing predicative adjective, here *miły* ‘nice’. The adjective may surface with nominative case morphology, thus matching the case of its controller *Jan*. In addition, it may appear in instrumental case.\(^{13}\) An interesting

\(^{10}\) *Zacząć* ‘to begin’ can be classified as either a control or a raising verb.

\(^{11}\) Please note that one informant constantly judged the instrumental option in control as ungrammatical, even in cases where it is the only option. I suppose that there was some prescriptive influence in not accepting bare instrumental adjectives in the first place.

\(^{12}\) Results are reported for (14a).

\(^{13}\) Number and gender features match those of the controller. I will address this in more detail when presenting the analysis in part three of this thesis.
possibility that comes to mind is that maybe the split between agreeing nominative case and instrumental case correlates with the EC/PC split discussed in the previous chapter. However, as tempting as this idea is, it cannot withstand empirical evidence. If we only look at verbs that license PC readings, the picture is exactly the same one as with EC data, see (15).

(15)   a. Piotr planował być trzeźw-y / trzeźw-ym.
       Peter.NOM planned be.INF sober.NOM / sober-INST
       ‘Peter planned to be sober.’

   b. Piotr nienawidzić być chor-y / chor-ym.
       Peter.NOM hates be.INF sick.NOM / sick-INST
       ‘Peter hates to be sick.’

In (15), we have a sample of PC predicates, namely planować ‘to plan’ and nienawidzić ‘to hate’. Despite being projected under PC predicates, the two different case markings on the adjective have no bearing on the EC/PC distinction. That is, instrumental does not trigger or force PC readings, but is rather available in both constructions. I will argue in this thesis that the choice of case is already determined inside the non-finite clause and has therefore no direct bearing on the control relation (see also Lindert 2017b). Thus, it is actually expected that the two cases do not pattern with the EC/PC split. This is not to say that Polish does not have PC (pace Słodowic 2008),

the point is simply that the case properties of adjectives in control under investigation here do not indicate such a split.

It should be mentioned that the data in (14) and (15) with the instrumental case are not judged equally good by all native speakers. Bondaruk (2004) judges them all as ungrammatical. Witkoś (2008, 2010a, 2010b) admits optionality, but states that it is severely restricted and that it is the agreeing, i.e. nominative case that is clearly better. Przepiórkowski (2004a) allows for variation, however, he prefers nominative case as well. As can be seen in Table 9 though, the instrumental option is pretty much accepted amongst native speakers in structures like (14).

3.2.2 Simple Obligatory Object Control

Object control crucially differs from subject control in Polish as it does not allow for a variation in case, see (16).

14 Please consult Bondaruk (2004) for a lot of Polish data showing PC.
In (16), the object of the finite clause, *Tom*, is marked with dative case and controls PRO. However, *Tom* may not share its dative case feature with the adjective; the latter must appear in instrumental case.

One possibility for the blocking of dative case transmission would be to assume that lexical case cannot easily be transmitted to associated elements like adjectives. Dative case qualifies as a lexical case in Polish, which will be thoroughly demonstrated in section 5.2. It has been noted for languages like Russian (Landau 2008), Czech (Przepiórkowski and Rosen 2005), and Icelandic (Sigurðsson 2008) that lexical case must not be transmitted to associated elements like adjectives. However, this is not an option for Polish, as the case pattern does not change when we substitute the matrix verb with a verb that assigns structural accusative to its object, see (17).

In (17), the verb *uczyć* ‘to teach’ assigns structural accusative to its complement *Tom*. However, this case cannot be transmitted to the adjective either, only instrumental case is an option. Transmission of structural case in control is possible in Russian, Czech, and Icelandic, though.

---

15 The data for Icelandic is more complex. Lexical case may not be transmitted to adjectives; however, it may be transmitted to other elements like quantifiers.
In the literature, the object control data led to the conclusion that the instrumental case might be some kind of default case in Polish.\textsuperscript{16} If we consider that the CP in (24) and (25) block syntactic operations from the finite into the non-finite clause, we could say that, as a last resort, the adjective is assigned default case post-syntactically. Witkoś (2008, 2010a, 2010b) and Bondaruk (2004) explicitly argue for this option, and Przepiórkowski (2004a) implicitly follows this intuition as well by stating that whenever case agreement between subject and predicate is possible, the instrumental option is made available by the syntax as well.\textsuperscript{17} The instrumental case option is also available in NOC constructions, as will be shown in the next section.

\subsection*{3.2.3 Non-Obligatory Control}

Examples of non-obligatory control and case-marked adjectives in Polish are presented in (18) and (19) below.

\begin{equation}
(18) \text{Być mil-ym /*mil-y to być głup-im /*głup-i.}\nonumber \\
\text{be.INF nice-INST/nice-NOM TO be.INF stupid-INST/stupid-NOM}\nonumber \\
\text{‘To be nice is to be stupid.’} \quad \text{(Przepiórkowski 2004a)}
\end{equation}

\begin{equation}
(19) \text{Być pijan-ym /*pijan-y to być głup-im /*głup-i.}\nonumber \\
\text{be.INF drunk-INST/drunk-NOM TO be.INF stupid-INST/stupid-NOM}\nonumber \\
\text{‘To be drunk is to be stupid.’}
\end{equation}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
 & Ok & ? & * \\
\hline
Nominative & 0 & 2 & 10 \\
Instrumental & 11 & 0 & 1 \\
\hline
\end{tabular}
\caption{Results arbitrary control (for (18))}
\end{table}

The standard explanation for the instrumental case marking on the predicate (in NOC as well as object control) is that it constitutes a default case that arises when no nominative controller is available (Bondaruk 2004; Witkoś 2008). At first glance, this looks like the right conclusion, but it is not without problems. In section 5.4 I will demonstrate that the instrumental case is not the default case in Polish. I will furthermore show that the instrumental option is much more restricted for adjectives in Polish compared to other Slavic languages like Russian. In addition, its productive appearance in subject control casts

\textsuperscript{16} NOC data also seem to support this idea, as only instrumental case adjectives are allowed there.

\textsuperscript{17} Przepiórkowski (1999) introduces a rule called the \textsc{Predicative Case (Non-) Agreement} which states that ‘the complement must either agree in case with its subject, or occur in the instrumental case’ (Przepiórkowski 1999: 216). He further mentions that nouns usually appear in instrumental case, while adjectives prefer agreement in case.
additional doubt on the default case approach; as nominative case is available in the syntax there, an additional default instrumental as last resort would be unexpected.

3.2.4 Control with Overt Complementizers – OC or NOC?

Some Polish control verbs (optionally) select for an overt C, either for the complementizer żeby ‘so that’ introducing declarative sentences or the complementizer jak ‘how’, introducing interrogative sentences.\(^{18}\) It has been argued that structures with żeby ‘so that’ fall into the class of OC (Bondaruk 2004, Witkoś 2008). In addition, Bondaruk (2004) concludes that control structures with jak ‘how’ are OC as well. In the following subsections, I will present the data in addition to applying diagnostics for OC to see whether these two structures fall into the class of OC. It will be shown that structures with the complementizer żeby ‘so that’ do indeed show the OC signature, while the structures with jak ‘how’ actually show signs of the NOC signature.

3.2.4.1 The Complementizer żeby ‘so that’

The complementizer żeby ‘so that’ can be found with control verbs such as marzyćć ‘to dream’ (20a), and modlić się ‘to pray’ (20b).

(20)  
a. Piotr marzy, żeby być bogaty / bogaty-ym.  
Peter.NOM dreams so-that be.INF rich-NOM / rich-INST  
‘Peter dreams to be rich.’  
(Witkoś 2008: 265)

b. Maria modli się, żeby być kochana / kochaną.  
Mary.NOM prays REFL so-that be.INF loved-NOM / loved-INST  
‘Maria prays to be loved.’  
(Witkoś 2008: 265)

In (20), the adjective may appear either with nominative case, thus matching the case of the controller, or with instrumental case.\(^{19}\) One question that arises is whether the data in (20) constitute OC or NOC constructions. The diagnostics for the OC/NOC split include having a local antecedent, a sloppy reading under VP ellipsis, and only allowing a de se interpretation (see (21)).

\(^{18}\) In fact, some verbs require żeby ‘so that’ to introduce non-finite complements, some take it optionally and some disallow it; see Citko (2012: 4-5) for an overview on which verbs fall into which class.

\(^{19}\) While it is generally accepted in the literature that żeby complements allow for both case options, agreeing and instrumental, there are some native speakers who do not allow case agreeing adjectives when an overt C is involved. My analysis aims to derive both case options as well as to explain why some speakers might not like nominative case in (20).
(21) a. Piotr₁ marzy, żeby PRO₁/²arb być bogat-y / bogat-ym.
Peter.NOM dreams so-that be.INF rich-NOM / rich-INST
‘Peter dreams to be rich.’

b. Jan₁ twierdzi, że Piotr₂ marzy, żeby PRO₁/²arb
Jan.NOM claims that Peter.NOM dreams so-that
być bogat-y / bogat-ym.
be.INF rich-NOM / rich-INST
‘Jan claims that Peter dreams of being rich.’

c. Piotr marzy, żeby PRO₁/²arb
Peter.NOM dreams so-that
być bogat-y / bogat-ym i Jan też.
be.INF rich-NOM / rich-INST and Jan.NOM too
‘Peter dreams to be rich and so does Jan.’

d. Nieszczęsniński, marzy, żeby PRO₁ dostać medal.
unfortunate.NOM dreams so-that get.INF medal.ACC
‘The unfortunate dreams of getting a medal.’ (Bondaruk 2004: 216)

The data in (21a) show that PRO needs an antecedent; (21b) furthermore shows that this antecedent must be local, i.e. the infinitive containing PRO and the antecedent must be clause-mates. (21c) shows that PRO can only have a sloppy reading under ellipsis, i.e. the sentence means that Peter dreams of being rich, and Jan also dreams of being rich himself (sloppy reading) and not that Jan dreams of Peter being rich (strict reading). (21d) shows that PRO only has a de se interpretation, i.e. the subject must be aware of who he is. The sentence cannot have an interpretation where the unfortunate is not aware that he is the one getting the medal (de re reading). All the hallmark characteristics of OC are available in żeby constructions in Polish. Bondaruk (2004: 213-217) comes to the same conclusion when looking at the complements of żeby. However, two notes are in order here. Bondaruk (2004) is not concerned with the behaviour of predicative adjectives with żeby complements, and therefore her data does not include adjectives. In addition, she shows that not all constructions with żeby complements pass all the hallmark characteristics of OC. She refers to these verbs as class 1 control predicates. However, she comes to the conclusion that this does not mean that the respective constructions are NOC, but rather that these predicates in general allow obviation effects, and therefore an NOC reading may be expected due to this independent
characteristic. I follow her reasoning here and conclude that all żeby type control sentences do display the OC signature.

3.2.4.2 The Complementizer *jak* ‘how’

The complementizer *jak* ‘how’ introduces interrogative sentences, as can be seen in (22).

(22) Marek zastanawiał się, jak PRO się zachować  
Mark.NOM wondered REFL how REFL behave.INF  
wobec gości na przyjęciu.  
towards guests at party  
‘Mark wondered how to behave towards the guests at the party.’  
(Bondaruk 2004: 219)

Witkoś (2008) notices that *jak* complements do not allow case variations like żeby complements. Instead, they only allow instrumental adjectives, see (23).

(23) a. Maria nie wie jak być ?*piekn-a / piekn-a.  
Maria.NOM NEG knows how be.INF beautiful-NOM / beautiful-INST  
‘Maria does not know how to be beautiful.’  
(Witkoś 2008: 266)

b. Piotr pytał jak być *?uczciw-y / uczeń-y.  
Peter.NOM asked how be.INF honest-NOM / honest-INST  
‘Peter asked how to be honest.’  
(Witkoś 2008: 266)

The question is whether the *jak* data fall into the class of OC or NOC. Witkoś (2008) does not address this question, and Bondaruk (2004) concludes that they are OC as well, though not running all the necessary tests. It will be shown that the results rather suggest that *jak* complements are NOC.

(24) Piotr pytał, jak PRO₁/₂/₃ab być uczeń-ym i Jan₂ też.  
Peter.NOM asked how be.INF honest-INST and Jan.NOM too  
‘Peter asked how to be honest and Jan, too.’

In (24), a structure with VP ellipsis, a sloppy reading is available, i.e. Peter asked how to be honest, and Jan would also like to know how to be honest himself. However, a strict reading is also available, i.e. Jan asked for Peter how to be honest or how to be honest in general. While the first reading is the more dominant one, the second reading is also available. With żeby complements, the strict reading is completely out.
(25) Piotr₁ pytał, jak PRO₁/arb być uczciw-ym.
Peter.NOM asked how be-INF honest-INST
‘Peter asked how to be an honest one.’

In (25) we see that PRO may be controlled by Piotr ‘Peter’, the local controller. However, an arbitrary interpretation is also available with the reading that Peter wonders how to be honest in general / for anyone. This reading is not available in (26a).

(26) a. Maria₁ marzy, żeb PRO₁₁/₁₁ arb być bogat-ą / *bogat-ym.
Mary.NOM dreams so-that be-INF rich.INST.F / rich-INST.M
‘Mary dreams to be rich.’

b. Maria₁ pytała jak PRO₁ arb być uczciw-ą /?uczciw-ym.
Mary.NOM asked how be-INF honest-INSTR.F / honest-INSTR.M
‘Mary asked how to be honest.’

As discussed in section 3.1.3, Polish adjectives do not only agree in case, but also in gender and number. In (26a), we see that the corresponding adjective must appear in instrumental case and feminine gender, masculine gender is out. This is understandable, as the adjective refers to a feminine controller. In (26b), the adjective appears with feminine gender as well, but crucially it can also (marginally) appear with masculine gender. While in both variants (26a/26b), the feminine gender is clearly preferred, there is a difference in acceptability between the masculine adjective in (26a) and (26b). The possibility of masculine gender, generally the least marked gender, on the adjective in (26b) may arise from the fact that this is a structure that allows a NOC reading, i.e. a for anyone reading. Here, the adjective may not refer to Mary directly, but to anyone that is also concerned with the question of how to be honest. The same logic does not work for (26a), where a NOC reading is not available, and the adjective must refer to Mary. Thus, we can see that jak complements do not necessarily need an antecedent, a hallmark of NOC. The last test is the de se/de re reading split; the corresponding data is given in (27).

(27) Nieszczesnk,₁ wie, jak PRO₁ dostać medal.
unfortunate.NOM knows how get-INF medal.ACC
‘The unfortunate knows how to get a medal.’
In (27), a *de se* reading is available and also dominant. However, a *de re* reading is also there, i.e. the unfortunate does generally know how to get a medal, but he does not need to be aware that he is the one getting the medal.

The applied diagnostics in this subsection strongly suggest that structures with *jak* complements do display an NOC signature (*pace* Bondaruk 2004) and therefore fall into the NOC class. As in NOC structures Polish always display instrumental case marking on adjectives, and *jak* complements seem to strongly prefer instrumental adjectives, everything falls nicely into place.

### 3.2.5 Numerals and Control

The combination of numerals phrases and control has not received the same attention in the literature as the data discussed so far. Consider the data in (28).

(28) Pięć dziewcząt chce być miłe / miłych

five.ACC girls-GEN want.3SG.N be.INF nice-ACC / nice-GEN

‘Five girls want to be nice.’

(Przepiórkowski 2004a: 104)

Data like (28) are not considered by Bondaruk (2004, 2007) and are only mentioned in passing by Witkoś (2010a). Przepiórkowski (1999, 2004a) explicitly analyzes constructions as in (28) and numeral DPs in general. The data in (28) needs thorough explanation. The controller here is a numeral phrase headed by *pięć* ‘five’. In Polish and many other Slavic languages, the complement of higher numerals (5+) is always assigned genitive case, see also (29).

(29) a. dwa / trzy / cztery kobiety

two / three / four women.NOM

‘two / three / four women’

b. pięć kobiet / *kobiet-y

five.ACC women.GEN / women-NOM

‘five women’

In the control example, we see that the numeral *pięć* ‘five’ seems to assign genitive case to its complement, *dziewczęta* ‘girls’. In addition, it is assumed that the numeral is assigned accusative case (Franks 1994, 1995; Przepiórkowski 1999, 2004b; Rutkowski 2002; Miechowicz-Mathiasen 2012). In chapter nine I will present arguments and a possible
analysis that may derive the case of the numeral; for the time being we will take it as a fact that (at least) higher numerals \((5+)\) are marked with accusative case. Since it is a non-nominative subject, the verb does not agree with the DP but appears in the default third person singular neuter form. In addition, the adjective may appear with different case markings – accusative or genitive. From one of our formal studies, the following possibilities were obtained concerning case markings.

\[(30)\] Pięć dziewczyn chce być mił-e / ??mił-ych / mił-ymi.

\(\text{five.ACC girls.GEN want.3SG.N be.INF nice-ACC / nice-GEN / nice-INST}\)

‘Five girls want to be nice.’

Detailed results of the questionnaire will follow, however, at this point some comments are in order: Przepiórkowski (2004a) uses an outdated word for girls in Polish (cf. (28)). The word \(\text{dziewczęta}‘\)girls’ is the old nominative form, with the corresponding genitive form being \(\text{dziewczyn}\). I declined the modern nominative form \(\text{dziewczyny}‘\)girls’ for the genitive \(\text{dziewczyn}.\) I did this in order to avoid that participants may judge the structure in (30) as bad or marginal because of an outdated or rarely used word. Please note in addition that accusative morphology is syncretic with nominative in the case of (30).

\[(31)\] a. Mił-e dziewczyn-y były w pokoj-u.

\(\text{nice-NOM girls-NOM were in room-LOC}\)

‘There were nice girls in the room.’

b. Widziałem mil-e dziewczyn-y.

I saw nice.ACC girls-ACC

‘I saw nice girls.’

The data in (31) show that morphological marking on \(\text{miły}‘\)nice’ is identical in nominative case (31a) and accusative case environments (31b). However, we can safely say that the marking in (30) is accusative and not nominative, in view of data with masculine nouns.

\[(32)\] a. Mil-i facet-i byli w pokoj-u.

\(\text{nice-NOM guys-NOM were in room-LOC}\)

‘There were nice guys in the room.’

b. Widziałem mil-ych facet-ów.

I saw nice-ACC guys-ACC

‘I saw nice guys.’
The data in (32) show that nominative and accusative markings on adjectives in environments with masculine nouns is not syncretic. The data in (33) show that the nominative marked adjective is ungrammatical in control. In consequence, the adjective in (30) with syncretic marking must also be accusative, and not nominative.

Let us now return to the data under inspection in (30). Concerning all the possible case marking of the adjective (accusative, genitive, instrumental), here are the results obtained in the formal study.

<table>
<thead>
<tr>
<th>Case</th>
<th>✓</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusative</td>
<td>8</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Genitive</td>
<td>3</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Instrumental</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 12: Results complex subject control

Generally, the accusative case marking was accepted, with only four people judging it somewhere between good and bad. Nobody judged it as ungrammatical. Genitive case was less liked than accusative case marking, but it seems to be acceptable, as it was often judged between bad and good. Some native speakers report that the genitive marking sounds archaic or old-fashioned. Instrumental case marking emerged as the favored option. Interestingly, while Przepiórkowski (1999) discusses the instrumental option and judges it grammatical, in later work (Przepiórkowski 2004a), the instrumental option is omitted from the examples. It should be noted that the situation is the same with masculine DPs, see (34).

(34) Pięć facet-ów chce być mily-ch / *mily-i.
    five.ACC guys-GEN want.3SG.N be.INF nice-ACC/GEN / nice-NOM
    ‘Five guys want to be nice.’

20 This might come as a surprise as the genitive case is clearly available in structures like (i).

(i) Pięć dziewczyn było mili-ch
    five.ACC girls.GEN was nice-GEN
    ‘Five girls were nice.’ (Przepiórkowski, p.c.)

It would be interesting to see how data in (i) is judged by those who do not fully accept genitive case in (30). Unfortunately, this was not tested.
Note, however, that masculine numeral DPs are not as revealing as feminine ones, as in these cases the morphology of accusative and genitive is syncretic, i.e. we cannot tease these two cases apart – thus it is hard to say which case, accusative or genitive, is preferred.

Numeral phrases as object controllers are discussed in the literature even less. The following example is taken from Witkoś (2008), where it is mentioned in a footnote.

(35)  Jan nauczył sześć-iu chłopców być sprawnymi fizycznie.
       Jan taught six-ACC boys-GEN be.INF fit-INST physically

   ‘Jan taught six boys to be fit.’

(Witkoś 2008: 263)

For all intents and purposes the numerals object controllers behave one-to-one with simple object controllers (DPs like John or Mary) in that they do not allow case transmission to the adjective, instead instrumental case appears. Therefore, they seem not to reveal more about control configurations than simple object control sentences do. The data in (36) show a numeral dative DP in object position with an embedded adjective.

(36)  Piotr kazał pięć-iu facetów być miły / *miłym.
       Peter ordered five-DAT/ACC guys-DAT be.inf nice-INST / nice-DAT

   ‘Peter ordered five guys to be nice.’

<table>
<thead>
<tr>
<th></th>
<th>Ok</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dative</td>
<td>12</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Instrumental</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 13: Results complex object control (dative controllers)

In (36), the matrix verb kazać ‘to order’ assigns dative to its complement, pięć-iu facetów ‘five guys’. This shows that dative case assignment even overrides the genitive case on the complement of the numeral, and presumably the accusative case on the numeral as well. The adjective miły ‘nice’ can only surface in instrumental marking, dative is ungrammatical. This was confirmed by native speakers, see Table 13.

If we take a verb that assigns structural accusative to its complement like uczyć ‘to teach’ more options arise than Witkoś (2008) discusses, see (37).

---

21 This process will be discussed in more detail in chapter 9, section 9.3.
Table 14: Results complex object control (accusative controllers)

<table>
<thead>
<tr>
<th></th>
<th>Ok</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusative</td>
<td>0</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Instrumental</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

The matrix verb assigns accusative case to its complement in (37); however, the genitive case on the complement of the numeral is kept, i.e. it is not overridden by accusative. Instrumental still appears as the preferred option on the adjective *miłym* ‘nice’. Interestingly, the accusative (or genitive) marking appears as an (restricted) option. It should be mentioned that no speaker judged the accusative marking on *miłym* ‘nice’ in (37) as perfect, only the instrumental option is judged as perfect, but it was more accepted than the parallel version with a simple DP controller (17), repeated in (38). Compare the accusative judgments in Table 14 to the ones in Table 10.

Table 10: Results simple object control

<table>
<thead>
<tr>
<th></th>
<th>Ok</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acc</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Inst</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

The same speakers who judge the accusative option in (37) at least as a marginal option, judge the same option in (38) as completely ungrammatical. Differences here are subtle, but they might give us more insights into what is actually going on when control relations are established. I will return to data like these in chapters eight and nine, where I will present an analysis that always prevents non-instrumental marking in (36) and (38) and leaves the accusative marking in (37) as an option for some speakers.
### 3.3 What about Raising?

In many textbooks on control, a difference is made between control and raising predicates. This is done as on the surface the two structures look very similar, but probing these structures reveals different syntactic behavior thus arguing for two different structures.\(^{22}\)

\[(39)\]

a. John tries to play the piano. \textit{Control}

b. [John ….. [PRO ….]]

\[(40)\]

a. John seems to play the piano. \textit{Raising}

b. [John ….. [John ….]]

Raising predicates as \textit{seem} in (39) lack an external argument; \textit{John} is the external argument of the embedded predicate. For case and EPP reasons \textit{John} moves up to the matrix clause into Spec,TP. By contrast, control involves two elements, \textit{John} and PRO, the latter being an argument of the embedded verb, while \textit{John} is the argument of the matrix verb. Landau (2013: 8-28) discusses a number of tests to distinguish these two constructions.

Raising is also present in Polish showing the same behaviour as raising in English. When it comes to case marking, it behaves like control – it allows case transmission, but also admits (marginally for some speakers) instrumental case marking, see (41).

\[(41)\]

a. Piotr wydaje się (być) mił-y / mił-ym. \textit{Raising}

\begin{align*}
\text{Peter.NOM} & \text{seems } \\
\text{REFL(be.INF)} & \text{nice-NOM / nice-INST}
\end{align*}

‘Peter seems (to be) nice.’

b. Piotr próbuje *(być) mił-y / mił-ym. \textit{Control}

\begin{align*}
\text{Peter.NOM} & \text{tries } \\
\text{(be.INF)} & \text{nice-NOM / nice-INST}
\end{align*}

‘Peter tries to be nice.’

As can be seen in (41), case marking in raising and control is identical. However, the copula \textit{być} ‘to be’ is optional in raising (41a), much like in English. In control, the copula must be overtly realized, see (41b).

For the rest of this thesis, all emphasis is put on control. If nothing further is specified, it is assumed that case assignment works the same way in both constructions.

---

\(^{22}\) The Movement Theory of Control (Hornstein 1999 and subsequent work) aims to derive control and raising via the same mechanism, namely movement.
3.4 Summary

In this chapter, I have presented the language under investigation, namely Polish. In addition, I have taken a closer look at the Polish data under investigation; that is control constructions with embedded adjectives. This study aims to give a syntactic account of these structures accounting for all of the discussed case variations on the embedded adjective. The pivotal data to be discussed and analyzed in this work is repeated below.

(42)  Jan próbuje być miło / miło.  
Jan.NOM tries be.INF nice-NOM / nice-INST  
‘Jan tries to be nice.’  

Subject Control

(43) a. Piotr uczył Tomka być miło / *mil-ego.  
Peter.NOM taught Tom-ACC be.INF nice-INST / nice-ACC  
‘Peter taught Tom to be nice.’  

Object Control (ACC)

b. Piotrkazał Tom-owi być *mil-emu / miło.  
Peter.NOM ordered Tom-DAT be.INF nice-DAT / nice-INST  
‘Peter ordered Tom to be nice.’  

Object Control (DAT)

(44) Piotr marzy, żeby być bogaty / bogat-ym.  
Peter.NOM dreams so-that be.INF rich-NOM / rich-INST  
‘Peter dreams to be rich.’  

Control with żeby (OC)

(45) Być miło /mil-y to być głup-im / *glup-i.  
be.INF nice-INST /nice-NOM to be.INF stupid-INST / nice-NOM  
‘To be nice is to be stupid.’  

NOC

(46) Maria nie wie jak być *piekn-a / piekn-ą.  
Maria.NOM NEG knows how be.INF beautiful-NOM / beautiful-INST  
‘Maria does not know how to be beautiful.’  

Control with jak (NOC)

(47) Pięć dziewczyn chce być miło / *mił-ych / mił-ymi.  
five.ACC girls.GEN want.3SG.N be.INF nice-ACC / nice-GEN / nice-INST  
‘Five girls want to be nice.’  

Numeral Subject Controllers
In the next chapter, which will conclude part one of this study, I will discuss the three prominent analyses for the Polish data presented in this section.

I will then continue with part two of this study, where I will discuss the ingredients for my analysis. That is, which independent principles of the language will be of use to derive (some) of the phenomena spotted in control. These principles include rules and principles from Case Theory, predication, and NP-ellipsis. Eventually, in part three, I will discuss the analysis proper for the data in (42)-(48).
4. Previous Analyses for Control


4.1 Przepiórkowski (2004a)

4.1.1 Theoretical Background, Data, and Assumptions

Przepiórkowski (2004a) is concerned with the possibility of case transmission in subject control and raising, and the impossibility of case transmission in object control and NOC.

(1) Janek wydawał się być mil-y. \textit{Raising}

\begin{tabular}{l} 
Janek.NOM seemed & REF\ell be.INF nice-NOM \\
‘Janek seemed to be nice.’ 
\end{tabular}

(2) Janek chce być mil-y. \textit{Subject Control}

\begin{tabular}{l} 
Janek.NOM wants be.INF nice-NOM \\
‘Janek wants to be nice.’ 
\end{tabular} 
Przepiórkowski (2004a: 104)

(3) Janek kazał Tomk-owi być mil-ym / *mil-emu. \textit{Object Control}

\begin{tabular}{l} 
Janek.NOM ordered Tom-DAT be.INF nice-INST / nice-DAT \\
‘Janek ordered Tom to be nice.’ 
\end{tabular} 
Przepiórkowski (2004a: 104)

(4) Być mil-ym to być głup-im. \textit{NOC}

\begin{tabular}{l} 
be.INF nice-INST TO be.INF stupid-INST \\
‘To be nice is to be stupid.’ 
\end{tabular} 
Przepiórkowski (2004a: 104)

In (1), a construction with the raising verb \textit{wydawać się} ‘to seem’, the case on the predicate \textit{mily} ‘nice’ matches the one on the subject. The case possibility for raising (1) is also true for (2), a subject control example, for which Przepiórkowski (2004a) claims that it is not expected under standard assumptions neither of GB nor HPSG.\textsuperscript{1}

\textsuperscript{1} He does not mention why this is supposed to be unexpected. For GB, I can only assume that this has to do with the Case Filter as well as the PRO Theorem. As PRO must not get case, case transmission from the subject via PRO to the predicate would then not be expected. In raising, the problem would not arise, as in PRO’s position there would be a trace of the subject, and the CP projection, i.e. the barrier for government would be missing.
What Przepiórkowski (1999, 2004a) explicitly assumes is that agreement in case and instrumental case are like two sides of the same coin, i.e. ‘the syntax always makes both options available’ (Przepiórkowski 2004a: 106). Proof for this claim comes from the data in (5) and (6), taken from Przepiórkowski (2004a: 106).

(5) Pamiętam go pijanego / pijan-ym.  
I.remember him.ACC drunk-ACC / drunk-INST  
‘I remember him drunk.’

(6) Jesteś świnia / świni-q!  
You.are pig-NOM / pig-INST  
‘You are a swine!’

In (5), an example of secondary predication, the predicate *pijany* ‘drunk’ may agree in case with its subject or it can appear in instrumental. Both options are available. In the same fashion, the predicative noun *świnia* ‘pig/swine’ in (6) can appear either with nominative or instrumental case marking. Data like these support Przepiórkowski’s (1999, 2004a) assumption about the availability of either option. Let me already state at this point that the data in (6) might be a bit misleading. It is not the case that all nouns allow agreeing case when in predicative position; in fact, it is only a limited class of nouns that actually do so. In contemporary Polish, all nouns can appear in instrumental – in most cases must – while only some appear in nominative. I will discuss predication in Polish in more detail in chapter six. Secondary predicates as in (5) always admit agreeing case, in this example accusative. Some allow instrumental, others allow it only marginally, and yet others do not allow instrumental at all. It is not the case that a secondary predicate can appear in instrumental unrestrictedly. I will briefly address the issue of secondary predication in Polish in chapter ten. These restrictions do not necessarily contradict Przepiórkowski’s assumption; however, the empirical picture must be adequately presented. Moreover, there are examples where either one or the other case is licensed, but not both options; there, the idea is that the structure clashes with other restrictions or rules imposed by the language. If we take (4), an example of NOC, agreeing case (nominative case) is not possible as there is no element to agree with, therefore only the instrumental option is available.

In order to be able to follow Przepiórkowski’s analysis, one needs to say more about the specific assumptions made in HPSG. I will briefly present them here.
HPSG works with lexical entries of words, much like the standard GB approach and contra approaches which are couched within Distributed Morphology. The lexical entry of a predicate like *miły* ‘nice’ in HPSG is presented in (7).

\[ (7) \]

\[
\begin{array}{c}
\text{word} \\
\text{PHON} \langle \text{miły} \rangle \\
\text{SUBJ} \langle \text{NP(CONT[0]\text{])} \rangle \\
\text{HEAD} \left[ \begin{array}{c}
\text{adjective} \\
\text{CASE nom} \\
\text{PRD +} \\
\text{CONT nice'}(0) \\
\end{array} \right] \\
\end{array}
\]

(Przepiórkowski 2004a: 108)

The lexical entry includes the phonology of the predicate and what it subcategorizes for. In this case, the adjective subcategories for an NP. The term subcategorization is not used in the same sense as in GB, where it means that a head takes a complement. Here, it illustrates, more or less, what the predicate associates with. In this case, it associates with a subject and this is properly represented in the lexical entry. The head of the lexical entry is an adjective, which can act as a predicate (PRD +). The case feature is in principle empty, but will be filled in the course of the derivation. In addition, it is equipped with a semantic structure, namely NICE (CONT nice’). The shared numerical index 0 means that it is a property of SUBJ.

In addition, the observations about case assignment from the above examples are formalized in the following rule (8):

\[ (8) \]

\[
\begin{array}{c}
\text{SUBJ} \langle \text{XP(CONT[1]\text{])} \rangle \\
\text{HEAD} \left[ \begin{array}{c}
\text{PRD +} \\
\text{CASE 2} \\
\end{array} \right] \\
\end{array} \rightarrow (1 = 2) \lor (2 = \text{inst})
\]

(Przepiórkowski 2004a: 108)

The entry reads as follow: The subject needs case and it will appear with case [1]. The head, here, the adjective *miły* ‘nice’, is a predicate (PRD +) and also comes with a case, namely case [2]. The predicate subcategorizes for a subject that is case-marked. The two cases, the one of the predicate and the one of the subject, must either be identical ([1] = [2]) or the case of the predicate must be instrumental ([2] = inst).

Let us also take a look at the lexical entry of the copula *być* ‘to be’, as it plays a crucial role in the control constructions under discussion.
The entry in (9) states that the copula is non-finite, and that it does not carry any semantic content of its own; it takes over the content of its complement. The content depends on the information of the complement. In addition, the copula is treated as a raising verb: its subject has the same value [1] as the subject of the complement. Let us now put all the ingredients together and derive a simple, finite predicative sentence.

(10) Janek jest miły.

Janek. NOM is nice-NOM

‘Janek is nice.’

(Przepiórkowski 2004a: 109)
The derivation is as follows: The copula być ‘to be’, here in the morphological form of jest, and the adjective miły ‘nice’ combine and form a bigger unit. They structure-share their subject as indicated by the same index of the subject. The head of the phrase is the copula. Then this bigger chunk combines with the subject Janek. This subject is understood as [1] and fills this position. The sentence in (10) is derived.

However, what is missing here is how exactly case should be assigned (and at which point). The case assignment rule in (8) only tells us something about the type of case that may occur. In order to fill this gap, Przepiórkowski (1999, 2004a) adds the following principles in (12)-(15) (cited from Przepiórkowski (2004a: 110-111)).

(12) Grammatical case is assigned (checked) at the level of the argument structure of words.

(13) In case of raising, when an argument occurs at a number of argument structures of different verbs, case is assigned at the highest argument structure on which the arguments occurs.

(14) The following syntactic case assignment principles hold for Polish:
   a. For subjects of finite verbs:
      (i) Assigns the nominative to NPs;
      (ii) Assign the accusative to Numeral Phrases.
   b. For subjects of non-finite verbs:

(15) Null case cannot be morphologically realized.

The principles in (12)-(15) can thus govern and predict case assignment in Polish. For our simple example in (10) it would mean the following: The copula is finite, and therefore it assigns nominative case to its subject (14ai). In addition, the copula is a raising verb and thus case is assigned at the highest (i.e. latest) step (13). The subject of the copula is structure-shared with the subject of the predicate miły ‘nice’. In GB terms that would mean that there is movement of the subject, i.e. it is the same element. According to the case assignment rule in (8), the subject and the predicate appear either in the same case (nominative) or the predicate may appear in instrumental. Here, both elements appear in nominative thus satisfying the rule in (8).

Let us now see how these principles can explain the case possibilities in subject control, object control, and in NOC.
4.1.2 The Derivation of Subject Control

In this section, I will derive subject control data as in (4), repeated for convenience in (16), with the (general) lexical entry for a subject control verb, as represented in (17).

(16) \[ Janek \text{ chce byc mi-y.} \]

\[ \begin{array}{c}
\text{Janek.NOM} \text{ wants be.INF nice-NOM} \\
\text{‘Janek wants to be nice.’}
\end{array} \]

(17) \[
\begin{array}{c}
\text{word} \\
\text{SUBJ \langle NP \{ INDEX \{0\} \} \rangle} \\
\text{COMPS \langle VP \{ SUBJ \{ INDEX \{0\} \} \} \rangle} \\
\text{CONT \{ P(1,2) \}}
\end{array}
\]

(Przepiórkowski 2004a: 112)

The entry in (17) states that a subject control verb is a two-place predicate (CONT P ([1], [2])). It subcategorizes for two arguments, a subject NP (SUBJ) and a complement VP (COMPS).\(^2\) The derivation of (16) is illustrated in (18).

\(^2\) However, structure-sharing is an option, but not needed. What the entry gives us is the possibility that only the index is shared, but not the subject itself. However, Przepiórkowski refers to Pollard and Sag (1994), who mention that when structure-sharing of the indices is forced, it can also be realized as structure-sharing of the subject.
The copula and the predicate merge and create a phrase. The copula is non-finite and structure-shares its subject with the predicate. The phrase *być mili* ‘to be nice’ is then merged with the verb *chcieć* ‘to want’, which is specified in its entry as a subject control verb. It may structure-share its subject with the complement. Once the subject *Janek* is merged, case is assigned (cf. (13)). Here it is nominative case, as the verb is finite (cf. (14ai)). The predicate then has to appear either in nominative or instrumental case. As it appears in nominative, the principle is satisfied. Note that this analysis makes it also possible for the instrumental case to surface on the predicate, something that is possible for many native speakers (19).

(19)  
Jan. NOUN wants be.INF nice-INST  
‘Jan wants to be a nice one.’

While Przepiórkowski (2004a) judges this slightly marginal, his analysis correctly predicts that this structure should be a possible outcome of the grammar, see the rule in (8). ³ In this respect,

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³ However, at the same time, the system might overgenerate as it predicts that whenever agreement is possible, instrumental is as well (and vice versa).
it is superior to Bondaruk’s (2004) and Witkoś’ (2008, 2010a, 2010b) analyses of the same phenomenon, because they do not allow instrumental as an alternative.

4.1.3 The Derivation of Object Control

In object control only instrumental case is licensed on the predicate, contrary to subject control. The data is repeated in (20) with the respective rule formulated in (21).

(20) Janek kazał Tomkowi być miłym / *miłemu.
    Janek.NOM ordered Tom-DAT be.INF nice-INST / nice-DAT
    ‘Janek ordered Tom to be nice.’

(21) \[
\begin{array}{c}
\text{word} \\
\text{SUBJ } \langle \text{XP} \rangle \\
\text{COMPS } \langle 1\text{NP}[^{\text{INDEX 0}}], \text{VP} \text{ SUBJ } \langle 2\text{INDEX 0} \rangle \rangle \\
\end{array} \rightarrow 1 \neq 2
\]

(Przepiórkowski 2004a: 114)

An object control verb is a three-place predicate, it subcategorizes for a subject (SUBJ) and a complement (COMPS) which includes an NP and a VP (21). It states that structure-sharing of subjects is not allowed, i.e. the subject of the VP complement (of the copula) cannot be structure shared with the first complement of the matrix verb. Let us now see how the derivation proceeds and derives instrumental case as the only option on the adjectival predicate.
The derivation in (22) proceeds as follows: The copula and the predicate merge and structure-share their subject, as can be seen by the same numerical index [7] they carry. This is the highest argument structure for this subject, as structure-sharing with an object control verb is not allowed (21). Therefore, case is assigned there. The copula is non-finite, and therefore null case is assigned (cf. (14bi)). As null case cannot be morphologically realized (15), instrumental

4 In GB terms, this means that there is a silent subject PRO in the non-finite clause. However, if the subject of the non-finite clause (PRO) and the object of the finite clause do not share the same index, we derive a structure where the two elements are not co-referential.
appears on the predicate to satisfy the rule in (8). The phrase być milym ‘to be nice’ merges then with the control verb and its indirect argument. As dative case is lexical, it is not subject to grammatical case assignment and is assigned immediately to Tom. They all merge to create kazal Tomkowi być milym ‘ordered Tom to be nice.’ The last element, Janek, is merged as the subject of the control verb kazać ‘to order’. Crucially, this subject is not structure-shared with the copula nor with the adjectival predicate. As the control verb is finite, the subject receives nominative case at the highest level, i.e. at the end of the derivation.

4.1.4 The Derivation of NOC

NOC is characterized by only allowing instrumental predicates, much like object control. The difference, however, is that there is no overt controller in NOC structures. The derivation would therefore run as follows: An adjectival predicate and the copula merge into a phrase. The copula is non-finite and both elements may share subjects. Null case is assigned to the subject, as the copula is non-finite. Null case cannot be reflected in morphology, therefore instrumental appears as a last resort on the predicate. Nominative case, i.e. agreeing case, is therefore assumed to be ruled out as there is not a finite case assigning element at the highest level of argument structure.

\[(23) \text{ Być mil-ytm to być gup-im. } \]
\[
\text{be.INF nice-INST TO be.INF stupid-INST}
\]

‘To be nice is to be stupid.’

Example (4), repeated as (23), shows an NOC structure. The subjects may all be structure-shared, but due to the non-finiteness of the highest predicate, only null case is available in the structure. As the case assignment rule states that you either agree or appear in instrumental, null case must be realized as instrumental on the predicate thereby fulfilling the case assignment principle.

4.1.5 Some Comments

Przepiórkowski (2004a) analyses a lot of data with the aim of deriving it within the HPSG framework. He does admit variation and wants to capture this as well. While he is successful in many regards, his assumptions are not compatible with a derivational, transformational approach, like generative grammar. The question of the nature of the instrumental case, or why it can appear as an option, is not really addressed in this account. It is mentioned that the

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5 To be more precise, for NOC, there is no local controller. In the case of (23), arbitrary control, we have the most extreme form of NOC, namely no controller.
instrumental is a ‘default of predication’ (Przepiórkowski and Rosen 2005), but it is also mentioned that it is nouns that prefer this case marking, while adjectives tend to agree. The introduced principle on case assignment states that in predicational environments one should either have agreement or instrumental on the predicate. This rule captures (some) of the descriptive facts, but in no way does it derive it, nor does it predict when one is preferred over the other. This is not necessarily a flaw of Przepiórkowski’s theory, as this is not his central concern. For the purposes of this thesis, it is not desirable to simply state that instrumental is an option, but we want to understand why and how this is possible and how it can be derived (and excluded) in certain structural configurations. His system, as open as it is to variations and capturing a lot of data, does not bring us closer to understanding the phenomenon at hand.

In the following section, I will present Bondaruk’s (2004, 2007) approach to the data. She works within a Minimalist framework.

4.2 Bondaruk (2004)

Bondaruk’s (2004) analysis is based on Landau’s (2000) transformational approach, which he calls the Agree Model. In this model, the control relation is established via multiple Agree relations. Depending on which functional projection agrees either with PRO or with C, an EC or a PC effect arises. In the following subsections, I will present Bondaruk’s approach to control in Polish, presenting her derivation of EC and PC. The mechanism of PC will be important here as Bondaruk assumes that all object control configurations actually display PC effects.

4.2.1 The Background: Landau (2000)

Landau’s (2000) claim is that the two types of control, EC and PC, are derived in the syntax, i.e. both types underlie two different syntactic structures. For this, he assumes the following:

(24) a. DPs, including PRO, enter the derivation with valued phi-features.
b. Functional heads enter the derivation with unvalued phi-features.
c. Semantic Plurality (SP): +/- on DP, +/-/$\emptyset$ on functional heads.
d. Matching: $\emptyset$ (i.e., no SP) and [-SP] are non-distinct on functional heads.
e. PRO and infinitival Agr are anaphoric.
f. PRO, being anaphoric, cannot value unvalued functional heads.
g. In tensed clauses, C contains an uninterpretable T-feature.
h. T-to-C applies in PC-complements but not in EC-complements.

(Landau 2000: 62-64)
The rather lengthy list of assumptions is necessary to derive all kinds of OC constructions, including EC and PC. The first two assumptions are unproblematic, as they have already been proposed by Chomsky (1998, 1999) independently of control. (24c) and (24d) are important ingredients to derive the EC/PC split. Assumption (24e) verbalizes the idea that PRO is an anaphor, in addition to Agr having anaphoric properties as well (Borer 1989). (24f) follows naturally from (24e) in so far as anaphoric elements, and thus PRO, cannot value features. Assumptions (24g) and (24h) are lengthily derived in Landau (2000) as they are crucial for the Agree model to work, so let me briefly elaborate on those.

Landau observes that EC-complements cannot have independent semantic tense, while PC-complements can, see (25).

(25)  
   a. *Yesterday, John began to solve the problem tomorrow. \textit{EC}  
   b. Yesterday, John hoped to solve the problem tomorrow. \textit{PC}  
   \hspace{1cm} (Landau 2000: 57)

In (25a), the finite clause and the non-finite clause cannot display independent tense from one another. This does not seem to be true for PC, as illustrated in (25b), where the matrix event is in the past, while the embedded event takes place in the future. Landau (2000) proposes that this is a decisive difference between EC/PC and shows that the two forms of control have two different structures.\footnote{See Wurmbrand (2014) and Grano (2012) for data contradicting this idea. Landau (2015) re-evaluates the Agree model coming to the conclusion that it was built on wrong assumptions concerning tense. His new model, the two-tiered theory of control, derives the split via PC verbs selecting attitude predicates, while EC verbs select for non-attitude predicates (Landau 2015), see the discussion in chapter 2.2.}

(24g) is based on Pesetsky and Torrego’s (2001) observation that the C-domain seems to signal the tense domain of its respective clause. Thus, while T seems to have an interpretable tense feature, the C-head hosts an uninterpretable tense feature. Equipped with this, the two heads must undergo Agree. Landau (2000) proposes then that T raises to C in order to check the uninterpretable feature on C (24h). Crucially, this only happens in PC-complements, as it is only those complements that can display independent tense values from the matrix tense. That is to say, EC-complements are untensed clauses and therefore do not form their own tense domain. As a consequence, there will be no tense feature on C, and thus no T-to-C movement.\footnote{This assumption makes it in principle possible that T may still have an (interpretable) tense feature, while C has no (uninterpretable) tense feature. As T’s feature is interpretable, it does not need to be checked. So, the difference between EC and PC might not be the presence of a tense feature, but rather whether we have T-to-C-movement.}

Let us now see how these ingredients derive the two respective structures.
The derivation runs as follows: PRO is merged as the external argument of *play*.\(^8\) It enters an Agree relation with T-Agr, thus matching its phi-features with the latter (Agree\(_1\)). PRO then moves to Spec,TP checking the EPP. The matrix F\(^9\) then enters an Agree relation with the controller (Agree\(_2\)). In addition, it also enters an Agree relation with PRO (Agree\(_3\)).\(^{10}\) Via Agree\(_2\), F inherits semantic number of the controller. Via Agree\(_3\), semantic number is also inherited by PRO; presumably, gender is also inherited that way, but Landau (2000) does not explicitly say so. That way, the interpretation of PRO is exhaustively dependent upon the controller, crucially also semantic number. No PC effect may arise in this construction. Let us now consider how a PC effect may be derived.

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\(^8\) The tree and the derivation are simplified, i.e. the internal make-up of the verbal domain is reduced so that the reader can concentrate on the issues at hand.

\(^9\) F can either be T in the case of subject control, or v in the case of object control.

\(^{10}\) In order for Agree\(_3\) to work, Landau (2000) relaxes the PIC (Chomsky 2000, 2001). The PIC will be discussed in more detail in chapter 4, section 4.3.2 and chapter 8, section 8.1.
The derivation of PC runs as follows: As with EC, PRO is merged as the external argument of *play*. It enters an Agree relation with the T-Agr complex (Agree₁). As C is tensed in this construction, T-Agr moves to C to check off the latter’s uninterpretable tense feature. In the matrix clause, F enters an Agree relation with the DP, inheriting the latter’s phi-features (Agree₂). The crucial difference to EC is the following: as T-Agr moves to C, it is now a closer goal for Agree than PRO. As a consequence, F undergoes Agree₃ not with PRO, but with the T-Agr complex. Therefore, the control route is indirect, since PRO does not directly agree with F. That way, a mismatch in semantic plurality between PRO and the controller DP is possible as PRO never inherits the latter’s features as in EC. A PC effect may arise.

As mentioned in fn. 6, this analysis is not without problems. Landau (2015) himself has already proposed a different analysis for the phenomenon at hand, see chapter 2.2.

Bondaruk (2004) applies Landau’s Agree model to the vast sample of control data from Polish in her analysis, however, she changes some crucial aspects. I will discuss her contribution in the next section.

### 4.2.2 Polish Data I: Bondaruk’s Basic Claims

Bondaruk (2004) follows Landau’s (2000) argumentation when it comes to the modelling of control structures and applies his model to Polish data. For EC structures, she follows Landau one to one and no modifications are made. She disagrees with the derivation of PC, in detail
when it comes to T-to-C movement, which she rejects for Polish. One reason for this is that control verbs may select a źебy ‘so that’ complement, i.e. a CP with a filled C-head. Therefore, movement to C should be blocked. She does consider the option that źебy originates in T and then undergoes T-to-C movement as proposed by Pesetsky and Torrego (2001) for English that clauses, but rejects this possibility stating that this kind of movement is generally unmotivated in Polish, in contrast to English.

(30) Should Mary go to school?

(31) Czy Maria powinna iść do szkolę?

   if Mary should go.INF to school

   ‘Should Mary go to school?’

(Bondaruk 2004: 239)

In (30), should is merged under T and then undergoes movement to C, deriving a yes/no question. Such a movement is not motivated in Polish (31), as powinna ‘should’ remains in T while C is filled with the interrogative pronoun czy ‘if’.

Thus, Bondaruk (2004) concludes that T-to-C movement is not an option in Polish, and thus, PC must be derived in a different fashion. She proposes that the PC effect is achieved via binding and adds the following assumptions to the repertoire of (Polish) control:

(32) a. Anaphoric PRO is licensed via Agree with the matrix T or v, and anaphoric Agr is licensed via binding by the matrix T or v.

b. Anaphoric Agr inherits its features from its binder.

c. The binding domain is extended to the matrix clause in tensed clauses, but not in untensed ones.

(Bondaruk 2004: 241)

What Bondaruk carries over from Landau’s model is the intuition that PRO and Agr are anaphoric elements. The difference in Bondaruk’s system is that their anaphoricity is derived in two different ways: PRO gets it via Agree, and Agr via binding (32a). Once Agr is bound, it inherits all features from its binder, which includes semantic plurality (32b). In addition, the binding domain is extended in PC contexts (tensed clauses), but not in EC contexts (untensed clauses), (32c). Furthermore, Bondaruk assumes that C-less complements embed bare TPs, whereas CPs are only projected when the C position is overtly filled. Let us now see how the system derives the two types of control.
(33) a. Marek próbuje [PRO grać na pianini-e].
Mark.NOM tries play.INF on piano-LOC
‘Mark tries to play the piano.’

b. [...] F [...] [DP [...] [TP PRO T-Agr [vp tPRO [...]]]]

The configuration in (33b) blocks a potential PC effect: As mentioned earlier, Bondaruk (2004) does not modify Landau’s approach here, thus, it can be applied directly to Polish without any modifications. PRO and T-Agr undergo Agree, as do T-Agr and the DP Mark. As a final Agree relation, matrix T-Agr agrees with PRO with the latter inheriting all of the controller’s features, including semantic plurality, i.e. PRO and the DP Mark cannot have a number mismatch. An EC effect arises. Let us now turn to the derivation of PC, see (34).

(34) a. Marek₁ chciał [PRO₁+ się spotkać o 3-ej].
Mark.NOM wanted REFL meet.INF at 3
‘Marek wanted to meet at 3.’ (Bondaruk 2004: 223)

b. [DP T-Agr₁ [TP PRO T-Agr₂ [vp tPRO [...]]]]

For (34b), Bondaruk assumes that the first two Agree relations (Agree₁ and Agree₂) happen just as in EC constructions. As she rejects T-to-C movement, Agree₃ where matrix T-Agr targets the closer goal T-Agr (which has moved to C) cannot take place. Instead, T-Agr₁ binds T-Agr₂. This is possible as in the case of tensed complements, the binding domain is extended to the matrix clause (32c). A PC effect arises if T-Agr is not specified for SP and is bound by a matrix T-Agr that is [-SP], while PRO is [+SP]. As stated in Landau’s assumption, [-SP] and [ØSP] are non-distinct. Due to this construction, PRO is semantically plural, but the controller may be semantically singular. A PC effect arises.¹¹

¹¹ Note that if the matrix subject is [+SP], Agree instead of binding may take place. That way, no PC effect arises and an EC configuration is derived.
4.2.3 Polish Data II: Case and Control

Having now established how Bondaruk (2004) derives the general control constructions for Polish, let us see how this system can account for the case paradigms found in subject and object control. For subject control, EC and PC constructions are at our disposal, for object control, Bondaruk (2004) assumes that these only give rise to PC readings, i.e. they follow the mechanisms of PC. Let us first consider subject control.

(35) a. Marek$_1$ musi [PRO być najlepsz-y / *najlepsz-ym].  \[EC\]
Mark.NOM must      be.INF best-NOM / best-INST
‘Mark must be the best.’ (Bondaruk 2004: 256)$^{12}$

b. [DP T-Agr$_1$ [TP PRO T-Agr$_2$ [VP tPRO … ]]]

The mechanism which guarantees nominative case on the adjective is Agree$_3$. Via Agree$_3$ the features of the controller are copied onto PRO and transferred further to the adjective. Case checking is here a by-product of phi-feature checking (see also Chomsky 1995).

For subject control involving PC predicates, case markings of predicates have a different source. Consider the data in (36a) and the corresponding derivation (36b).

(36) a. Marek$_1$ chce [PRO być najlepsz-y / *najlepsz-ym].  \[PC\]
Mark.NOM wants be.INF best-NOM / best-INST
‘Mark wants to be the best.’ (Bondaruk 2004: 257)

b. [DP T-Agr$_1$ [TP PRO T-Agr$_2$ [VP tPRO … ]]]

T-Agr$_2$ bound by T-Agr$_1$

Case on the predicate comes from nominative marking on PRO. PRO gets this marking here not directly from the controller (unlike in EC). In PC, T-Agr$_2$ inherits phi-features, and case from its binder, namely T-Agr$_1$. As a consequence, the embedded T-Agr$_2$ is turned into a

$^{12}$ The data and grammaticality judgments are from Bondaruk and do not necessarily reflect my judgments or the judgments of my informants. This is true for all her examples involving adjectives. My informants’ judgements are presented in chapter 3, section 3.2.
nominative case checker and checks case on PRO. Consequently, PRO copies these features on the adjective.

Summing up so far, for Bondaruk there are two ways as to how adjectives in control receive case; in the case of EC it is directly transmitted via Agree with the controller and in the case PC it comes from the embedded T-Agr$_2$ which is turned into a case checker as a consequence of being bound by finite T-Agr$_1$.

For object control, Bondaruk must make further stipulations. In object control, which always displays PC effects according to her (Bondaruk 2004: 257), neither agreeing nor nominative case is allowed, only instrumental is licit.

For object control, Bondaruk must make further stipulations. In object control, which always displays PC effects according to her (Bondaruk 2004: 257), neither agreeing nor nominative case is allowed, only instrumental is licit.

(37)  Marek poradził Ew-ie być najlepsz-ą / *najlepsz-a / *najlepsz-ej.
Mark.NOM advised Eve-DAT be.INF best-INSTR / best-NOM / best-DAT$^{13}$
‘Mark advises Eve to be the best.’

b. [DP v … [TP PRO T-Agr$_2$ [VP t$_{PRO}$ … ]]]

In this PC construction, T-Agr$_2$ is not bound by T-Agr$_1$ but rather by $v$, as we are dealing with object control. Consequently, T-Agr$_2$ cannot be turned into a nominative case checker, as nominative is associated with finite T. The impossibility of nominative case is derived. Due to the binding of T-Agr$_2$ by $v$, the former is turned into an objective case checker. For Bondaruk, objective case comprises dative and accusative (and possibly genitive). Objective case, dative in (37), is copied onto PRO. However, PRO’s case is not copied onto the adjective as in the subject control examples. Bondaruk stipulates that objective case cannot be transmitted and therefore instrumental (non-nominative case for her) is assigned. Bondaruk calls the instrumental in these constructions an ‘elsewhere case’, a case that is assigned when no regular case can be assigned. That is to say, instrumental appears as default in all object control constructions.

Summing up, nominative case marked adjectives in EC subject control are derived via Agree with the controller and PRO; the latter transferring phi-features as well as case to the adjective. Nominative case marked adjectives in PC subject control are derived via binding of T-Agr$_2$ by T-Agr$_1$. That way, the non-finite T-Agr$_2$ is turned into a nominative case checker, checks

$^{13}$ I have added the (impossible) dative option to complete the picture.
nominative on PRO and the latter transfers the case to the adjective. For object control, always PC according to Bondaruk, the embedded \( T-Agr_2 \) becomes an objective case checker due to being bound by little \( v \). It checks objective case on PRO, but PRO cannot transmit objective case, and therefore instrumental appears on the adjective as a default.

This analysis faces certain challenges. First, even though case markings on the adjectives in subject control in EC and PC are independent of the split found in OC contexts, Bondaruk derives the two case options via two different operations (transmission from the controller in EC, and in PC via turning non-finite \( T-Agr \) into a case checker), which complicates the grammar. While this is not a lethal problem, it would be more desirable to derive the cases via the same mechanism. A more serious problem is that this mechanism cannot easily deal with variations. As argued in this thesis, native speakers report that instrumental case marking is fine in examples (36) and (37). Bondaruk’s system, which is very rigid, does not allow for variation. There is simply no reason for the grammar to resort to the elsewhere case, instrumental, as the system derives nominative case whenever it is syntactically possible. Witkoś (2008) also reports similar judgments when it comes to control with overt complementizers.

(38) a. Maria modli się, żeby być kochaną / kochana.
Mary.NOM prays REFL so-that be.INF loved-INF / loved-NOM
‘Mary prays to be loved.’ (Witkoś 2008: 265)

b. Piotr marzy, żeby być bogatym / bogaty.
Peter.NOM dreams so-that be.INF rich-NOM / rich-INF
‘Peter dreams to be rich.’ (Witkoś 2008: 265)

The data in (38) involve OC, therefore subject to the structures proposed by Bondaruk for OC. However, both case versions of the adjectives are attested but cannot easily be derived both by Bondaruk’s model. Witkoś (2008) also discusses case possibilities in control with the complementizer \( jak \) ‘how’ where only instrumental seems to be licit. While Bondaruk (2004) does discuss constructions with \( jak \) ‘how’, she never does so with embedded adjectives.

(39) a. Maria nie wie, jak być piękną / *?piękna.
Mary.NOM NEG knows how be.INF beautiful-INF / beautiful-NOM
‘Mary does not know how to be beautiful.’ (Witkoś 2008: 266)
b. Piotr pytał, jak być uczciw-y.

Peter.NOM asked how be.INF honest-INST / honest-NOM

‘Peter asked how to be honest.’ (Witkoś 2008: 266)

The data in (39) could pose an even bigger problem for Bondaruk (2004), as not even nominative case is licit. While I do agree with Witkoś’ judgments here, I do not necessarily believe that (39) poses a problem for Bondaruk. I have argued that the data in (39) display NOC, and not OC (pace Witkoś 2008). If it is not OC, different rules apply. It has been shown in this thesis and in the literature that NOC only allows instrumental case. If (39) is indeed NOC, instrumental case is expected and does not necessarily contradict Bondaruk’s model. However, we would still want to derive this pattern.

Another potential burden might be Bondaruk’s stipulation about object control. There she argues that PRO receives an objective case but this case cannot be transferred to the adjective. While empirically correct for object control, this impossibility of case transmission cannot be derived and forms a stipulation. It gets even more unattractive when looking at data with objective case transmission as in (40).

(40) Pięć dziewczyn chce być mię - / ??miły-ch / mię-y mię-y.

five.ACC girls.GEN want be.INF nice-ACC / nice-GEN / nice-INST

‘Five girls want to be nice.’

Data involving numerals will be discussed in detail in chapter nine. Leaving details aside, one can see that the case of the numeral can be transmitted to the adjective. It is accusative case, which is an objective case, and transmission is fine. The same is true for the genitive.14

In sum, objective case can be transmitted in Polish, so it remains a mystery why PRO cannot transmit it in object control.

4.2.4 A Revised Approach: Bondaruk (2007)

As a reply to the criticism concerning the wrong predictions made by her system with regard to case markings on predicative adjectives with źeby and jak complements, Bondaruk (2007)

14 Bondaruk does not specifically mention genitive case as objective case. This is probably due to the fact that there are no object control verbs in Polish that assign genitive case to their internal argument. However, in the case of negation, we may turn an accusative object into a genitive one.

(i) Jan nie uczył Marys-ą być mił-q / * mił-ej.

Jan.NOM NEG taught Mary-GEN be.INF nice-INST / nice-GEN

‘Jan did not teach Mary to be nice.’
slightly modifies her model to make room for these data. Note that these modifications will still not predict instrumental case in C-less subject control.

She divides the data into three classes: C-less subject control displays case transmission, *żeby* complements and non-local subject control allow for case optionality,¹⁵ and object control illustrates case independence. Arbitrary control is not discussed.

What is crucial is that Bondaruk (2007) assumes that C may be optionally equipped with a set of phi-features. When it has phi-features, the C-route is open. Once the C-route is taken, default case is valued on the adjective – instrumental for all predicates, dative for *sam* ‘alone’.¹⁶

For case transmission, i.e. subject control with C-less complements, she assumes that C has phi-features.¹⁷ C cliticizes onto the higher head little v; C is now invisible for Agree. Thus, whether C has phi-features or not would be irrelevant here, as probe T cannot take C as a goal anyway. Therefore, only the PRO-route is available resulting in case transmission. In (41) I have sketched the analysis based on Bondaruk’s (2007) bracketing structures.

(41)  

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¹⁵ Non-local subject control will be ignored here.

¹⁶ The semi-predicate *sam* ‘alone’ is special as it allows dative, where other predicates allow instrumental. I will briefly address this issue in chapter 10, section 10.1, where I will also present the full empirical picture for Polish.

¹⁷ In Bondaruk (2004), no CP is assumed when there is no overt C.
Again, this structure predicts that instrumental case – which is assigned as a default – should never be available, contrary to fact.

For case independence, as in object control, it is assumed that C always has phi-features, therefore the C-route is available. Once control is established through C, default case is valued on the adjective, see (42).

(42)

```
TP
<table>
<thead>
<tr>
<th>DP_{Subject}</th>
</tr>
</thead>
<tbody>
<tr>
<td>T'</td>
</tr>
<tr>
<td>vP</td>
</tr>
<tr>
<td>DP_{Subject}</td>
</tr>
<tr>
<td>v'</td>
</tr>
<tr>
<td>v-[V]</td>
</tr>
<tr>
<td>VP</td>
</tr>
<tr>
<td>v</td>
</tr>
<tr>
<td>ApplP</td>
</tr>
<tr>
<td>Appl</td>
</tr>
<tr>
<td>Appl-C</td>
</tr>
<tr>
<td>C'</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>TP</td>
</tr>
<tr>
<td>PRO</td>
</tr>
<tr>
<td>T'</td>
</tr>
<tr>
<td>vP</td>
</tr>
<tr>
<td>PRO-be nice_{Inst}</td>
</tr>
</tbody>
</table>
```

Object control

In (42), when C clitics onto the next higher head, Appl, it is still available for Agree, unlike in the scenario where it attaches to little v (see also Landau 2008).

In the case of jak complementation, where we also have case independence, C is filled with an overt complementizer, thus does not cliticize onto a higher head. It still has valued phi-features making C a closer goal for Agree than PRO.

For optional case transmission, the PRO-route is open, resulting in case concord. However, the C-route should also be available. Bondaruk (2007) argues that when the C-head is specified for phi-features, the C-route is taken resulting in default case on the adjective. If the C-head is not specified for phi-features, the PRO-route is taken resulting in case concord; control with żeby
can either be constructed with a C with phi-features or a C without phi-features. The structure is sketched in (43).

As mentioned above, her modifications are still too weak, as subject control with C-less complements is predicted to never allow instrumental case adjectives. In addition, there is no consistent property of C that could predict when it has phi-features or not. With C-less subject control it is impossible to test, as C cliticizes onto little v making it not a potential goal for Agree independent of its feature set-up. For object control, it must have phi-features due to the occurrence the instrumental case.18 When it comes to the complementizers źeby and jak, the picture is a bit blurred. The latter must have phi-features, as case transmission is not allowed, and case transmission is not allowed, as C has phi-features. It is a circular argumentation. For źeby, the optionality is not clear as one and the same head can either come with or without phi-features. In addition, complex subject control data, as in (44), is not discussed.

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18 Bondaruk (2007) offers more data showing that all object control data can be paraphrased with finite subjunctive clauses. As finite C is equipped with phi-features, the logical consequence is that object control also has phi-features, deriving the obligatory C-route in this instance of control. In addition, object control allows for optional źeby insertion, i.e. it can have a filled C, but this C must always be equipped with phi-features.
Bondaruk (2004) states that accusative case in object control cannot be transmitted as PRO cannot transmit non-nominative cases. In (44), we see that accusative (and marginally) genitive case can be transmitted to the adjective. This would be unexpected in her system.

\[
\text{(44) } \text{Pięć dziewczyn chce być mił-e / ??mily-ch / mił-ymi.}
\]

\[
\text{five.ACC girls.GEN want be.INF nice-ACC / nice-GEN / nice-INST}
\]

‘Five girls want to be nice.’

Summing up, Bondaruk’s approach is an application of Landau’s (2000) Agree model to Polish data, including control structures with predicative adjectives. While she may easily derive case concord in subject control (via two distinct mechanisms), the emergence of instrumental in object control remains a stipulation. In addition, instrumental case in C-less subject control is not expected under her system.\(^{19}\)

In the next section, I will turn to Witkoś (2008, 2010a, 2010b) proposal. He also works within the MP, like Bondaruk, but he applies the Movement Theory of Control and argues that the Polish data can be derived with this approach.

### 4.3 Witkoś (2008, 2010a, 2010b)

#### 4.3.1 The Original Proposal: Hornstein (1999) for English

When the control module underwent significant changes in the 90s, in particular the fact that government as a universal principle was abolished (Chomsky 1995), various ideas have been proposed as to how to deal with control data. Recall that in GB the distribution of PRO was regulated by the PRO Theorem, which states that PRO must be ungoverned. However, since the notion of government has been abolished, the PRO Theorem is gone as well. While Landau (2000, 2013) maintains having the element PRO in order to establish control, Hornstein (1999) proposes a radically different approach to control – he suggests to abandon the control module altogether and derive the structures via movement operations only. This means that the existence of PRO is negated. This idea has repercussions for certain aspects of the theory, of course. For one, the Theta-Criterion must be abandoned as well.\(^{20}\) Hornstein (1999) explicitly assumes this and mentions that this is not as radical as it looks, as theta-roles were allocated at

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\(^{19}\) In addition, the problems raised by Landau (2015) when it comes to his Agree model, also apply to Bondaruk’s (2004) model.

\(^{20}\) The Theta-Criterion is defined the following way:

(i) The Theta-Criterion:

Each argument bears one and only one theta-role, and each theta-role is assigned to one and only one argument.

(Chomsky 1981: 36)
D-Structure, and Chomsky (1995) proposes to eliminate D-Structure from the grammar altogether, so the assignment of theta-roles has to be rethought in any case. For Hornstein, theta-roles are encoded as features which are checked via movement of the DP into the respective theta-position. There is no upper boundary on the numbers of theta-roles a single DP may receive. While the DP still moves in the course of the derivation, it may collect as many theta-roles as necessary along the way. The only restraint is on movement, namely, that a DP stops moving once it receives structural case. A typical derivation is presented in (45).

(45)  
a. John hopes to leave.

b. [IP John [VP John [hopes [IP John to [VP John leave]]]]]  

(Hornstein 1999: 79)

In (45b), John is merged with leave absorbing the latter’s theta-role. John moves to Spec,IP to check the EPP. As this is Spec,IP\textsubscript{non-finite}, there is no case available for John. John continues to move; in Spec,VP, it receives another theta-role from hope but still no case. It continues to move, reaching Spec,TP, where it finally gets nominative case. At the end of the derivation, John has nominative case and two theta-roles from two different predicates. As theta-roles are checkable features in Hornstein’s analysis that can be checked without a cap by a DP, John may have two theta-roles. What is important for Hornstein is that John remains visible for movement only as long as John has no case. Once the DP has case, no further movement can be motivated. This is why, Hornstein rejects the null case approach (Chomsky and Lasnik 1993; Martin 2001), where it is assumed that non-finite T assigns null case to PRO. If non-finite T were a case assigner, the DP John would stop moving in the embedded Spec,TP position essentially crashing the derivation.

This approach has been criticized by many scholars working on control, and indeed there are certain challenges that the MTC has to deal with. Nevertheless, Witkoś (2008, 2010a, 2010b) shows that the Polish data presented throughout this thesis can be dealt with in terms of movement. How this works will be presented in the next section.

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21 It is structural case and not lexical or quirky case that stops movement; this assumption needs to be made in order to deal with Icelandic control data (see the discussions in Boeckx and Hornstein 2006a, 2006b; Bobaljik and Landau 2009; Boeckx, Hornstein and Nunes 2010a, 2010b and Wood 2012).

22 Hornstein (1999) encodes the EPP as a D-feature on I/T.

23 See the discussion on Icelandic (fn. 21) as well as challenges when it comes to movement out of islands (Fischer 2017).
4.3.2 Polish Control and Movement

Witkoś (2008, 2010a, 2010b) applies Hornstein’s MTC to Polish data and shows that the apparent case (mis)matches are no obstacle for the MTC, as Bondaruk (2004: 259) claims. For him, CPs are always present in control. In addition, it is very important for Witkoś to derive the case effects in a local syntax model, therefore he follows the Phase Impenetrability Condition (PIC) (Chomsky 1999, 2001), which is defined in (46).

\[(46) \quad \text{PHASE IMPENETRABILITY CONDITION (PIC)}
\]

The domain of H is not accessible to operations at ZP, but only H and its edge. Where ZP is the least strong phase and the edge consists of specifiers.

(taken from Witkoś 2010: 183 following Chomsky 2001: 13)\(^{24}\)

Usually, vPs and CPs are considered to be phases.\(^{25}\) In order to make it possible to move elements out of embedded vPs, and crucially, having the adjective still accessible when finite T is merged for case valuation, Witkoś (2010a) uses the following excerpt from Chomsky (2001), which he calls the Phase Impenetrability Condition Application.\(^{26}\)

\[(47)\]

a. \[[ZP Z \ldots [HP α [H YP]]]\]

b. Suppose that the computation L, operating cyclically, has completed HP and moved on to a stage \(\sum\) beyond HP. L can access the edge \(α\) and the head H of HP. But PIC now introduces an important distinction between \(\sum=ZP\) and \(\sum\) within ZP, for example \(\sum=TP\). The probe T can access an element of the domain YP of HP; PIC imposes no restriction on this. But with \(\sum=ZP\) (so that \(Z=C\)), the probe Z cannot access the domain YP. (Witkoś 2010a: 185, citing Chomsky 2001: 14)

For control, (47) means the following: The complement of the embedded vP does not become inaccessible once the vP is completed. Instead, it is only a potential phase. If we replace Chomsky’s generic HP with vP, we can say that it becomes a real phase, once C enters the picture (ZP = CP). That is, once C is merged, the complement of v is inaccessible. In addition,

---

\(^{24}\) It should be noted that the definition in (46) is already the weaker, less restrictive version of the PIC. The stricter version of the PIC states that the complement of a phase is inaccessible once the respective phase (vP or CP) is completed; thus, it is irrelevant whether a new phase is created atop.

\(^{25}\) The vP may be called the ‘inner phase’ as there arguments are merged and given proper interpretation, i.e. thematic relations are established. The CP would be the ‘outer phase’ as there temporal as well as modal properties are established (see Błaszczyk 2007: 281-312).

\(^{26}\) See Richards (2007) for drawbacks of the PIC as formulated here.
the CP itself does not become a phase, until the merger of the matrix $v$; that is, the complement of C is still accessible for syntactic operations. I have represented these ideas in (48).

We can see that the accessibility of a phase’s (vP/CP) domain depends on the introduction of the next phase head. That is, the embedded vP does not become a phase on the basis of its own strength, but rather, it can only become one once C is projected. In turn, the CP cannot act as a phase, only as a potential one, up until the matrix $v$ is created.

For the MTC, the following problem arises: Once the matrix $v$ is created, the domain of CP becomes inaccessible, that means, that the DP is trapped in the non-finite TP.\textsuperscript{27} Neither movement of the DP nor case valuation of the adjective by T would be possible anymore. In order to solve the movement problem, Witkoś assumes the following:

(49) Every maximal verbal projection is a phase only when saturated with all its arguments. \textsuperscript{(Witkoś 2010a: 187)}

\textsuperscript{27}Witkoś does not assume that the DP moves to Spec,CP (which would still be accessible). Presumably, because there is no reason for the DP to move there. See Fischer (2017) for arguments that the embedded element does move up as high as Spec,CP.
What (49) does is essentially relaxing the PIC even further. vP can only become a phase once all of its arguments are merged. In example (48), once matrix v is merged, the external argument is missing; by the power of (49) it can therefore not be a phase. By extension, the complement of CP remains accessible for syntactic operations as long as no external argument of the matrix verb is merged. Let us consider how this works for control without a case-marked element in the non-finite clause.

(50) a. Maria marzy, żeby popływać w jeziorz-e.
Mary.NOM dreams so that swim.INF in lake-LOC
‘Mary dreams of swimming in the lake.’

(Witkoś 2010a: 188)

b. 

The derivation runs as follows: Once the DP Mary is theta-marked in the lower vP, it moves to Spec,TP to check the EPP. The CP is projected and the domain of the lower vP becomes inaccessible. VP is projected hosting the CP as the internal argument and the verb as its head. Then vP is built up; however, at this point, CP does not become subject to the PIC, as the matrix verb is not saturated with all of its arguments (49). Hence, the complement of CP is still accessible and as a consequence, moving the DP Mary from the embedded clause into Spec,vP
is licit (50b). Once Mary has moved into Spec,vP it absorbs the external theta-role of marzyć ‘to dream’. That way, the verb is saturated with all of its arguments and the complement of CP becomes inaccessible. The derivation then continues and Mary moves to Spec,TP checking EPP and nominative case.

However, the story does not end here. Witkoś solves the movement problem with the assumption in (49), however, it is still not clear how finite T could value an adjective’s case feature, considering the adjective is trapped in the lower vP. Recall, that even with (49), the domain of CP becomes inaccessible the moment Mary moves into Spec,vP; in order to deal with the data involving adjectives, Witkoś (2010a) therefore introduces the following assumptions to derive the different case possibilities for the data discussed so far:

(51)  

   a. Only T can be a [+multiple] Probe.  
   b. Obligatory control PRO (tNP) carries no case.  
   c. Predicative adjectives and sam ‘alone’ appear in instrumental/dative as a default option.  
   d. Phi-features of v are not a [+multiple] Probe in object control.  
   e. All infinitives under control verbs are underlying CPs.  
      i. Null C cliticises either to v (then the CP is not a phase)  
      ii. or to Appl (CP is an optional phase).  
   iii. CPs filled with a lexical C are optional phases.  
   f. Both Null C and lexical C are optionally selected either with [+phase] or [-phase] properties.  
   g. Interrogative CP functions as a [+phase].  
   h. Spell-Out Economy: Heads C and v count as phase-inducing heads when their complements can be spelled out independently of each other.

(Witkoś 2010a: 213-217; simplified)

The immense set of assumptions in (51) is necessary for Witkoś to derive the right outcome for subject control and raising, plus object control. Let us see how some of these assumptions work based on simple subject control, see (52).

(52)  

   a. Maria chce być bogat-a.  
       Mary.NOM wants be.INF rich-NOM  
       ‘Mary wants to be rich.’  

(Witkoś 2010a: 217)
The derivation starts with the vP *Mary be rich*, where the DP *Mary* is theta-marked. The DP *Mary* moves up to Spec,TP checking the EPP. The CP is projected with a null C° - optionally a phase (51e, f). As it is a null C°, it cliticises onto the higher head, here V. The V-C complex cliticizes onto v (51e-i). Once the C-head moves to v, the complement domains of both, C and v overlap, and therefore the CP cannot act as a phase (51h) irrespective of whether it was selected with a [+phase] feature from the lexicon. As a consequence, the DP *Mary* can move out of the embedded TP into Spec,vP, where it is again theta-marked. A look-ahead problem is avoided, as head movement of C precedes movement of the DP *Mary*, as the head v is created before the specifier of v can be created. T can now value phi-features and case on *Mary*, and in addition, being a multiple probe (51a), it can value case and phi-features of the embedded adjective *bogata* ‘rich’. The latter valuation is possible due to (51h); the lower vP remains accessible as the CP does not act as a phase due to spell-out economy.  

28 This idea resembles the notion of Phase Sliding (Gallego 2006) or Phase Extension (den Dikken 2007a, 2007b).

(i) PHASE EXTENSION
Syntactic movement of the head H of a phase α up to the head X of the node β dominating α extends the phase up from α to β; α loses its phasehood in the process, and any constituent on the edge of α ends up in the domain of the derived phase β as a result of Phase Extension. (den Dikken 2007a: 1)
instrumental case on the adjective (marginal, but possible for Witkoś) could be explained by (52c), but it is not clear why it should be a possibility given that case can be structurally assigned. Let us stay with subject control taking an example with a lexical C, see (53).

(53) Piotr marzy, żebym być bogat-y / bogat-ym.  
Peter.NOM dreams so-that be-INF rich-NOM / rich-INST  
‘Peter dreams to be rich.’  

(Witkoś 2008: 265)

In structure (54), where the C is filled, there is no cliticization of C onto the V-complex, and thus there is no overlap of the domains of v and C. CP is an optional phase (51e-iii, f). When it is a phase, the complement of the lower vP becomes inaccessible resulting in default case (instrumental) on the adjective (51c). If CP is not a phase, the lower vP remains open for T to value the adjective’s case feature (51a). However, the question of how the adjective may be valued with nominative case, is not too clear. In example (52) it is derived by the assumption that the domains of v and C overlap. In example (54), there is no C-to-v-movement and therefore their complements do not clash; the complement of the lower v thus remains inaccessible to syntactic operations of the higher clause. The movement of the DP Peter to the higher Spec,vP should render the complement of C inaccessible (49), but if this is the case, it is unclear how
the adjective can receive nominative case.\(^{29}\) Let us now turn to subject control with the complementizer *jak* ‘how’, where only instrumental case is possible.

(55) Piotr pytał, jak być uczciw-ym /*uczciw-y.*
Peter.NOM asks how be.INF honest-INST / honest-NOM

‘Peter asks how to be honest.’ (Witkoś 2008: 266)

The sole difference to (53/54) is that *jak* ‘how’ has not the choice between [+/-phase] but it is an inherent/strong phase (51g). The DP *Peter* may still move out of the embedded clause to Spec,vP due to (49), but T cannot probe into the non-finite clause, as the CP is an inherent phase, making the complement of the lower vP inaccessible. As a result, only instrumental as default is licit here (51c).

Having now discussed how the subject control data are derived,\(^ {30}\) let us now turn to object control.

\(^{29}\) One could say that the adjective remains accessible due to internal merge of the DP *Peter*, however, this is just a speculation.

\(^{30}\) Complex subject control involving numerals are not discussed. Witkoś mentions in a footnote that in these constructions, the controller DP carries accusative case and that ‘for all intents and purposes this type of Accusative functions like Nominative, pace morphological differences’ (Witkoś 2008: 263).
The object *Tom* is base generated in the non-finite clause and moves to Spec,TP. The CP is merged. Assuming that the CP is a phase here (51e-ii), once C is introduced, the complement of the lower vP is inaccessible. As the CP is empty it must cliticize onto the next higher head, here the Appl. The DP *Tom* may move to Spec,Appl, but the domain of CP remains inaccessible. At the latest, once the subject is merged in the specifier of vP, everything in the complement of C is shipped off. Little v assigns dative case to the object, but as it is no

31 Witkoś considers the CP to be an optional phase here to account for the behavior of adjectives in subject control across an object, where ApplP is also projected.

(i) Jan obiecał Mari-i naprawić radio / sam-emu.
    Jan,NOM promised Maria-DAT repair-INF radio,ACC alone,NOM/alone-DAT
    ‘Jan promised Maria to repair the radio himself.’ (Witkoś 2010a: 193)

In (i), the semi-predicate *sam* ‘alone’ may appear with nominative case. In order to achieve this, Witkoś must assume that the CP does not render the lower vP’s domain inaccessible, so that the adjective remains accessible for case marking.
[+multiple] probe (51d), no valuation of phi- and case features on the adjective is possible even if it were not inaccessible. As a result, the predicate gets default valuation; instrumental for adjectives and dative for the predicate *sam* ‘alone’ (51c). While T may act as a [+multiple] probe (unlike little *v*), it is of no help as once it is merged, the domains of the lower *vP* as well as the CP have been rendered inaccessible, thus trapping the adjective.

### 4.3.3 Some Comments

Witkoś’ (2008, 2010a, 2010b) proposal covers a lot of data and shows that a movement approach could work in theory with the case properties found in Polish control.

The main criticism probably concerns the application of a local syntactic model only to add many assumptions, so that the model ends up not being very local after all. It does not really make sense to work within a model that aims to perform operations locally, only to introduce many assumptions with the goal of opening the domain to non-local operations. Tree (52b) shows this perfectly; there is no inaccessible domain, so why assume that there are inaccessible domains in the first place. I do think that a local syntax model brings many advantages, but it needs to be tested and tested again against new data and more languages to see how far we can take it. Polish seems to indicate that not all operations are performed locally.

One point that is not clear is how exactly nominative case valuation is possible in *żęby* complements. Recall that in these constructions nominative and instrumental are both possible, which is explained in Witkoś’ proposal by assuming that this C-head can be an optional phase. However, even when it is not a phase, i.e. it does not render the complement of the lower *vP* inaccessible, it is not clear how nominative case can be valued. T is merged after matrix *vP* is merged with all its arguments. That way, the DP may move out, but the adjective is still inside the lower *vP*.\(^{32}\)

In addition, it is not clear how instrumental case valuation takes place in simple, C-less subject control. As Witkoś’ considers the instrumental case only a marginal option in this construction, it is not his primary goal to derive these structures.\(^{33}\) It has, however, been shown in this thesis that instrumental adjectives are rather productive across subject control data (see chapter three).

---

\(^{32}\) Witkoś might say that since CP is not a phase, matrix *vP* counts as the first phase, and therefore the complement of the lower *vP* should remain open. However, the lower *vP* should count as the first phase, and the matrix *vP* is then the second phase. The only effect the non-phase status of CP has is that the matrix *vP* becomes the second phase, but not that the phase status of the lower *vP* is cancelled.

\(^{33}\) Witkoś (2010a) mentions in a footnote that people might accept instrumental case on the adjective if a process of NPE is assumed. However, he does not elaborate further on this idea.
Putting these challenges aside, Witkoś’ proposal also suffers from a long list of stipulations. In order to derive all the data presented, the stipulations seem to be needed in a movement approach. However, the goal should be to reduce the number of stipulations; so while Witkoś’ may derive many of the presented structures, he does so at a high cost. Eventually, a system with less stipulations should be preferred.

### 4.4 Summary

In this chapter, I have presented the three main proposals dealing with case marking in Polish control. The whole spectrum of control theories has actually been defended for Polish control data involving case-marked adjectives. A movement approach is pursued by Witkoś (2008, 2010a, 2010b), while Bondaruk (2004, 2007) develops a PRO-based approach. In addition, Przepiórkowski (2004a) seems to be in-between arguing that there is PRO in object control, but movement in subject control (in GB terms). The picture is represented in (58):

![Analysis for Polish Control](image)

I have shown that all three analyses have certain strengths and give insights into the nature of control. At the same time, all analyses suffer from drawbacks, some major, others minor. For my analysis in chapters eight and nine, I will use some insights from all of these analyses, see Table 1.

<table>
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<tr>
<th>Analysis</th>
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<tr>
<td>Przepiórkowski (2004a)</td>
<td>Insights on numeral DPs in and outside of control</td>
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Table 1: Insights that will be used from previous analyses
PART 2: THE INGREDIENTS FOR THE PROPOSAL
5. Case

This chapter will introduce the important notions, ideas, and tests of case theory which are relevant for our understanding of the presented control data. That is, we will have a deeper look at aspects of case theory that have a direct bearing on the issues at hand, namely, case markings in Polish control constructions.

Key notions that are important in this discussion pertain to the structural / lexical case split. It has been observed that different cases behave differently with respect to certain syntactic operations. Therefore, one needs to classify the cases under discussion, as many observed phenomena might already be linked to a lexical or structural case status. As we saw in chapter three, control in Polish may embed nominative, instrumental, accusative, or genitive case-marked elements. In addition, it can have nominative, accusative, or dative controllers; depending on the structure, certain case phenomena arise. Therefore, it is of vital importance to first classify these cases appropriately, as some cases are more easily transmitted than others. Which tests are at one’s disposal and how to use them, is one big part of this chapter.

Apart from identifying and applying tests to determine a case’s status, we will be concerned with the notion of default case, the second big part of this chapter. This is an important area of research, as the previous control analyses treat the instrumental case as some kind of default or elsewhere case. In this chapter, I will re-visit the notion of default case, apply tests to Polish data and actually conclude that instrumental does not behave like default at all. It will also be shown that the environments that are used to argue for instrumental are no default environments in the first place and therefore do not function as a good testing ground. In addition, looking at similar constructions in Russian and Czech reveals that there is more to the instrumental case than just a default value.

5.1 A Classification of Cases

Classifying cases as structural and lexical cases has already been proposed by Chomsky (1986) who attributes the following properties to the respective classes:

(1) **Structural Case**
   (i) Assigned at S-Structure
   (ii) Assigned by verbs and finite Infl
   (iii) Realized as objective and nominative
(2) **LEXICAL CASE**

(i) Assigned at D-Structure

(ii) Assigned by prepositions, nouns and adjectives

(iii) Realized as oblique (assigned by prepositions) and genitive (assigned by nouns and adjectives)

Let us look at some data that exemplify this distinction of cases into structural, and more generally, non-structural cases. The following data are from two languages with rich nominal morphology, namely Polish (3a) and German (3b).

(3) a. Piotr kocha Kasię.
   
   Peter.NOM loves Kate-ACC
   
   ‘Peter loves Kate.’

b. Die Frau liebt den Mann.
   
   the.NOM woman loves the.ACC man
   
   ‘The woman loves the man.’

In Polish (3a) as well as in German (3b), the object appears with overt case marking (accusative), either directly on the noun (3a) or on the respective determiner (3b). Why would we call the accusative in all these examples structural? If it is a structural case, then it is assigned at a specific structural position at S-structure (cf. (1i)). This makes certain predictions when it comes to movement operations, like the passive. A passive construction is characterized by the object being moved from its base-position inside the VP to a higher projection dominating the VP. That is, the initial position of the object is not the final position. As structural cases are assigned at S-Structure, this predicts, that an object that is moved from its base-position to a higher position should not be marked accusative, but rather with a case that is assigned higher up the tree, presumably nominative.  

And this prediction is indeed true, consider the data in (4): 

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1 Chomsky (1986) actually calls these cases ‘inherent case’. What Chomsky calls ‘inherent case’ is called ‘lexical case’ in Haider (1985). These two terms have often been used interchangeably in the literature and will be so in this work as well. For an analysis teasing apart lexical from inherent cases, please consult Woolford (2006). The term ‘non-structural case’ will also be used interchangeably with the notions of ‘inherent case’ and ‘lexical case’.

2 Accusative case can also be assigned higher up the tree as in ECM constructions. However, we will concentrate on scenarios where the ‘higher’ and the ‘lower’ case differ.

3 I will not present the Polish passive as a test for the structural/lexical split here. It will be shown later that this test is not a good indicator for the split in Polish.
(4) a. Die Frau küsst den Mann.
   the.NOM woman kisses the.ACC man
   ‘The woman kisses the man.’

      the.ACC/ the.NOM man is kissed
      ‘The man is being kissed.’

In (4a), accusative case on the object der Mann ‘the man’ is structural. We can see this as once the structure is changed into a passive (4b), where der Mann ‘the man’ is promoted to subject, der Mann ‘the man’ surfaces with nominative case. This is expected if structural case is assigned at S-structure, i.e. after movement operations.

Let us now take a look at dative objects, which are usually characterized as non-structural cases. Since lexical cases are assigned at D-Structure, that is before movement happens, these cases should be rather persistent and movement operations should not have any kind of effect on them, see (5).

(5) a. Piotr pomaga Kas-i.
      Peter.NOM helps Kate-DAT
      ‘Peter helps Kate.’

   b. Die Frau hilft dem Mann.
      the.NOM woman helps the.DAT man
      ‘The woman helps the man.’

In (5a), we see that the object of pomagać ‘to help’ does not receive accusative case, but dative. In (5b), we have a corresponding example in German. The dative case is not assigned structurally like accusative and nominative in (3), but is rather determined by the lexical characteristics of specific lexical predicates, here the verb to help. That is to say, the verb

4 This is a simplification. Alexiadou, Anagnostopoulou and Sevdali (2012) argue that dative is a mixed case in that it has properties of a lexical as well as a structural case. They identify three different patterns when it comes to the dative. (i) A uniform language where dative is a lexical case (Russian), (ii) a language where there is a ditransitive vs. monotransitive asymmetry; in such a language dative is either structural or lexical depending on the structure (Dutch and Icelandic), and (iii) languages where there is no ditransitive vs. monotransitive asymmetry. Ancient Greek and certain dialects of German belong to the latter category. See also Anagnostopoulou and Sevdali (2016) for a discussion on two ways on assigning dative (and genitive) in different stages of Greek.

5 Chomsky (1986) states that lexical cases are assigned by P, N, and A, while structural cases are assigned by V and I/T. With the data presented here, we can already see that this claim is too strict, as verbs may also assign lexical case. However, McFadden (2004) argues that some instances of the dative in German do actually not come from V, but are assigned by a silent P.
pomagać ‘to help’ in Polish, as well as its German counterpart, is lexically specified to mark its internal argument with dative. Furthermore, the prediction is the following: As lexical cases are assigned at D-Structure, that is, before any movement happens, the dative should in principle be kept if the object is moved to a higher position, like in a passive. And this is indeed the case, as can be seen by the German examples in (6).

(6) *Der /Dem Mann wird geholfen.
    the.NOM/the.DAT man is helped
    ‘The man is being helped.’

Note that an accusative object in a transitive construction surfaces with nominative case when moved to the subject position. The dative-marked object of a transitive clause retains its dative case marking when moved (6). This different behaviour of objects under movement with different case markings can be explained if the structural/non-structural case split is assumed.

Chomsky’s (1986) presentation of structural vs. inherent cases is not without problems though. Przepiórkowski (1999) mentions that it is not clear why verbs should assign structural case, while other lexical categories like prepositions, nouns, and adjectives should assign lexical cases. Eventually, the picture turns out to be rather simplistic; verbs seem to be able to assign lexical case (5) and prepositions should assign structural case as well, otherwise we would have to assume that English prepositions assign lexical case. However, English lacks morphological case, and languages with lexical cases but without morphological case are not attested.7

The split between structural and lexical case will be further investigated for Polish in the next sections. There, I will present language-specific tests on how to tease these two cases apart. For this, I will largely draw from Przepiórkowski’s (1999) work.

---

6 I am careful here with the exact landing position of a dative-marked DP in passives. It is assumed that it does not become a subject like an accusative-marked object as it does not pass typical subjecthood tests. This is the case for German. It has been shown, however, that dative DPs show subject properties in Icelandic (Zaenen, Maling, and Thráinsson 1985). For this reason, the Icelandic dative has been dubbed a ‘quirky case’ to distinguish it from the German dative. The topic of quirky case will be addressed in chapter nine, where I will investigate the properties of Polish numeral DPs, which are argued to bear quirky case.

7 Pesetsky and Torrego (2001, 2007) argue that what is generally called ‘case assignment’ is actually an Agree process involving tense features. Furthermore, structural case may be assigned by elements with tense features, like T and V. That might explain why structural cases are tied to these two elements. They add that, at least for English, prepositions bear valued T-features and share a significant amount of its syntax with tense.

8 See McFadden (2004) for a thorough discussion of morphological case and its relevance for the syntax.
5.2 Structural vs. Non-Structural Case: Some Tests (Przepiórkowski 1999)

The split between structural and non-structural case is not a theoretical desire, but it can be shown empirically that this split exists. One of the most frequently used tests for distinguishing the two is the passivization test. In the section above, I have already demonstrated the application of this test for the German dative and accusative showing that these two cases fall into two different categories. In (7), German data from genitive constructions are presented.

(7) a. Das Volk gedenkt der Opfer.
   the.NOM people commemorate the.GEN victims
   ‘The people commemorate the victims.’

   b. *Die /Der Opfer wird gedacht.
      the.NOM / the.GEN victims is commemorated
      ‘The victims are commemorated.’

In (7a), we have a simple transitive construction with the verb *gedenken ‘to commemorate’ assigning genitive to its complement *die Opfer ‘the victims’. If the genitive marking was structural, one would predict changing case with changing structures. The passive version (7b), however, shows that the case marking is kept – Opfer ‘victims’ appears in genitive, no matter whether it is moved or not; this suggests that this genitive is a lexical case.

Having presented the passivization test for German dative, accusative, and genitive, let us now turn to Polish. I will first demonstrate some of the proposed tests for the dative case, then I will apply them to the instrumental case. The data in (8a) and (9a) involve verbs that take a dative complement; the passive version is presented in (8b) and (9b), respectively.

(8) a. Imperialiśc-i zagrozili pokójowi.
    imperialists-NOM threatened peace-DAT
    ‘The imperialists threatened the peace.’
    (Zabrocki 1981: 113)

   b. Pokój został zagrożony przez imperialist-ów.
      peace.NOM remained threatened by imperialists-ACC
      ‘The peace was threatened by the imperialists.’
      (Zabrocki 1981: 113)

(9) a. Zaufalem te-mu przyjaciółowi.
    I.trusted this-DAT friend-DAT
    ‘I trusted this friend.’
    (Zabrocki 1981: 113)
b. Ten przyjaciel jest zaufany.
   this.NOM friend.NOM is trusted
   ‘This friend is trusted.’    (Zabrocki 1981: 113)

On the basis of the passivization test, the Polish dative should be classified as a structural case. The object pokój ‘peace’ is marked dative in (8a); when passivized it changes into nominative (8b). The same is true for the pair in (9). The results are rather unexpected as the prototypical structural case a verb assigns is the accusative case. However, there is good reason to believe that the passivization test is not a good indicator for the structural/nonstructural split across languages. That is, the passive might not tell us anything about the dative’s status in (8) and (9). Woolford (2006) argues this when looking at data from Japanese, see (10).

(10)    a. John-ga Mary-ni soodansita.
       John-NOM Mary-DAT consulted
       ‘John consulted Mary.’

       b. Mary-ga John-ni soodans-(r)are -ta.
       Mary-NOM John-DAT consult -PASS -PAST
       ‘Mary was consulted by John.’

       (Woolford 2006: 120, based on Kuno 1973: 347)

The dative marked Mary in (10a) turns into nominative once passivized, see (10b). Here, as in Polish, one is tempted to conclude that dative is structural. However, Woolford (2006) mentions that one should be careful when it comes to independent requirements of the language which interact with the application of a test. For Japanese, it is not allowed to have dative case in intransitive clauses. As passives of transitives derive intransitive structures, a dative is not expected; not because it is structural and disappears under passivization, but rather because the independent requirement of banning datives in intransitives is in effect. Woolford (2006) then presents data from ditransitive structures and their respective passive constructions, see (11).

       John-NOM Mary-DAT that book-ACC sent
       ‘John sent Mary that book.’

We could also argue that the examples in (8) and (9) are instances of lexical passivization and therefore not derived syntactically.
b. Mary-ni sono hon-ga okur-are-ta.

**Mary-DAT** that book-NOM send-PASS-PAST

‘Mary was sent the book.’

When passivizing a ditransitive structure, a transitive clause is derived. Thus, the rule of no datives in intransitive clauses is not in effect. We can see that in the passive version (11b) *Mary* keeps the dative marking showing that dative is lexical after all.10

What the Japanese data show is that we must be careful before jumping to conclusions when applying specific tests to the language. The results of certain tests must be interpreted with caution taking the properties of the tested language into consideration.

Thus, Przepiórkowski (1999) takes the Polish data in (8) and (9) to show that whatever the passive test is doing in Polish, it is not an indicator for the structural/non-structural split. He proposes language-specific tests for Polish, two of them being the genitive of negation and nominalizations. I will present these tests in turn.11

### 5.2.1 Genitive of Negation

The genitive of negation is a phenomenon present in the Slavic languages though subject to various degrees of obligatoriness.12 Polish and Slovene represent the most restrictive scenario—the genitive of negation (GoN) is obligatory. In Russian, Ukrainan and Belorussian, it is optional. In Czech, it seems to be non-existent.

The GoN can be described as follows: A structural case-marked object is turned into genitive in the presence of negation. Consider the data in (12).

(12)  

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>a. Ewa</td>
<td>czyta gazet-y</td>
<td>/ *gazet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa.NOM reads newspapers-ACC / newspapers.GEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Ewa reads newspapers.’</td>
<td>(Błaszczyk 2001b: 9)</td>
<td></td>
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</tr>
</tbody>
</table>

| b. Ewa | nie czyta gazet | / *gazet-y. |
| Ewa.NOM NEG reads newspapers.GEN / newspapers-ACC |
| ‘Ewa does not read newspapers.’ | (Błaszczyk 2001b: 9) |

---

10 Alternatively, we could say that the Japanese dative in transitives is structural, whereas in ditransitives it is lexical; see Alexiadou, Anagnostopoulou and Sevdali (2012) who pursue this idea for languages like German.

11 Other tests proposed by Przepiórkowski (1999) include non-inherent phrases, *dużo*-type phrases, phrases with *nie* ‘nothing’, and distributive *po*-phrases. For reasons of space, I will only discuss the two tests mentioned in the main text.

12 See Błaszczyk (2001b, 2007) for extensive work on the nature of the GoN in Polish.
The GoN is a structural case – it can only appear in a certain structural configuration and it only targets structurally case-marked objects. This is an environment in which we can test the Polish dative. So far, the passivization test suggested, at first glance, that dative is structural. Applying the GoN to the dative yields the following results:

    Jan helped yesterday REFL-DAT neighbours-DAT
    ‘Jan helped his neighbours yesterday.’
    (Błaszczak 2001: 9)

b. Jan nie pomógł wczoraj swo-im sąsiad-om /
    Jan NEG helped yesterday REFL-DAT neighbours-DAT /
    *swo-ich sąsiad-ów.
    REFL-GEN neighbours-GEN
    ‘Jan did not help his neighbours yesterday.’
    (Błaszczak 2001: 9)

(13a) shows a simple transitive sentence with the verb pomagać ‘to help’ taking a dative complement. In (13b), the sentence is negated. The data show that the dative marking does not change into genitive when in the scope of negation. This is expected if the dative is a lexical case, not a structural one. We can therefore use the GoN test when we want to probe the status of a specific Polish case.

5.2.2 Nominalizations

Another test for the structural/lexical case split proposed by Przepiórkowski (1999) is the nominalization test. He proposes that the behaviour of complements of deverbal nouns tells us something about the nature of the involved case; consider (14):

(14) a. Janek lubi Mari-ę.
    John.NOM liked Mary-ACC
    ‘John likes Mary.’

b. lubienie Mari-i (przez Jank-a)
    liking Mary-GEN by John-ACC
    ‘John’s liking of Mary’
    (Przepiórkowski 1999: 108)

The verb lubić ‘to like’ assigns accusative to its object (14a). When this predicate is nominalized, the corresponding object carries genitive case (14b). According to
Przepirkowski (1999), this suggests, and confirms, that the accusative case is a structural case. When this test is applied to dative-marked objects, the following results are obtained:

(15)  

a. Janek pogratulował Tomkowi.  
John.NOM congratulated Tom-DAT  
‘John congratulated Tom.’ (Przepiórkowski 1999: 108)  

b. pogratulowanie Tomkowi (przez Janka)  
congratulating Tom-DAT by John-ACC  
‘John’s congratulating Tom’ (Przepiórkowski 1999: 108)  

(15a) shows the verb *pogratulować* ‘to congratulate’ assigning dative to its internal argument. Once the predicate is nominalized, as in (15b), the object *Tom* keeps its dative case marking. This suggests that dative is lexical.

In the following, I will use the two tests proposed by Przepiórkowski (1999), namely the GoN and nominalization test, to determine the nature of a given case. Next, I will take a closer look at the instrumental case and its status in the Polish language. As shown in chapter three, the instrumental case is very prominent in Polish control, therefore it justifies a closer look into this particular case and its behaviour in general, before analysing the respective control data.

### 5.3 The Instrumental Case

Here I will present the different usages of the instrumental proposed in the literature, and unify them eventually as an instance of lexical case. First, I will present data where instrumental appears on elements with specific verbs and prepositions, then the appearance of instrumental in predication, and finally, the assumed default instrumental in control.

#### 5.3.1 Verbs and Prepositions

The instrumental appears on complements to prepositions (16) and verbs (17).

(16)  

a. Robert bawi się z przyjacielem.  
Robert.NOM plays REFL with friend-INST  
‘Roberts is playing with his friend.’  

b. Las jest za ogrodem.  
forest.NOM is behind garden-INST  
‘The forest lies behind the garden.’
c. Dziecko siedzi pod stoł-em.
child.NOM sits under table-INST
‘The child is sitting under the table.’

d. Piotr rozmawiał przed chwilą z Kasią.
Peter.NOM talked before moment-INST with Kate-INST
‘A moment ago, Peter talked to Kate.’

e. Robert stoi między Kasią a Tomkiem.
Robert.NOM stands between Kate-INST and Tom-INST
‘Robert is standing between Kate and Tom.’

f. noclegi nad morzem
overnights over sea-INST
‘overnights at the sea’

(17) a. Janek kieruje fabryką.
John.NOM manages factory-INST
‘Johns runs a factory.’

(Przepiórkowski 1999: 109)

b. Młodzież fascynuje się kulturą starożytną.
youth.NOM fascinates REFL culture-INST ancient-INST
‘Young people are fascinated with ancient culture.’

(Przepiórkowski 1999: 109)

c. Maria bawi się lalką.
Mary.NOM plays REFL doll-INST
‘Mary plays with a doll.’

(Przepiórkowski 1999: 109)

d. Król włącza krajem.
king.NOM reigns country-INST
‘The king reigns over the country.’

In (16), we see a collection of prepositions that assign instrumental case to their complements in Polish, namely z (or ze) ‘with’, za ‘behind’, pod ‘under/beneath’, przed ‘before’, między ‘between’ and nad ‘over’. In (17), a sample of verbs assigning instrumental case is
When applying the two tests proposed by Przepiórkowski (1999), we see that instrumental case is retained (18)/(19). This strengthens the idea that instrumental is lexical here.

13 More verbs taking instrumental complements are cieszyć się ‘to enjoy’, dysponować ‘to have at one’s disposal’, interesować się ‘to be interested in sth.’, martwić się ‘to worry’, napewna ‘to fill sth up’, niepokoić ‘to bother’, ochronić ‘to protect’, odbierać ‘to receive’, opiekować się ‘to take care of’, pokrywać ‘to cover’, posługiwać się ‘to make use of’, smucić się ‘to be sad’, stawać się ‘to become’, sterować ‘to steer’; zajmować się ‘to busy oneself’, zasłaniać ‘to cover’.

14 Applying the two tests to the complement of P is not possible, as nominalizing prepositions is impossible. In addition, the GoN does not target DPs inside PP (Błaszczyk 2001b).

(18) a. Młodzież nie fascynuję się kulturą starożytnej GoN
youth.NOM NEG fascinates REFL culture-INST ancient-INST
/ * kultur-y starożytnej
/ culture-GEN ancient-GEN
‘Young people are not fascinated with ancient culture.’

b. fascynowanie się kulturą starożytnej Nominalization
fascination REFL culture-INST ancient-INST
/ * kultur-y starożytnej
/ culture-GEN ancient-GEN
‘the fascination with ancient culture’

(19) a. Król nie włąda kraju.
king.NOM NEG reigns country-INST
‘The king does not reign over the country.’

b. włądanie kraju / *kraj-a Nominalization
reigning country-INST / country-GEN
‘the reigning of a country’

I have not much to add here when it comes to the source of the instrumental case. Following recent literature, I assume that objective case is not assigned directly by the lexical verb, but

\[\text{(i)}\]
\[\text{Jan nie czeka na autobus / *autobus-u.}\]
\[\text{Jan NEG wait on bus.ACC / bus-GEN}\]
\[\text{‘Jan doesn’t wait for the bus.’}\] (Błaszczyk 2001b: 9)

However, as instrumental case is tied to a specific lexical item, that is a specific preposition, we can conclude that this instrumental is of a lexical nature.

15 This is true for all the complements of all verbs presented here; for reasons of space, I only present the data for the two verbs in (18) and (19).
rather by a higher functional projection within the verbal domain (Anagnostopoulou 1999a, 1999b, 2001; McFadden 2004), see (20).

(20)

\[
\begin{array}{c}
\text{vP} \\
\text{Agent} \\
v' \\
v \\
v_{\text{AppP}} \\
\text{VP} \\
\text{v}_{\text{Appl}} \\
\text{VP} \\
V
\end{array}
\]

The structure in (20) is taken from McFadden (2004: 127), who proposes this for ‘inherent datives’ in German. For McFadden (2004), ‘inherent datives’ are datives that appear in transitive constructions, as the complement of German *helfen* ‘to help’, for example. As, more generally, all inherent cases should be assigned as in (20), I extend his line of reasoning to the instrumental case as well.\(^{16}\) McFadden (2004) bases much of the structure in (20) on Anagnostopoulou (1999a, 1999b, 2001) who proposes a similar structure when analyzing double object constructions. McFadden (2004) adapts her analysis then also for transitive constructions stating that the availability of dative is not dependent upon a direct object.\(^{17}\)\(^{18}\)\(^{19}\)

The case of a PP complement should be assigned in the same fashion. That is, a functional projection in the extended prepositional domain assigns case to the DP. This may happen in a Spec-head relation or case being assigned via Agree downward the tree. The details of the analyses are not of great importance here.\(^{20}\) What we should keep in mind is that in both instances instrumental case finds its source in a functional projection thus unifying the

\(^{16}\) This conclusion might be simplified. Applicative \(v\) is usually assumed for benefactives (McFadden 2004). Pylkkänen (2002) makes a distinction between high and low applicatives, whereas high applicatives are associated with benefactives, while low applicatives assign recipients. In any case, instrumental case in our examples is dependent on the respective verb; therefore the case must come from within the verbal domain.\(^{17}\)

Whether case is assigned upwards (in a spec-head relation) by the respective head to its argument (Anagnostopoulou 1999a, 1999b, 2001) or downwards to the argument of a lower head (as Voice assigning accusative to the argument of \(V\) in Kratzer 1996) is not of great importance here.\(^{18}\)

Note that McFadden (2004) calls this dative then structural, because the dative is assigned in a specific structural configuration and is severed from the lexical verb. Nevertheless, only with the respective verb is the position in the extended verbal domain created.\(^{19}\)

Another interesting idea would be to assume that instrumental case is not assigned by an applicative head, but by an empty preposition. Thereby, we could unify the occurrences of instrumental case in the verbal and prepositional domain. This could capture the fact that the instrumental case is often associated with prepositional structures cross-linguistically.\(^{20}\)

The interested reader is referred to Svenonius (2010) when it comes to the idea of an extended prepositional domain. However, Svenonius does not address the question of case assignment. See Haselbach and Pitteroff (2015) for a proposal concerning the extended prepositional domain in German.
occurrences of lexical cases.\textsuperscript{21} This will be important when we will discuss predicational uses of the instrumental case in Polish, to which I will turn to in the following section.

5.3.2 Predication

A lot of focus has been upon instrumental case marking in Polish predication (Bailyn 2001; Citko 2008; Bondaruk 2013; Franks 2015), as in (21).

\begin{center}
(21)  
\vspace{10pt}
\begin{enumerate}
\item a. Piotr jest (dobr-ym) pilot-em / aktor-em / lekarz-em.  
\hspace{10pt}Peter.NOM is good-INST.M.SG pilot-INST / actor-INST / doctor-INST
\hspace{10pt}‘Peter is a good pilot / actor / doctor.’  
\hspace{10pt}(Lindert 2016: 6)
\item b. Kasia jest (dobr-a) kobiet-ą / dziennikark-ą / kuchark-ą.  
\hspace{10pt}Kate.NOM is good-INST.F.SG woman-INST / journalist-INST / cook-INST
\hspace{10pt}‘Kate is a good woman / journalist / cook.
\end{enumerate}
\end{center}

The predicative nouns pilot, actor, and lekarz ‘doctor’ in (21a) and kobieta ‘woman’, dziennikarka ‘journalist’ and kucharka ‘cook’ in (21b) surface with instrumental case marking.\textsuperscript{22} This is obligatory in contemporary Polish. Also all modifiers inside the noun, like adjectives, agree then with the head noun in number and case.\textsuperscript{23} Having the predicative noun agree in case with the subject leads to ungrammaticality, see (22).\textsuperscript{24}

\begin{center}
(22)  
\vspace{10pt}
\begin{enumerate}
\item a. *Piotr jest pilot / aktor / lekarz.  
\hspace{10pt}Peter.NOM is pilot.NOM / actor.NOM / doctor.NOM
\hspace{10pt}‘Peter is a pilot/actor/doctor.’
\end{enumerate}
\end{center}

---

\textsuperscript{21} Instead of \textit{v}_{\text{Appl}}P one could also assume VoiceP (Kratzer 1996). Kratzer (1996) actually proposes that it is the Voice-head that assigns accusative in English. One could assume that Voice always assigns case to the complement of V, including dative and instrumental. However, one should keep in mind that when a structure is passivized, the external argument is not merged in Spec,\textit{VoiceP} and accusative is not available. When we passivize structures where the object carries instrumental, the external argument is also not merged, but lexical case is still available.

\textsuperscript{22} There are also copula clauses with \textit{to} where the predicative noun is marked nominative, as in (i).

\begin{center}
(i)  
\vspace{10pt}
\begin{enumerate}
\item Kasia to jest dziennikark-a / *dziennikark-ą.
\hspace{10pt}Kate.NOM TO is journalist-NOM/ journalist-INST
\hspace{10pt}‘Kate is a journalist.’
\end{enumerate}
\end{center}

I will not discuss these structures and refer the interested reader to Geist and Blaszczyk (2000) and Bondaruk (2010) for data and discussion.

\textsuperscript{23} As the focus is on case marking, I will drop glossing gender and number features from now on when they are in concord with their head noun.

\textsuperscript{24} This is not completely true; as will be discussed in chapter 6, section 6.3.3, some predicative nouns do allow nominative case marking.
b. *Kasia jest (dobr-a) kobieta / dziennikarka / kucharka.
Kate.NOM is good-NOM woman.NOM / journalist.NOM / cook.NOM
‘Kate is a good woman / journalist / cook.’

The nature of the instrumental case marking in (21) is usually called ‘predicational’ (Przepiórkowski and Rosen 2005). Little reference is made as to whether this case falls into the structural or the non-structural category. The classification is not a trivial question at all. When we apply the tests proposed by Przepiórkowski (1999), we arrive at the following results:

\[(23)\]
\[
a. \text{Piotr nie jest lekarz-em} / *\text{lekarz-a.} \\
Peter.NOM NOT is doctor-INSTR / doctor-GEN \\
‘Peter is not a doctor.’ \quad \text{(Lindert 2016: 7)}
\]

\[
b. \text{Kasia nie jest dziennikark-a} / *\text{dziennikark-i.} \\
Kate.NOM NOT is journalist-INSTR / journalist-GEN \\
‘Kate is not a journalist.’
\]

In (23), the GoN test is applied. When the predicated elements lekarz ‘doctor’ in (23a) and dziennikarka ‘journalist’ in (23b) are in the scope of negation, the instrumental marking is kept, marking them in genitive case leads to ungrammaticality.

When we nominalize the predicate być ‘to be’, the complement stays in instrumental, it does not change into genitive either, see (24).

\[(24)\]
\[
\text{bycie lekarz-em} / *\text{lekarz-a} \\
being doctor-INSTR / doctor-GEN \\
‘being a doctor’ \quad \text{(Lindert 2016: 7)}
\]

The results of the two tests suggest that predicational instrumental is also of a lexical nature, just like instrumental case assigned in verbal and prepositional domains. For the predicational instrumental, the question arises where it comes from and thus, what the underlying structure of (21) is. As both instances of the instrumental case seem to be the same in nature, namely lexical, we should aim for an analysis where the instrumental case as the complement of verbs and prepositions as well as in predication is assigned in a similar fashion, namely by some functional projection during the syntactic derivation; identifying this projection in predicational structures needs more elaboration and data. I will turn to these structures in chapter six. A thorough investigation of predication is necessary, as predicational rules seem
to be active when control relations are established; predication as well as control can embed adjectives and nouns, the same cases appear in control as well as predication, and the copula być ‘to be’ is present in both data sets.

5.3.3 Default

A third use of the instrumental is proposed in the literature, namely as a so-called default case (Witkoś 2008, 2010a, 2010b; Ruda 2014), elsewhere case (Bondaruk 2004) or ‘default of predication’ (Przepiórkowski and Rosen 2005); cf. the data below:

(25) Piotr marzy, żeby być bogat-y / bogat-ym.
    Peter.NOM dreams so-that be.INF rich-NOM / rich-INST
    ‘Peter dreams to be rich.’

(26) Kazalem mu być trzeźw-ym / *trzeźw-emu.
    I.told him.DAT be.INF sober-INST / sober-DAT
    ‘I told him to be sober.’

(27) Być mil-ym /*mil-y to być głup-im /*głup-i.
    be.INF nice-INST / nice-NOM TO be.INF stupid-INST / stupid-NOM
    ‘To be nice is to be stupid.’

In (25), we have a case of subject control across a lexical complementizer, here żeby ‘so that’, where instrumental case is available, even preferred by some speakers. In (26), we have a case of object control where the adjective cannot agree with the controller in case and must therefore appear in default instrumental. In (27), a case of NOC, only instrumental case marked adjectives are licit, nominative is ungrammatical.

Data like (25)-(27) have been advanced to argue that instrumental also appears as default. Depending on the respective analysis, the appearance of instrumental is motivated differently. For Bondaruk (2004), it is a default spell-out of objective case that cannot be transmitted to associated elements. For Przepiórkowski (2004a), it is the morphological realization of null case, and for Witkoś (2008, 2010a, 2010b), it appears as the objective case assigner can only assign case once (to its DP argument) and can therefore not assign it to the adjective as well, thus the default instrumental appears.

To sum up our findings so far: The instrumental case that appears as the complement of verbs and prepositions is of a lexical nature; the same is true for the predicational instrumental. This
suggests that the two usages are not so different from one another. In addition, we have seen that the default usage appears in some control constructions and is not assigned syntactically, according to the proposed analyses.

For the rest of the chapter, I will concentrate on this notion of default case. I will show that a default instrumental does not exist in Polish and that the evidence for its existence is circular at best. For this, I will advance in two steps:

First, I will apply the default case tests proposed by Schütze (2001) to Polish to reveal the language’s default case. The results will unambiguously point to nominative.

Second, I will look at data from Russian and Czech and compare the characteristics of the instrumental case and default cases in these two languages to Polish. It will be shown that adjectives in Russian freely take, and often even prefer, instrumental case marking in various constructions. This is not true for Polish, where instrumental markings on adjectives seem to be restricted to raising and control structures. Furthermore, Czech can give us some insights into this matter as well. It has been proposed that where Polish has a default instrumental, Czech has a default nominative. I will show that Czech often admits instrumental in the same environments as Polish, too. This might give additional evidence that the instrumental is not default, but finds its source somewhere else.

5.4 The Nature of Default Case

5.4.1 Some Background

There is a rich discussion in the literature exploring the exact nature of default case (McCloskey 1985; Chung & McCloskey 1987; Zwart 1988; Duffield 1989; McFadden 2004, 2007; Schütze 2001). When talking about default case, one must be careful to be explicit what is meant by this term. The notion of default case is used differently in the literature, and in order to avoid confusion, I will follow Schütze’s (2001) definition of default case, which in turn is inspired by Marantz (1991), see (28).

(28) DEFAULT CASE

The default case forms of a language are those that are used to spell out nominal expressions (e.g. DPs) that are not associated with any case feature assigned or otherwise determined by syntactic mechanisms.

Schütze makes it clear that he assumes default case not to be part of the syntactic component, i.e. it is basically invisible in the syntax. Therefore, the presence of a default case form on a
nominal can never save a derivation, as the ingredients for default case are not present in the syntactic structure.

That the default form of a nominal expression is actually located outside the realm of syntax, can also be shown by looking at the data in (29), taken from Schütze (2001: 209).

(29)  a. *It seems him/he to be tired.
     b. *Him/*He to leave would be rude.
     c. *It is important, he/him to be on time.

The subject position of non-finite clauses in English cannot host overt subjects. The standard explanation is that in these positions case cannot be assigned or checked. As all overt nominals need case, they cannot end up in this position as the Case Filter would be violated. However, the notion of default case could kick in and save the derivation. Default case could be assigned to the elements in non-finite Spec,TP as a last resort strategy incorrectly predicting that the data in (29) to be grammatical. It must therefore be concluded that default case is not part of the syntax, but rather a post-syntactic operation that cannot be applied to the syntax proper.

Many researchers have taken a closer look at default cases in various languages, and have concluded that it is nominative for German (McFadden 2007), Icelandic (Boeckx and Hornstein 2006b), Dutch (Havranová 2014), and Russian (Matushansky 2010),25 accusative for Irish (Bondaruk 2004) and dative for Hungarian (Széscényi 2002); often Schütze’s (2001) proposed default case environments were used as a testing ground.

In the following sections, I will show how Schütze came to the conclusion that accusative case is the default form in English. I will then apply the tests to Polish to show that it is the nominative that acts as the default, and never the instrumental case.

5.4.2 Default Case in English (Schütze 2001)

Schütze (2001) proposes a number of tests to disclose the default case. I will briefly demonstrate these for English, before turning to the Polish data in the next section. These tests include gapping, coordination, modified pronouns, ellipsis, and left dislocation. All the English data presented below are taken from Schütze (2001).

25 Pesetsky (2013) actually argues that genitive seems to be some kind of default for Russian. He states that nouns are ‘born genitive’ but might surface with a different case due to case stacking with the last case added being pronounced. Nouns surface with nominative, when they combine with D, which assigns nominative on top of the genitive.
In gapping contexts as in (30), the pronoun surfaces in accusative case. In (30a) the verb is elided forcing accusative on the embedded subject. Next, we are going to look at coordination of pronouns (31).

\[(31)\]
\[
\text{a. [Us and them]/*[We and they] are gonna rumble tonight.} \quad \text{Coordination}
\]
\[
\text{b. [Her and us]/*[She and we] have been friends for ages.}
\]

Coordination of pronouns results in accusative case, as can be seen in (31). Schütze discards the possibility of the conjunction being a case assigner, due to the lack of empirical evidence. Again, we have a default case environment. Let us now turn to the next test, namely modified pronouns, see (32).

\[(32)\]
\[
\text{a. Lucky me/*I gets to clean the toilets.} \quad \text{Modified Pronouns}
\]
\[
\text{b. The real me/*I is finally emerging.}
\]
\[
\text{c. Dear me/*I!}
\]

When modified pronouns are used, they appear in accusative case, even when they are in subject position as in (32). Schütze concludes that this is another position where default case is assigned.

In the context of ellipsis, where we see no overt verb or functional projection atop VP (be it IP or TP), the corresponding pronouns receive accusative case as well, see (33)-(34).

\[(33)\]
\[
Q: \text{Who wants to try this game?} \quad \text{Ellipsis}
\]
\[(34)\]
\[
A: \text{a. Me/*I}
\]
\[
\text{b. Not us/*we}
\]

Crucially, Schütze (2001) shows that in (34) no IP (or TP in more modern terms) can be involved, as otherwise nominative case should at least be possible in the answer, see (35-36).

\[(35)\]
\[
Q: \text{Who wants to try this game?}
\]
\[(36)\]
\[
A: \text{I want to try this game.}
\]
\[
B: \text{*I want to try this game.}
\]

The data in (36A) would constitute the non-elliptical answer to the question in (35). However, we cannot simply project it and erase all elements bar the pronoun (36B), as this would imply that a nominative marked pronoun should emerge, and not an accusative one, contrary to the
empirical observations. Therefore, either IP/TP is not projected, or it is projected but without a case feature, the latter option being a stipulation to capture the observed facts.

The last testing ground Schütze (2001) discusses is left dislocation as in (37):

(37) a. Me / *I, I like beans, \textit{Left Dislocation}
b. The best athlete, her /*she, should win.

The elements \textit{me} in (37a) and \textit{her} in (37b) are dislocated. They are in a position where there is no case assigner; yet being overt DPs, they need case. Consequently, they are assigned default case as a last resort. English chooses accusative in that position, as can be seen from the data in (37). McFadden (2004) mentions that left dislocation seems to be one of the most reliable tests when it comes to the default status of a case citing the following data (McFadden 2004: 36):

(38) a. Der /*Dem Hans, mit dem spreche ich nicht mehr. (German)
    the.NOM / the.DAT Hans with him.DAT speak I not more
    ‘Hans, I don’t speak with him anymore.’

b. Vanja / ?Vanj-u, ego ja ne ljublju. (Russian)
    John.NOM / John-ACC him.ACC I not like
    ‘John, I don’t like him.’

c. al-kitaab-u qara?t-u-hu (Arabic)
    the-book-NOM read-1sg-it
    ‘The book, I read it.’

d. Stráknir, vid pá hafdi aldrei verid talad. (Icelandic)
    boys-the.NOM with them.ACC had never been spoken
    ‘The boys, they had never been spoken with.’

In (38), we see data from German, Russian, Arabic, and Icelandic. In (38a), we see that the left dislocated element appears with nominative, while the associated pronoun is marked dative. In Russian (38b), the left dislocated element may appear with the same case as the pronoun (accusative), but nominative is preferred. In general, the dislocated element in each of the sentences has no structural case assigner available to value case. The logic here is again that a default mechanism kicks in and assigns the respective default case.
To summarize, Schütze (2001) offers a number of syntactic environments where DPs universally surface with case morphology which does not seem to be assigned by a functional projection during the syntactic derivation. These environments include left dislocation, gapping, coordination, modified pronouns, and ellipsis. The conclusion is that the observed case must come from somewhere else, namely from a last resort mechanism assigning default case. The data suggest that default case in English is accusative.

In the next section, I will apply these tests to Polish and conclude that instrumental case is not the default case in Polish, but rather nominative.

5.4.3 Default Case in Polish (Lindert 2016)

The nature of default case in Polish has not been properly investigated in the literature. In Lindert (2016), I applied the tests proposed by Schütze (2001) to Polish data. In this section, I will present the findings, as well as new data and considerations. The first default case environment to be tested will be gapping contexts (39).

(39) a. Nie możemy jeść kawior-u a on / *nim (jeść) fasol-i.
   NEG we.can eat.INF caviar-GEN and he.NOM/him.INST eat.INF beans-GEN
   ‘We cannot eat caviar and him beans.’

   b. Maria jest zwycięż-q a on / *nim (jest) przegran-ym.
     Mary.NOM is winner-INSTR and he.NOM/ him.INST is loser-INSTR
     ‘Mary is the winner and he is the loser.’

When we probe gapping contexts, as in (39), we see that nominative appears. In (39a), case marking on on ‘he’ can only be nominative, never instrumental, the same is true for (39b). This test signals that nominative is a proper contender for the default case in Polish. The next environment we will test is coordination. In (40), two pronouns, namely oni ‘they’ and my ‘we’ have been coordinated.

(40) a. *Nimi i nami idziemy do dom-u.
    they.INST and we.INST go to home-GEN

   b. Oni i my idziemy do dom-u.
    they.NOM and we.NOM go to home-GEN
    ‘Them and us go home.’
In (40a) the two pronouns are marked with instrumental, whereas in (40b) they are marked with nominative. Only the structure in (40b) with nominative case marked pronouns is licit in Polish, whereas (40a) with instrumental case-marked pronouns is ungrammatical. We see again here that nominative behaves like the default case in Polish. To conclude, two tests, already favor nominative over instrumental. The third test involves modified pronouns. This test is a bit more complex as its application to Polish is not as straightforward as in English. It is not easy to come up with good, natural examples for this, or to find naturally occurring ones.

(41) a. My / *Nami trzy musimy teraz iść.
    we.NOM/ we.INST three have now go.INF
    ‘Us three have to go now.’

b. ?Prawdziw-a ja / *prawdziwy-ą mną pojawiła się.
    real-NOM I.NOM / real-INST I.INST surfaced REFLEX
    ‘The real me surfaced.’

c. Biedn-y ty! / *Biedn-ym tob-ą!
    poor-NOM you.NOM / poor-INST you-INST
    ‘Poor you!’

In (41a), Schütze’s example has been translated verbatim to Polish. A modified pronoun (my trzy ‘us three’) has been inserted in the derivation. As can be seen, that pronoun must surface with nominative, instrumental marking results in ungrammaticality.26 We can also see that in (41b) the pronoun can never appear in instrumental case, the only possible way to express this sentence in Polish is to have the pronoun – and the corresponding adjective – in nominative. (41c) was elicited directly from a native speaker informant. It should be noted that constructions like (41b) are not perfect in Polish to begin with, even when they are marked with nominative. However, there is a clear contrast between the nominative and the instrumental variant, with the latter being definitely rated worse. Consider also the examples in (42).

(42) a. Prawdziw-a ja zaczęła się teraz.
    real-NOM I.NOM began REFLEX now
    ‘The real me starts now.’

26 Numerals are a complex matter in Polish. I will discuss the quirks of these phrases in chapter nine.
b. Ta prawdzi-wa ja jest gdzieś we mnie.

that.NOM real-NOM I.NOM is somewhere in me.LOC

‘The real me is somewhere inside of me.’

(42a) is an example taken from an online search, and (42b) is a quote from a Polish novel. While naturally occurring examples of these modifying pronouns are rare in Polish, when they appear, it is always with nominative case marking, and never with the instrumental case. The next environment to test default case is ellipsis. However, this test does not seem to be applicable in Polish due to case markings on wh-questions, see (43).

(43) Kto chce jeść fasolę? Ja! / *Mną! / On! / *Nim! who.NOM wants eat-INF beans? I.NOM/INST /He.NOM/INST

‘Who wants to eat beans? Me! Him!’

In (43) we can see that the elliptical answer to the question Who wants to eat beans? must be in nominative (Ja/On ‘I/He’) and never in instrumental (Mną/Nim ‘I/He’). However, this might be connected to the interrogative pronoun kto, which already implies a nominative answer. Unlike in English, where wh-elements do not show case markings, polish has a full fletched paradigm for wh-words, see Table 1.

<table>
<thead>
<tr>
<th>Case</th>
<th>Wh-element who / what</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>kto / co</td>
</tr>
<tr>
<td>Genitive</td>
<td>kogo / czego</td>
</tr>
<tr>
<td>Dative</td>
<td>komu / czemu</td>
</tr>
<tr>
<td>Accusative</td>
<td>kogo / co</td>
</tr>
<tr>
<td>Instrumental</td>
<td>kim / czym</td>
</tr>
<tr>
<td>Locative</td>
<td>o kim / o czym (o = about)</td>
</tr>
<tr>
<td>Vocative</td>
<td>-----</td>
</tr>
</tbody>
</table>

Table 1: wh-elements in Polish

(Lindert 2016: 13)

Forming questions with these different wh-elements yields an elliptical answer in the corresponding case; see (44), taken from Lindert (2016: 13-14).


‘What is his profession? Cook.’

27 Taken from: Renata Górska, Przyciąganie niebieskie, p. 89.
28 An exception would be whom that still maintains its objective marking from older stages of the language.
   who.ACC like.you? She.NOM / her.ACC
   ‘Who do you like? Her.’

   who.DAT help.you? He.NOM/ him.DAT
   ‘Who(m) are you helping? Him.’

   who.GEN this is house? Father.NOM/ father-GEN
   ‘Whose house is this? Father’s.’

In (44a), only instrumental is licit, as nominal predicates always appear in instrumental in Polish. In (44b) the accusative marking presumably comes from the elided verb, dative in (44c) probably has the same source, namely the verb. In (44d), with a genitive pronoun, it is likely to be allocated within the NP of the non-elliptical structure. In Lindert (2016), I have then concluded that the ellipsis test is not applicable in Polish when it comes to eliciting a default case. While in most cases this is definitely true, we do actually find examples where there is indeed a mismatch. The following is an extract from a conversation between two native speakers.

(45)  
a. Co jest z resztą kurczak-a? Zamroziłiscie go?
   What.NOM is with rest-INST chicken-GEN? You.froze him.ACC?29
   ‘What about the leftovers of the chicken? Did you put it into the freezer?’

b. Nie, ziedliśmy go.
   NEG we.ate him.ACC
   ‘No, we ate it.’

c. Cał-y?
   whole-NOM
   ‘The whole?’

What this extract shows is that elliptical answers might be a default case environment in Polish after all. While the pronoun that refers to kurczak ‘chicken’ is used in accusative case in (45a) and (45b), a nominative case-marked adjective is used in the elliptical answer in

29 Note that kurczak ‘chicken’ is masculine in Polish, therefore the appropriate pronoun is him, not it.
Note that the accusative form *calego* would be preferred by prescriptive grammars as well as by most native speakers, but nominative seems to be possible as well. While (45) is the only example of an elliptical answer that does not display case concord that I have come across, one could say that these are rather rare, as in writing, nobody would use the nominative case. In speaking, apparently, more variation is possible. Note again that the instrumental variant *calym* would be ungrammatical in all cases and highly unexpected.

In sum, the data in (45) might indicate that ellipsis can work as a default case test and it shows that nominative is used when no case concord is established. The last environment we have left for testing is left dislocation; consider the data in (46).

   L.NOM / L.INST, L.NOM like beans-ACC
   ‘Me, I like beans.’

b. My / *nami, my idziemy do dom-u.
   we.NOM / we.INST, we.NOM go to home-GEN
   ‘Us, we go home.’

c. Najlepsz-y sportowiec / *Najlepsz-ym sportowc-em,
   best-NOM sportsman.NOM / best-INST sportsman-INST,
   on powinien wygrać.
   he.NOM, should win-INF
   ‘The best sportsman, him, should win.’

The dislocated element – *ja* ‘I’ in (46a), *my* ‘we’ in (46b) and *najlepszy sportowiec* ‘the best sportsman’ in (46c) – can only surface with nominative case morphology, instrumental is infelicitous. This is a strong indication for nominative in a default case environment. However, one could argue that the left dislocated element in Polish must bear the case of its associate as in the examples in (46) the case on the left-dislocated element mirrors the case of the subject pronoun. However, we can control for this by establishing left-dislocation involving non-nominative marked elements, see (47) and (48).

(47) Jan, nikt go nie lubi.
    Jan.NOM, nobody him.GEN not likes
    ‘Jan, nobody likes him.’

(Citko 2008: 284)
In (47), the dislocated element Jan carries nominative. The corresponding pronoun carries genitive case morphology. We can observe the same effect in (48). This time the corresponding pronoun ja ‘her’ is clearly accusative, however, the dislocated element carries nominative (Gosia) and marginally accusative (Gosię). Doing some more research on the internet, we actually find more examples of left dislocation where we do not get congruent case, see (49).

(49) Duda, ja go poznałem, jest kumat-yym gości-em.
    Duda.NOM I.NOM him.ACC got.to.know is understanding-INST guest-INST
    ‘Duda, I got to know him, he is an understanding fella.’

While one could argue that left dislocation either does not exist in Polish at all or that the dislocated element only shows case agreement with the corresponding noun, it has been shown in this section that this would be too strict. Although it is true that a mismatch in case on the dislocated element is mainly absent in formal writing (as left dislocation structures are a phenomenon occurring in spoken language, not so much in written language), it seems to be part of the grammar. In addition, the left dislocated element may agree with the pronoun in case (see (48)), but nominative seems to be just as good or even better. In any case, instrumental marking is not possible.

Summing up, I have shown that the default case of Polish can only be nominative. I applied Schütze’s (2001) default case tests and the conclusion was unequivocal. The results are summarized in Table 2.

<table>
<thead>
<tr>
<th>Default Case test</th>
<th>Nominative</th>
<th>Instrumental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gapping</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Coordination</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Modified Pronouns</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Ellipsis</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Left Dislocation</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 2: Results of default case tests in Polish

30 https://twitter.com/jnizinkiewicz/status/595668968708435968 (accessed 24th April, 2017)
31 Willim (2015) proposes that accusative is the default in Polish. She argues that numeral DP subjects are phi-deficient and therefore cannot Agree with T. As a result, they surface in accusative case as T cannot value nominative on them. More on these numeral subject DPs will be said in chapter nine. See Matushansky and Ionin (2016) for criticism of Willim’s (2015) approach; they also mention that the default in Polish is nominative.
While the results clearly show that nominative is default, and not instrumental, one could in theory argue that nominative is the default for noun phrases, whereas adjectives take instrumental as a default. This is a possible hypothesis that warrants discussion.\(^{32}\) The fact is, however, that we do not have specific tests that may reveal a default case for specific elements like adjectives, quantifiers, demonstratives, and so on. Therefore, the burden of proof lies with those who claim that these elements have a separate default case. One of the most convincing arguments from this camp comes from arbitrary control data, where adjectives receive instrumental case, see (50):

\[(50) \quad \text{Być miłym} /*\text{mił-y} \quad \text{to być głupim} /*\text{głup-i}.
\]

\[
\begin{align*}
\text{be.INF nice-INST} & \quad \text{nice-NOM} \\
\text{TO be.INF stupid-INST} & \quad \text{stupid-NOM}
\end{align*}
\]

\'
\text{To be nice is to be stupid.}'
\text{(Przepiórkowski 2004a: 104)}

In (50) we see that in the absence of a case assigner, the adjective receives instrumental case.\(^{33}\) This seems to argue for instrumental being the default case in Polish. Whether the environment in (50) is actually a good structure to test a default case is something we can probe now. We have identified nominative case to be the default in Polish, at least for nouns. The prediction for nouns would be that they appear in nominative case in an environment like (50). This prediction is not borne out, see (51):

\[(51) \quad a. \quad \text{Być miłym człowiek-em to być głupim człowiek-em.}
\]

\[
\begin{align*}
\text{be.INF nice-INST} & \quad \text{man-INST} \\
\text{TO be.INF stupid-INST} & \quad \text{man-INST}
\end{align*}
\]

\b. *\text{Być mił-y człowiek to być głup-i człowiek.}
\]

\[
\begin{align*}
\text{be.INF nice-NOM} & \quad \text{man-NOM} \\
\text{TO be.INF stupid-NOM} & \quad \text{man-NOM}
\end{align*}
\]

\'
\text{To be a nice man is to be a stupid man.}'
\]

\(^{32}\) But note that the ellipsis test yielded a nominative-marked adjective in a default environment (45), already indicating that there might not be a specific, different default case for adjectives.

\(^{33}\) It might be argued, depending on the respective approach and theory, that there is a case assigner in (50), namely the Pred-head (Bondaruk 2013 and references therein) assigning instrumental case to the predicates. However, Bondaruk (2013) argues that instrumental is assigned when phi-feature valuation is involved, and adjectives enter the derivation with unvalued phi-features.
c. Żeby być lekarz-em, nie wystarczy wiedz-a medyczn-a, so-that be-INF doctor-INF, NEG enough knowledge-GEN medicine-GEN, trzeba być przede wszystkim człowiek-em.need be-INF before all-INST man-INST

‘To be a doctor, it does not suffice to know medicine, but before all, one must be human.’

In (51), the adjectives are replaced by noun phrases. As can be seen in (51a), instrumental marking is perfectly fine, whereas having these noun phrases surface in nominative, their default case, results in ungrammaticality (51b). (51c) was obtained during an internet search and shows that a noun like lekarz ‘doctor’ behaves like the generic człowiek ‘man’ in taking instrumental case. The data in (51) suggests that NOC contexts are not default case environments and that the instrumental on the adjective in (50) does not signal a default case.

I will argue that NOC contexts embed simple predicational structures with noun phrases, and that the case marking on the adjective is a residual of the noun that is elided in this context. I will go into much more detail on this in chapters seven and eight. For the time being, it is important to note that the case markings in (51) are unexpected under a default case approach, and we must therefore conclude that arbitrary control environments are not a good indicator for default cases; be it adjectives or other elements.

What can we conclude from this section, i.e., what is there that we can actually prove and test, and not merely assume? We can say that default case tests have shown that nominative case is the default in Polish. In addition, we have seen that arbitrary control contexts are not a good indicator for default case, and that the notion of a default instrumental for adjectives cannot be proven or tested, and should therefore be rejected.

In the next section, I will go back to the control data which supposedly show default instrumental (like (50)) and compare it to other Slavic languages, namely Russian and Czech. For Russian, a default instrumental has also been proposed, and I will show that it does not behave in parallel to its Polish counterpart. For Czech, it is assumed that where Polish has default instrumental, Czech has default nominative (Przepiórkowski and Rosen 2005). I will show that the picture is a bit more complex and that it can help us to shed more light onto the instrumental marking in Polish.

---

5.4.4 Default Instrumental: Russian vs. Polish

In this section, we will take a closer look at predicative adjectives in primary predication, secondary predication as well as control and see with what case variations they may appear. If instrumental is indeed a default, one would also expect it to be an option in more structures than just control. It will be shown that instrumental is severely restricted in Polish outside of control. In contrast, in Russian it is more freely available, possibly arguing for instrumental as default in Russian.

We will start with primary predicational structures in Polish as in (52). There we can see that adjectives strongly prefer agreement with the noun they modify.

(52) a. Piotr jest mił-y / *?mił-ym.
    Peter.NOM is nice-NOM / nice-INST
    ‘Peter is nice.’

b. Kasia jest mił-a / *?mił-q.
    Kate.NOM is nice-NOM / nice-INST
    ‘Kate is nice.’

In these primary predicational structures (52), the adjectives have to agree in case with their subjects; projecting them in instrumental case is ungrammatical. The only way one could save the derivation with an instrumental-marked adjective is to make sure that it is the attributive modifier of an elided noun. But even then do these structures get rather bad ratings. If instrumental were the default case for adjectives, it is surprising that they cannot take it outside of control.35

In Russian, the situation is different. There adjectives can optionally take instrumental, and sometimes instrumental marking is even preferred, see (53).

---

35 One could argue here that the application of default case is not necessary in (52) as the elements surface in an environment where case is available syntactically. That is, according to Schütze (2001), default case environments are only those where case is not assigned by a functional projection during the syntactic derivation. While this is true, variations have been attested (Polish subject control with and without the complementizer żeby ‘so that’) which might be explained by having case assigned syntactically or by default. In addition, we will see that Russian does allow a variation in case in structures like (52). For Russian, it has been argued that instrumental is taken very productively as a default in many environments in addition to getting case via Agree (Landau 2008).
In (53a), the predicate may appear in agreeing nominative case, but may also bear instrumental case marking. This is already a sharp contrast to Polish, where the instrumental marking would be rated close to being ungrammatical. For Russian, a recoverable noun that is associated with the instrumental adjective in (53a) is not needed, i.e. Russian speakers can interpret the predicate as a bare adjective (Pitsch 2014: 253). In (53b) and (53c), we have a case of secondary predication. In these structures, case on the secondary predicate is preferably instrumental in Russian, independent of whether the predicate modifies the actions of the subject (53b) or object (53c).

For Polish (54), instrumental is much more restricted in secondary predication; sometimes it is rated just as good as agreeing case (54a), sometimes as slightly worse (54b) and sometimes instrumental is not possible at all (54c/54d). There is never a scenario where instrumental is better than the agreeing option though, as is the case in Russian.

(53) a. Katja byla dobraja / dobr-oj.36

Katja.NOM was good.NOM / good-INST

‘Katja was good.’ (Pitsch 2014: 45)


Taras.NOM came drunk-INST / drunk.NOM

‘Taras came drunk.’ (Landau 2008: 882)


I.NOM found him.ACC drunk-INST / drunk.ACC

‘I found him drunk.’ (Landau 2008: 882)


I.found him.ACC drunk-ACC / drunk-INST

‘I found him drunk.’ (Przepiórkowski 1999: 203)


I.liked John-ACC sober-ACC / sober-INST

‘I liked John (when he was) sober.’ (Przepiórkowski 1999: 203)

36 In Russian, adjectives may appear in a long form or a short form. Predicative instrumental adjectives can only appear in a long form; in order to have minimal pairs, the corresponding nominative long form is presented here. Note that a nominative short form would be fine as well. See Geist (2006) for data and discussion.
Turning to control, the instrumental case is also the preferred option in Russian simple subject control clauses as in (55).

(55)  

a. Ivan ne xočet prijti domoj p’janyj / p’jan-ym. (Russian)  
Ivan.NOM NEG wants come.INF home drunk.NOM / drunk-INST  
‘Ivan doesn’t want to come home drunk.’ (Franks 1995: 222)

b. Vladimir xočet byt’ mil-ym /?mily.  
Vladimir.NOM wants be.INF nice-INST / nice.NOM  
‘Vladimir wants to be nice.’

As in Polish, nominative and instrumental are allowed in control. The difference between the two languages is that in Russian, instrumental seems to be (slightly) preferred over nominative case (55b). In Polish, if there is any preference among speakers, it is for the nominative, not for the instrumental case.

It is clear at this point that the instrumental case in Russian and in Polish behave differently. In Russian, the default seems to be available in all contexts for predicative adjectives, be it primary predication, secondary predication, or control. In Polish, the alleged default instrumental is only freely available in control contexts, never in primary predication, and only restrictively in secondary predication. If instrumental were really default that would be surprising. While the Russian default instrumental seems to behave like a real default for adjectives, Polish instrumental does not, although it might be tempting to conclude that there is a default instrumental in Polish in view of the data in (25)-(27), one would have to explain

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37 I asked three native speakers for judgments of (55b). Two speakers rated the nominative version worse than the instrumental one. One speakers judged the nominative version as ungrammatical. All three accepted the instrumental version.

38 This might also have something to do with the specifics of the instrumental/nominative distinction in predicational structures in Russian (Geist 2006). Geist argues that the two case markings come with different semantics.
why its appearance is restricted to control, while in Russian it is not. The results are summarized in Table 3 below.

<table>
<thead>
<tr>
<th></th>
<th>Russian Instrumental</th>
<th>Polish Instrumental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Predication</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Secondary Predication</td>
<td>✓ (Preferred)</td>
<td>✓ / ? / *</td>
</tr>
<tr>
<td>Control</td>
<td>✓ (Preferred)</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 3: Russian vs. Polish instrumental on adjectives

To conclude, in all environments instrumental is available on the adjective in Russian, sometimes it is preferred. In Polish, instrumental is sometimes just as good as agreeing case or plainly unacceptable; never is it preferred. If one wanted to come up with a generalization as regards case on adjectives, then one could say that Russian adjectives receive instrumental by default, and Polish adjectives agree by default (see also Pitsch 2014).

5.4.5 Default Instrumental: Czech vs. Polish

In this section, we will compare Czech data involving supposedly default case and Polish instrumental case adjectives; the respective Polish data are repeated below.

(56) Kazałem mu być trzeźwym / *trzeźw-emu.
    I.told him.DAT be.INF sober-INF / sober-DAT
    ‘I told him to be sober.’ (Witkoś 2008: 257)

(57) Być milym / *mil-y to być głupim / *głup-i.
    Be.INF nice-INF / nice-NOM TO be.INF stupid-INF / stupid-NOM
    ‘To be nice is to be stupid.’ (Przepiórkowski 2004a: 104)

In this section, I want to add some data from Czech which cast additional doubt on the notion of default instrumental in Polish control.


(58) a. Marie nařídila Honzovi přijít střízlivý / *střízliv-ém.
    Marie.NOM ordered Honza-DAT come.INF sober-NOM / sober-DAT
    ‘Marie ordered Honza to come sober.’
b. Poručil pěti pacient-ům přijít svlečen-í / *svlečen-ým.
he.ordered five.DAT patients-DAT come.INF undressed-NOM / undressed-DAT
‘He ordered five patients to come undressed.’

I will only consider contexts where case transmission to the adjective is not possible. In Czech, case transmission in object control is fine as long as the controller carries a structural case. When a lexical case is involved, as the dative in (58), case transmission is blocked as can be seen by the infelicitous dative forms of the adjectives střízlivý ‘sober’ and svlečený ‘undressed’. It is important to note that instrumental does not appear on the predicates, but rather nominative. P&R (2005) conclude that where Polish has a default instrumental, Czech has a default nominative.

We have conducted a study asking native speakers for ratings of Czech control sentences involving predicative adjectives. The study was done online, the participants were to read the sentences themselves. All instructions were in Czech. The participants were asked to rate the sentences on a scale from 1-7 based on how natural they sound (1 equalling ungrammaticality, whereas 7 represents a perfect sentence). Here I will present some data from the study to illustrate which case possibilities there actually are in Czech control, see (59)-(61).

(59) Filip přikázuje Šimonovi být laskav-ému.
Filip.NOM ordered Šimon-DAT be.INF friendly-DAT
‘Filip ordered Šimon to be friendly.’ 2.04/52

(60) Stanislav ne-dovoluje Emilovi být lín-ý.
Stanislav.NOM NEG-allows Emil.DAT be.INF lazy-NOM
‘Stanislav does not allow Emil to be lazy.’ 5.31/52

(61) Zdeněk doporučuje Richardovi být ochotn-ým.
Zdeněk.NOM recommends Richard-DAT be.INF helpful-INST
‘Zdeněk recommends Richard to be helpful.’ 4.69/52

The example in (59) shows an object control structure with a dative marked controller, Simon, and the adjective laskavý ‘friendly’ agreeing in case. As expected, this structure was rated rather bad with a mean average of 2.04 (with number of participants = 52). Case transmission of dative seems not to be possible in Czech control (in line with P&R 2005). The structure with a nominative marked adjective (60) gets much higher rating, with a mean rating of 5.31.
So far, the data support P&Rs’s (2005) findings. In addition, we have given the participants a structure with the adjective surfacing in instrumental (61), also involving a dative-marked controller. Somewhat surprisingly, instrumental marking was judged not too bad with a mean rating of 4.69. While this is definitely not a perfect rating, it shows nevertheless a high level of acceptance of instrumental case, considering that the nominative variant has a mean rating of 5.31. This already shows that these kinds of structures do not seem to be very natural as no variant comes close to a perfect rating. Still, the ratings suggest that both, nominative and instrumental, are available in object control constructions. Since it has been argued that Czech has default nominative and no default instrumental, the result in (61) is surprising and cannot be accounted for with a default case approach. In fact, P&R (2005) also mention that instrumental may be possible in Czech, namely in NOC, but only very restrictively, see (62).

(62)  
a. Být opil-y znamená být hloup-ý.  
be.INF drunk-NOM means be.INF stupid-NOM

b. ??Být opil-ym znamená být hloup-ým.  
be.INF drunk-INST means be.INF stupid-INST  
‘Being drunk means being stupid.’  
(P&R 2005: 37)

In NOC contexts (62), nominative is preferred (62a), whereas instrumental is only very marginally possible, if at all (62b), so P&R (2005) report. NOC contexts were also tested in our study, and the following results can be reported.

(63)  
be.INF nice-NOM is be.INF stupid-NOM  
‘To be nice is to be stupid.’  
4.56/52

b. Být přijemn-ým je být rozkošn-ým.  
be.INF agreeable-INST is be.INF adorable-INST  
‘To be agreeable is to be adorable.’  
4.13/53

As can be seen from the obtained ratings, the two structures are rated almost identically. The nominative option gets a mean rating of 4.56, while the instrumental variant has a mean rating of 4.13. What this shows is that native speakers do not like NOC structures like (63) very much in the first place, as both possibilities receive a mean rating lower than five. The second

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39 Not all participants of the study were able to see all examples; that is why the number of participants varies depending on the sentence.
fact is that the nominative variant is by no means the preferred option compared to the instrumental. Instrumental does not seem to be a marginal possibility in some restricted contexts, its acceptability is close to the acceptability of nominative case.

To come up with a unified account of case markings on predicative adjectives in Polish and Czech on the basis of a default case notion does not seem to be the correct way. The idea that Polish uses a default instrumental where Czech uses a default nominative turns out to be empirically wrong. Instrumental case is much more accepted in Czech than previously assumed. In fact, it seems to be available in these contexts where Polish also admits instrumental.\footnote{This is a simplified conclusion. In Czech object control, where we have accusative-marked controllers, Czech speakers allow nominative and accusative on the adjective, but not instrumental.} It will be the aim of this study to show that both instances of instrumental – in Polish as well as in Czech – might have the same source which does not involve a default mechanism.

5.5 Summary

This chapter was devoted to the notion of case. Of course, this chapter could not do justice to the vast literature on case and it was therefore not the aim in any way. Rather, we have concentrated on relevant factors of case theory for the Polish control data under investigation. First, the distinction between (at least) two classes of case, namely structural and non-structural (or lexical/inherent) cases has been investigated. It was shown, on the basis of Przępiorowski (1999), that the GoN and nominalizations are good tests for the case split in Polish. Furthermore, three usages of the instrumental case in Polish were investigated. Instrumental in the verbal/prepositional domain, predicational usages, and the so-called default instrumental. The first instance was clearly an instance of lexical case, and its assignment happens inside the verbal or prepositional domain via functional projections. The predicational usage has been shown to be of a lexical nature as well. The alleged default usage has been shown not to pattern like a default case at all. This was based on the application of Schütze’s (2001) default case tests, as well as on comparison with default instrumental in Russian. It has also been shown that Czech allows the instrumental case in the same environments as Polish, in addition to its default nominative. Therefore, one must conclude that the third usage cannot be reduced to a default analysis.

However, nothing has been said about the source of this alleged default instrumental in this chapter. It will be argued in chapter eight that this case is also of a lexical nature and is assigned by a specific functional projection in the structure; the same that is projected in
predication. So, importantly, its assignment is determined in the syntax and not by a default rule. The next chapter is about predication, where we will derive the predicational structures in which instrumental case is available.
6. Predication

Like the area of case, predication is a vast topic, covering many structures and configurations. And just as with case, this chapter is not to be understood as a complete and comprehensive investigation of all predicational structures of Polish. Instead, we will be looking at some specific predicational structures which may help us to understand control better. In fact, it will be claimed in this thesis that when understanding predicational structures better, many of the control phenomena presented in chapter three can be accounted for without any further stipulations.

6.1 Some Background

The focus of this investigation lies on structures which involve the copula być ‘to be’. These come in different shapes and forms with each identifying a different relation between the elements involved. Some of these are shown in (1).

(1) a. Dziecko jest przykro.
    child-DAT is sorry-ADV
    ‘The child is sorry.’ (Bondaruk 2013: 124).

b. Marek to (jest) dobry lekarz.
   Mark.NOM TO is good-NOM doctor.NOM
   ‘Mark is a good doctor.’ (Bondaruk 2013: 128)

c. Jan byl student-em /*student.
   Jan.NOM was student-INST/student.NOM
   ‘Jan was a student.’

d. Marek jest genialny /*genialnym.
   Mark.NOM is brilliant-NOM / brilliant-INST
   ‘Mark is brilliant.’

e. Piotr jest głupiec.
   Peter.NOM is fool.NOM
   ‘Peter is a fool.’ (Bondaruk 2013: 126)

In (1a), we have a structure involving an experiencer. The DP dziecko ‘child’ appears in dative case marking; due to the fact that the DP is non-nominative, the copula appears in a
default form, namely third person singular, neuter\(^1\) and the corresponding predicate does not agree in number and gender. It is a caseless adverb. (1b) shows a structure where the two elements *Mark* and *dobry lekarz* ‘good doctor’ are connected via the element *to*. Optionally, the copula may be overtly realized. In this structure, the two elements agree in case, which in (1b) is nominative. This structure has been called specificational clause (Bondaruk 2013). (1c) and (1e) show predicational clauses (Bondaruk 2013). (1c) shows that a predicative noun has to appear in instrumental, nominative marking is ungrammatical. However, (1e) shows that it is possible to use nominative predicative nouns in certain contexts. (1d) shows a structure with predicative adjectives where the predicate has to agree in case with the subject, instrumental case marking is out.

The structures in (1a) and (1b), interesting as they are, will not be investigated further in this work as they represent structures which cannot be embedded under control. Instead, we will concentrate on other structures involving the copula *być* ‘to be’ that we may find in control as well. In the next section, we will look at data as in (1d) followed by a section about predicative nouns as in (1c) and (1e).

6.1.1 Predicative Adjectives

In this section, we will take a closer look at the behaviour of predicate adjectives in Polish as in (1d), repeated for convenience in (2).

(2) Marek jest genialn-\(y\) /*genialn-ym.  

Mark.NOM is brilliant-NOM / brilliant-INST  

‘Mark is brilliant.’

In (2), we see an adjectival predicate which agrees in case with the subject, here nominative. Instrumental case marking is judged ungrammatical.\(^2\) The descriptive generalization is that adjectives agree in case with the subject they modify, as can be seen in (2). Furthermore, we observe the same pattern with predicative adjectives that modify a non-nominative DP, as in (3).

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\(^1\) This is not too apparent in the example in (1a); example (i) shows the default form of the copula clearer:

(i) Matk-om byl-o / jest przykro.  

mothers-DAT was-3SG.N / is.3SG.N sorry.ADV  

‘The mothers were / are sorry.’

\(^2\) The star rating is probably too strong, as in certain contexts the adjective may appear in instrumental marking. However, this is only possible if the adjective is interpreted as the attributive modifier of an elided noun. So, eventually, the paradigm is left unchanged.
In (3), the adjective inteligentny ‘intelligent’ appears with the same case marking as the associated DP. Thus, adjectives carry the case of the element they modify, regardless of whether they are nominative or non-nominative.³ Nouns are more complex in Polish, which will be shown in the next section.

### 6.1.2 Predicative Nouns

Predicative nouns in Polish usually take instrumental case, as in (4a), a limited class of predicative nouns also admit nominative case, see (4b).

(4) a. Jan był student-em /*student.
    Jan.NOM was student-INST / student.NOM
    ‘Jan was a student.’

b. Piotr jest głupiec.
    Peter.NOM is fool.NOM
    ‘Peter is a fool.’

(5) a. Sergej gid /*gid-om.
    Sergej.NOM ØCOP guide.NOM / guide-INST
    ‘Sergej is a guide.’

b. Sergej byl /budet gid / gid-om.
    Sergej.NOM was / will guide.NOM / guide-INST
    ‘Sergej is / will be a guide.’

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³ The gloss is directly quoted from Bondaruk (2013). However, I am not sure whether the accusative marked elements are not actually genitive. The argument made in the text would be unaffected in any case.
⁴ Note that instrumental case marking in (4b) is perfectly fine as well.
In (5a), the predicative structure is in the present tense. The respective predicative noun *gid* ‘guide’ appears in nominative case marking, instrumental case marking is impossible. Note that Russian has lost the present tense copula and therefore it is missing in the structure. However, it is still assumed that a copula is projected, however it remains covert (Geist 2008). (5b) shows the same structure just with different tense marking, namely past and future; we have optionality when it comes to the case marking of the predicative noun. That is, instrumental marking becomes possible, unlike in (5a). The possibility of having both cases there, which is argued to be more productive in Russian than in Polish, has been studied intensively. What the literature agrees upon is that the two different case markings in (5b) and (6) give rise to two different interpretations. However, the exact semantic difference between the two case markings is still under discussion. For Jakobson (1971), the difference boils down to stage vs. individual level readings (SLP/ILP). He argues that nominative marking signals the latter, whereas instrumental signals the former reading. For Timberlake (1986), instrumental is used when the property of being something is only a part, but does not define the whole person, whereas nominative gives one a whole reading. For Geist (1999), the difference between the two case markings boils down to topic readings.

Peaking over to Czech, we see that predicative nouns may be used in all tense forms in both case markings, see (7).

(7) a. Antonín byl herec.
    Antonín.NOM was actor.NOM
    ‘Anton was an actor.’

b. Lumír byl architekt-em.
    Lumír.NOM was architect-INST
    ‘Lumir was an architect.’

(6) a. Ivan byl xoroš-im učitel-em.
    Ivan.NOM was good-INST teacher-INST

b. Ivan byl xorošij učitel.
    Ivan.NOM was good.NOM teacher.NOM

‘Ivan was a good teacher.’ (Geist 2007: 83)
In our survey, the following ratings have been obtained: Out of 53 participants, the mean rating on a scale from 1 to 7 was 6.91 for (7a), an almost perfect rating. (7a) shows a structure with past tense marking and nominative marking on the predicative noun. Changing the case on the predicative noun to instrumental has almost no effect on the mean rating (7b). Similar ratings can be reported for case markings in present tense contexts (7c/7d). Czech retains a present tense copula like Polish, but unlike Russian.

To recapitulate, Czech displays the least strict pattern when it comes to predicative nouns – it allows nominative and instrumental case markings in all environments. Russian allows both case markings when there is an overt copula, namely in past and future structures, but disallows instrumental case in present tense cases. Polish only allows predicative nouns in instrumental case marking in all tense forms, with some nouns in addition allowing nominative. The Polish pattern still needs to be accounted for.

One could argue that an SLP/ILP distinction exists in Polish as well, just like in Russian and probably Czech, where the different case markings signal different readings regarding these properties. This has been assumed mainly by older works (Suchecki 1867; Malecki 1879; Krasnowolski 1897; Szober 1923), but has ever since been rejected (Klemensiewicz 1927; Bogusławski 2001) in the light of numerous counter examples, as in (8).

Sophia.NOM is daughter.NOM voivode-GEN Krasinki-GEN
‘Sophia is the daughter of Krasinki, the voivode.’ (Bogusławski 2001: 107)

Being a daughter should qualify as an ILP, as it not something that changes over time. Therefore, if instrumental signalled SLP and nominative signalled ILP, one would expect to

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5 Whether the two case markings signal different interpretations in Czech has not been thoroughly investigated in our study. For space reasons, I will not go into possible semantic effects for the Czech data and refer the interested reader to Bartosová and Kucerová (2015) for data and discussion.

6 Gloss and translation to English are my own as Bogusławski’s paper is written in German. This is true for all of Bogusławski’s cited examples in this work.
have nouns like córka ‘daughter’, syn ‘son’ or bóg ‘God’ only in nominative case marking. However, these nouns take instrumental case. I therefore follow Bogusławski’s (2001) reasoning and reject this idea.

Testing the part/whole hypothesis (Timberlake 1986) proposed for the Russian data is not an easy task. If instrumental case signals part readings, whereas nominative signals whole readings, one would have to create a context where only a whole reading is available. In other words, can we find a context where only nominative case is fine, but not instrumental? The answer is no. All predicative nouns allow instrumental case, nominative is restricted. Besides, it is very hard to argue that one predicative noun signals wholeness. One is never just a daughter, but one also has a certain nationality. One is never just a Pole, but also a son/daughter, plus one also has a profession and a hair colour. In effect, nobody seems to be defined by one property. This proposal then seems to be unfalsifiable and is therefore rejected.

Bondaruk (2014) offers a different approach to the Polish data; she proposes that the split between instrumental and nominative marked nouns runs along the lines of defining and characterising properties (following Roy’s 2013 analysis of predication in French). She ascribes nominative to the former, and instrumental to the latter category. How does she come to this conclusion? For one she shows that only the instrumental marked noun can be restricted by temporal or spatial modification, while nominative cannot (9).

(9) Marek był profesor-em /\*profesor w Lublini-e.
    Mark.NOM was professor-INST/ profesor.NOM in Lublin-LOC
    ‘Mark has been a professor in Lublin.’ (Bondaruk 2014: 344)

In (9), Bondaruk (2014) argues, nominative is not licit because it signals defining properties which are supposed to be true at all times and places; thus, it cannot be combined with spatial adverbs like w Lublinie ‘in Lublin’ which restrict its valence. Throughout the paper, Bondaruk (2014) shows, by applying different tests, that only instrumental allows these sort of restrictions, while nominative does not. This results in a lot of data where instrumental marking is judged to be good and nominative marking to be bad. However, whether these tests (as in (9)) really indicate such a split is not clear.7 Remember, the standard view is that nominative predicative nouns do not exist in Polish (with some exceptions), therefore the

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7 Other properties of nominative predicative nouns, according to Bondaruk (2014), are that they exhibit lifetime effects, they cannot be projected as small clause complements of lexical verbs, they cannot be combined with the verb być ‘to be’ when it is marked for imperfective or perfective aspect (pobyt ‘was’ – perfective; bywał ‘was’ – imperfective), they entail the actual practice of a given activity (so that the action cannot be cancelled), and they are not possible with stage level nominals.
ungrammaticality of nominative nouns as in (9) can be explained by stating that they generally do not exist, so they do not exist either when they are temporally or spatially modified. In fact, Bondaruk only cites data where the nominative is illicit while instrumental is fine.\(^8\) This is not surprising, as the general picture shows that nominative is almost never good in Polish, so the ungrammaticality of (9) is not due to the spatial restrictions. To make her point clearer, Bondaruk (2014) should have provided data where only nominative is good, while instrumental is illicit. However, such data does not exist in Polish.

There might be one prediction that this approach makes: If there is no temporal or spatial restriction, nominative case should be preferred, or at least possible, on the predicative noun. However, this predication is not borne out, see (10).

(10) Nimoy przez całe życie [...] był między innymi aktor-em, fotograf-em, poet-a, pisarz-em, piosenkarz-em i reżyser-em. ‘Nimoy was, throughout his whole life, among other things an actor, a photographer, a poet, a writer, a singer and a movie director.’

The data in (10) was obtained in an online search.\(^9\) Through the addition of *przez całe życie* ‘throughout whole life’, we make sure that there is no temporal restriction. Even here, we get instrumental case marking, not the expected nominative marking. To go even one step further, nominative marking on these nouns would result in ungrammaticality.\(^10\)

In addition, I have conducted an informal Google search to see whether nominative predicative nouns are productively used on the Internet. As is well-known, we find all kinds of data on the Internet, good and bad. This means that structures which are supposed to be good should be found, but also bad structures should appear from time to time. In this study, we used the nouns which Bondaruk (2014) also discusses.\(^11\) Here are the results:

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\(^8\) Except for data involving lifetime effects where apparently both case markings are fine, according to Bondaruk (2014).


\(^10\) One could argue that the instrumental in (10) signals part readings (in the sense of Timerlake 1986). While this could explain the usage of instrumental in (10), it fails to predict the right outcome for data as in (8).

\(^11\) I added *prezydent* ‘president’ to the list, as Przepiórkowski (1999: 216) mentions that it is marginally possible to use it with nominative marking as well.
Table 1: Results case marking on predicative nouns

Table 1 shows the number of hits when searching for either *He is an actor* or *He is an actor*, respectively.\(^\text{12}\) However, one should read the table with caution; Google has a complex algorithm when it comes to displaying the number of hits. That is to say, Google multiplies the number of hits based on this algorithm. If we look at the instrumental hits for *aktor* ‘actor’, for example, we can safely say that there were not 6,960 individual pages displaying this structure, therefore the numbers in itself are useless. What is of greater use for our purposes here is the ratio between instrumental and nominative hits as the ratio should not be affected by the algorithm. If we stay with *aktor* ‘actor’, we see that the ratio for nominative vs. instrumental is 1 nominative hit to 1,160 instrumental hits. This basically indicates that the nominative form in this construction does not exist. Consider *dyrektor* ‘director’ which has a ratio of 1:80,800 and *prezydent* ‘president’ which has a ratio of 1:83,167. What these numbers indicate is that nominative predicative nouns do not seem to exist in contemporary Polish. If there was a predicable distribution of nominative and instrumental nouns, one would expect a more balanced number of occurrences. This is especially surprising as we expect to find good as well some bad data on the Internet yet nominative predicative nouns are basically non-existent. However, I do not think Bondaruk’s (2014) study and analysis is wrong or misleading. It is well-attested that in older stages of Polish, the two case options did exist in parallel (Moser 1993). In addition, Bondaruk (2014) cites a lot of data from older grammars showing that nominative nouns seem or seemed to be good. Eventually, Bondaruk’s analysis is probably on the right track when it comes to explaining the distribution of these nouns in older stages of the language. However, in contemporary Polish the nominative option ceased to exist, and we only have instrumental marking. It is still not clear why the nominative option

<table>
<thead>
<tr>
<th>‘On jest [predicative noun]’</th>
<th>Nominative hits</th>
<th>Instrumental hits</th>
<th>Ratio (Nom/Inst)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>aktor</em> ‘actor’</td>
<td>6</td>
<td>6,960</td>
<td>1:1,160</td>
</tr>
<tr>
<td><em>dyrektor</em> ‘director’</td>
<td>5</td>
<td>404,000</td>
<td>1:80,800</td>
</tr>
<tr>
<td><em>kucharz</em> ‘cook’</td>
<td>8</td>
<td>52,500</td>
<td>1:6,563</td>
</tr>
<tr>
<td><em>lekarz</em> ‘doctor’</td>
<td>10</td>
<td>18,000</td>
<td>1:1,800</td>
</tr>
<tr>
<td><em>muzyk</em> ‘musician’</td>
<td>6</td>
<td>2,610</td>
<td>1:435</td>
</tr>
<tr>
<td><em>Polak</em> ‘Pole’</td>
<td>36</td>
<td>14,900</td>
<td>1:414</td>
</tr>
<tr>
<td><em>prezydent</em> ‘president’</td>
<td>6</td>
<td>499,000</td>
<td>1:83,167</td>
</tr>
<tr>
<td><em>stolarz</em> ‘carpenter’</td>
<td>7</td>
<td>17,200</td>
<td>1:2,457</td>
</tr>
<tr>
<td><em>szef</em> ‘boss’</td>
<td>20</td>
<td>16,000</td>
<td>1:800</td>
</tr>
</tbody>
</table>

\(^{12}\) I chose Google as a tool to obtain data in order to take writings in forums, chats, and social media in general into account. As is well-known, language is constantly changing and I wanted to include possible usages of predicative structures that might be considered ungrammatical by grammars and would not be found in newspapers, articles or books.
exited the language; more research on this is needed. What can be said is, however, that this seems to be the course of events in the Slavic languages. My Russian informants point out that they always prefer instrumental marking in examples like (5b) and (6). In Czech, both options still exist in parallel, and in Polish only instrumental is fine. It seems that the three languages are at different stages of development. That is to say, Czech is closest to the older stages, then Russian, which permits both but prefers instrumental, and then Polish, which only admits instrumental markings.

Nevertheless, we are still left with some occurrences of nominative predicative nouns in Polish. We have seen that the reasoning for the Russian data cannot be easily transferred to the Polish data. In addition, Bondaruk’s (2014) idea does not seem to withstand the data, as her system overgenerates the usage of nominative predicative nouns. Let us check more carefully where exactly these nominative predicative nouns occur most productively (if we can speak of productivity in this context in the first place) and see whether the data itself already give us an answer. As shown in (1e), repeated as (11a), most nouns that allow nominative marking are actually used as insults.

(11) a. Piotr jest głupiec.
   Peter.NOM is fool.NOM
   ‘Peter is a fool.’ (Bondaruk 2010: 126)

b. Stefan jest gówno śmierdzące.
   Stephan.NOM is dirt.NOM smelly.NOM
   ‘Stephan is smelly shit.’ (Bogusławski 2001: 109)

   you.are ordinary-NOM swine-NOM
   ‘You are an ordinary swine.’ (Przepiórkowski 1999: 216)

---

13 I have asked three native speakers of Russian for judgments of the data in (5) and (6). All three preferred instrumental marking in future and past tenses; one judged the nominative marking in these as ungrammatical, the other two showed a preference for the instrumental marking, see also Geist (1999: 5) for discussion.

14 This ordering also mirrors another phenomenon in the Slavic languages, namely the GoN (Błaszczaż 2001b). Polish strictly employs this phenomenon, in Russian it is optional, and in Czech it is practically non-existent. A similar pattern can be found in object control, where Russian and Czech allow transmission of structural cases to adjectives, while Polish strictly forbids transmission of all cases. It seems that, when it comes to syntactic phenomena in the Slavic languages, Polish is the one that always exhibits the strictest pattern.

15 This could then explain why Polak ‘Pole’ appeared more often in nominative than the other nouns in Table 1. It can be used as an insult more easily than the others in the table.
In (11a), the predicative noun *głupiec* ‘fool’ appears in nominative case marking. If we look at the general paradigm for Polish again, we see that it is adjectives that agree in case, while nouns appear in instrumental. The noun in (11a) thus patterns more like an adjective. Looking at the intended meaning, one sees that the noun is also used like an adjective: It is not the case that Peter is a fool per se, he basically behaves like one. This is very different from Zosia ‘Sophia’ in (8); she is a daughter and does not necessarily have to behave like one in order to be called a daughter. For (11b), the contrast is even more apparent. There, Stefan is not literally shit, but instead, a property is ascribed to him that is rather negative. In (11c), again the person is not meant to be an actual swine, but is said to behave like one. It is striking that insults appear in nominative case marking rather often making them most felicitous for this kind of structure.

In addition to ascribing a negative property, namely using them as insults, one can also use nominative predicative nouns to ascribe a positive property to somebody, see (12) and (13).

(12) a. Stefan jest (świetn-y) kierowc-a!
    Stephan.NOM is wonderful-NOM driver-NOM
    ‘Stephan is a wonderful driver.’
    (Bogusławski 2001:104)

b. Stefan jest (świetn-ym) kierowc-ą!
    Stephan.NOM is wonderful-INST driver-INST
    ‘Stephan is a wonderful driver.’

(13) a. On jest zapalon-y wędkarz.
    he.NOM is enthusiastic-NOM angler.NOM

b. On jest zapalon-ym wędkarz-em.
    he.NOM is enthusiastic-INST angler-INST
    ‘He is an enthusiastic angler.’
    (Bogusławski 2001:104)

In (12a), as well as (13a), we see the predicates *kierowca* ‘driver’ and *wędkarz* ‘angler’ in nominative case marking. This signals a compliment here, not necessarily a profession. In (12a), the sentence means that Stefan drives well, but it is not necessarily the case that he is a professional driver. In (12b), with instrumental marking of the predicate, the reading that Stefan is a professional driver (and happens to be a good professional driver) is stronger. The
same is true for the data in (13). A similar usage of these nouns can be found when people are ascribed the property of animals, see the data in (14) which are taken from Bogusławski (2001: 109).

(14) a. Corocoro jest wilk, nie zaczepiaj go.
   Corocoro.NOM is wolf.NOM NEG attach him.GEN
   ‘Corocoro is a wolf, leave him alone.’

b. Stefan jest orzel.
   Stephan.NOM is eagle.NOM
   ‘Stephan is an eagle.’

c. Corocoro jest wilki-em.
   Corocoro.NOM is wolf-INST
   ‘Corocoro is a wolf.’

In (14a), we have the predicative noun wilk ‘wolf’ appearing in nominative case. The only interpretation one gets here is that Corocoro is actually a human being with properties of a wolf. The same is true for (14b); Stefan is not an actual eagle, he simply embodies certain properties which we assign to eagles, i.e. he might have some majestic qualities. In (14c), where wilk ‘wolf’ appears in instrumental, the interpretation is closer to Corocoro actually being a wolf. A first conclusion to be drawn from the data in (11)-(14) is that whenever the predicative noun appears in nominative case, the interpretation is more figurative, whereas when we have the noun in instrumental we have a literal meaning. Consider the minimal par in (15).

(15) a. Piotr jest aktor.
   Peter.NOM is actor.NOM
   ‘Peter is a good liar.’

b. Piotr jest aktor-em.
   Peter.NOM is actor-INST
   ‘Peter is an actor.’

In (15b), the predicative noun appears in instrumental and the interpretation is a literal one. That is, there is no reason to believe that Piotr is not an actor by profession. In (15a), where the predicative noun appears in nominative, it is possible to interpret the sentence in a non-
literal way. There, Piotr is not an actor by profession but inhabits a certain quality that he shares with professional actors – that he can convincingly tell lies, for example.\footnote{When it comes to professions more usages with nominative predicative nouns have been attested, see (i)}

Swan (1993) has also looked at the case markings of predicative elements and proposes a continuum when it comes to the described phenomenon. Basically, the more adjective-like an element is, the more probable it is that it shows agreement in case (usually nominative); the more noun-like an element is, the more probable it is that it appears in instrumental marking. With such a system, we could still maintain the generalization about case markings of Polish predicative nouns and adjectives (namely that the former appear in instrumental case and the latter show case agreement) and explain what kind of nouns could appear in nominative case marking, namely those that can have an adjective-like usage.

If we now assume that only instrumental predicative nouns actually constitute nouns, whereas nominative predicative nouns constitute adjectives, we are left with a challenge: What does this mean for the syntax? Are these nominative elements projected as APs? What does it mean to be adjective-like?

Eventually, what I will propose is that instrumental nouns mark DPs, whereas agreeing (or nominative) nouns are projected as bare NPs. This captures the fact that both elements are at their core nouns, the difference lies in how far they project. I will go into greater detail in section 6.3, where I will present an analysis for predication which can then be embedded under control and explain the case phenomena attested there without stipulating any control mechanisms involving default case. First, however, I will present Bondaruk’s (2013) analysis of the discussed data. Then, I will present an alternative that reduces structure as much as

\footnote{When it comes to professions more usages with nominative predicative nouns have been attested, see (i)}

(i) a. On jest \textit{?prezydent} / prezydent-em.
   he.NOM is president.NOM / president-INST
   ‘He is the president.’
   (Przepiórkowski 1999: 216)

b. Jestem professor.
   I.am professor.NOM
   ‘I am a professor.’
   (Bondaruk, p.c.)

In (i), the two predicative nouns \textit{prezydent} ‘president’ and \textit{professor} are used, albeit somewhat marginally, with nominative case marking. One should mention already at this point that instrumental marking is possible in both cases, and probably preferred by native speakers. What these two nouns have in common is that, in addition to denoting professions, they also refer to titles. That is to say, \textit{prezydent} ‘president’ and \textit{professor} can be used as referring to a title, and not the specific job. So, nominative case marking would probably signal a title here, not so much a profession. Generally, whenever predicative nouns appear in nominative case, they signal that the speaker intends a different meaning from the expected one when the noun appears in instrumental. These different meanings may be a figurative usage (and not the literal one) or some other usage of the noun like denoting a title, and not so much the profession.
possible (à la den Dikken 2006) and that derives case agreeing (nominative) adjectives, as well as the difference between nominative and instrumental nouns.

6.2 A Previous Approach (Bondaruk 2013)

Bondaruk (2013) studies predicational structures in both, English and Polish, and proposes an analysis in the minimalist framework. Here, I will shortly present how she derives the case mismatches in the three types discussed above, namely predicative adjectives and predicative nouns, the latter with nominative and instrumental case markings.

6.2.1 Predicative Nouns

Bondaruk (2013) assumes for the structure of DP predicates a specified Predicational Phrase (PredP) to be present in the syntax (Bowers 1993, 2001; Bailyn 2001; Bailyn and Citko 1999; Bailyn and Rubin 1991). It is this PredP that establishes predication between two elements. Also following Bailyn and Citko (1999) and Citko (2008), she assumes that the Pred-head comes in two types: One is a complete non-defective head, which has a full set of phi-features and assigns (instrumental) case to its complement, and one that is defective, that is, it has no phi-features and is unable to assign case; see (16) for an illustration of a Pred-head with a full set of phi-features.

\[
\text{(16)} \quad TP \quad \begin{array}{c}
\text{DP}_{\text{Subject}} \\
\text{T}' \\
\text{T} \\
vP \\
v \\
be \\
\text{PredP} \\
\text{be} \\
\text{DP}_{\text{Subject}} \\
\text{Pred'} \\
\text{DP}_{\text{INST}} \\
\text{INST}
\end{array}
\]

The idea is that the Pred-head establishes predication between the two elements in its specifier and complement position. Unlike Citko (2008),\(^{17}\) Bondaruk (2013) does not assume that the copula is projected under the Pred-head, but actually under little \(v\) being situated atop of PredP.\(^{18}\) In (16), the Pred-head is non-defective, which means that it carries phi-features and

\(^{17}\) Citko (2008) does not call her predicational phrase PredP, but rather \(\pi P\).

\(^{18}\) Bailyn and Citko (1999) posit two base positions for the copula, depending on the respective structure; it is either projected under \(V\) or Pred. Bondaruk (2013) admits that it is not easy to pinpoint the exact position of the
an instrumental case features. It probes its c-command domain and finds the DP in the complement position. They establish Agree, as a result the phi-features of Pred are valued, and as a by-product, case is valued on the DP. T probes its c-command domain as well, and finds the DP in Spec.PredP. They establish Agree, phi-features are shared and nominative case is assigned. The case mismatch between the two nominal elements is thus derived.\footnote{For space reasons, I will not present the structure where both nouns appear in nominative case. There, Bondaruk (2013) assumes that the Pred-head is defective and cannot establish Agree with the DP in its c-command domain. She further assumes that in this case the DP in Spec.PredP probes its c-command domain, finds the other DP and establishes Agree (for details, see fn. 22). As a result, both share their features (Frampton and Gutmann 2000; Pesetsky and Torrego 2007). Once the upper DP establishes Agree with T, all features are shared with the lower DP thus resulting in nominative case on the latter. This leaves the question open why only a subset of nouns allows this structure. In addition, it is not clear what the trigger for phi-feature sharing is – it does not happen with a non-defective Pred-head after all.}

### 6.2.2 Predicative Adjectives

The case of predicative adjectives is a slightly different one. In fact, the pattern of predicative adjectives resembles that of predicative nominative nouns: They do not appear in instrumental case, they agree in case with the subject they modify (which in most cases is nominative), see (17).

\begin{align}
(17) \quad & \text{Marek jest inteligentn-y /}\text{*inteligentn-ym.} \\
& \text{Mark.NOM is intelligent-NOM / intelligent-INST} \\
& \text{‘Mark is intelligent.’} \quad \text{(Bondaruk 2013: 200)}
\end{align}

In chapter five, we have also established that Russian allows for more variation than Polish in allowing bare adjectives to appear in instrumental case marking, see (18).

\begin{align}
(18) \quad & \text{On byl p’jan-y m / ?p’janyj.} \\
& \text{he was drunk-INST / drunk.NOM} \\
& \text{‘He was drunk.’} \quad \text{(Matushansky 2006: 11)\footnote{I have left out the distinction between long and short adjectives in (18) which Matushansky makes in her examples, as it is not relevant for the current discussion.}}
\end{align}

This default usage of instrumental case on adjectives is not licit in Polish. In addition, it is not the case that adjectives can only appear in nominative, but they take the case their associated DP assigns to them, see (19).

\begin{align}
(19) \quad & \text{a. Ci trzej mężczyzni są inteligentn-i.} \\
& \text{these three men-NOM are intelligent-NOM} \\
& \text{‘These three men are intelligent.’} \quad \text{(Bondaruk 2013: 200)}
\end{align}

copula, however she provides some pieces of evidence for her structure. For space reasons I will not discuss them here but refer the interested reader to the respective passages (Bondaruk 2013: 163-167).
b. Tych trzech mężczyzn jest inteligentnych.

These three men is intelligent

‘These three men are intelligent.’

(Bondaruk 2013: 200)

In (19a), we have the standard nominative subject from which the adjectives get its case value. In (19b), we have an accusative case-marked subject, a so-called quirky subject,\(^{21}\) which also transmits the case to the adjective, thus the latter surfaces with accusative case marking. As adjectives always agree in case with the noun they modify, Bondaruk (2013) assumes that the structure is then built with a defective Pred-head as in (20).

\[(20)\]

\[
\begin{array}{c}
\text{T} \\
\text{TP} \\
\text{DP}_{\text{subject}} \\
\text{T'} \\
\text{vP} \\
\text{PredP} \\
\text{DP}_{\text{subject}} \\
\text{Pred} \quad \text{AP} \\
\text{NOM} \\
\end{array}
\]

The only difference between the structures in (16) and (20) is that the latter involves a defective Pred-head, which means that it cannot value case features. The DP and the AP establish Agree and share their phi-features (Frampton and Gutmann 2000; Pesetsky and Torrego 2007).\(^{22}\) Once the DP receives nominative case from T via Agree, this case feature will also percolate down to the adjective, thus resulting in matching features. For Bondaruk (2013), it is actually important to have the same underlying structure, that is, for both nouns and adjectives there should be a PredP establishing predication. The only difference is encoded in the feature composition of the respective Pred-head. In addition, Bondaruk (2013) uses the notion of feature sharing to account for the two nominative case markings on the two elements (cf. Pesetsky and Torrego 2007). Crucially, she rejects the notion of multiple Agree relations established by T, one of the reasons being the data in (19b), where the DP and the adjective carry a non-nominative case. She deduces that any head that is responsible for the accusative marking on the DP in (19b) would then also have to be responsible for the

\(^{21}\) The issue of quirky subjects will be taken up in chapter nine, where we will look more closely at DPs which constitute quirky subjects.

\(^{22}\) For Frampton and Gutmann (2000) as well as Pesetsky and Torrego (2007) the trigger for Agree, or feature sharing, is unvalued phi-features on a functional head. In order for the DP to Agree with the AP in (20) Bondaruk (2013) assumes that is can also be unvalued case features that trigger probing and that phrases may also probe to value their features. I will follow Bondaruk (2013) when it comes to this mechanism.
accusative marking on the adjective. This means that it is not only T that probes multiple times, but any functional head that happens to assign case to the subject. For her, it seems more intuitive to assume that it is the DP that shares the features with the adjective instead of having multiple functional projections being able to probe multiple times in certain structural configurations.

6.2.3 Some Comments

In the following section, I will present my own approach to these predicative structures, which can then be embedded in control and derive the case markings without assuming a specific default instrumental. I will use some of Bondaruk’s insights concerning predication. For one, an application of feature sharing in AP predication will be assumed, that is, I will not assume a mechanism that makes multiple probing of T available.

In addition, Bondaruk’s structures for predicative adjectives and predicative nominative nouns are basically the same. They involve a defective Pred-head and the same phi-feature matching process. So, eventually, according to her structures, these two elements – adjectives and nominative nouns – form one class, and predicative instrumental nouns another class, as the latter involves a different structure. I will follow this intuition here, albeit with different assumptions about the underlying structures.

However, from a minimalist point of view, it is not clear what a defective PredP is actually doing in the structure (see also Pitsch 2014). As the defective PredP is available with predicative adjectives, predicative nominative nouns and structures with to,23 it seems to cut through the different types of copula constructions. Bondaruk (2013) argues that structures with adjectives and nominative/instrumental nouns constitute predicational structures, while structures with the element to actually belong to the specificational class of copula constructions. Based on this, we cannot derive a predicational or specificational clause based on the feature make-up of Pred.

Furthermore, the copula does not seem to play any role in establishing predication for Bondaruk (2013). That is, Pred establishes the predication, and the copula is projected atop of it. This is counterintuitive as one would argue that the copula actually connects the two predicated elements. In her approach, it is an empty (sometimes defective) head that

23 Example for a structure with to is given in (i).

(i) Marek to jest aktor /*aktor-em.
   Mark.NOM TO is actor.NOM / actor-INST
   ‘Mark is an actor.’
establishes predication, with the copula atop of it. Following the idea that structure should be reduced as much as possible, I will assume that a specific PredP might not be needed to build predicational structures (see also Matushansky 2015).

### 6.3 A Proposal for Predication

In this section, I will outline a potential structure for predicational clauses in Polish. The attentive reader has probably realized that we have drifted rather far away from our original set of data which is under investigation here, namely control constructions. The point of this rather long journey into predicational structures is that these are very revealing for control mechanisms. That is to say, when looking at control phenomena, we need to strip away everything that can be explained by other means than control theory. As I have argued in chapter five, instrumental marking in Polish is not default, but follows predicational rules. In order to follow this logic, we need to understand these predicational rules first to judge whether these can do the job of explaining certain phenomena in control structures.

I will start by presenting the structure for AP predication followed by DP predication, which involves more structure than AP predication. Then, I will briefly outline how the (limited) class of nominative predicative nouns fits into the system.

#### 6.3.1 AP Predication

In this section, I will propose a possible derivation of structures involving predicative adjectives. In (21), we have some data displaying AP predication.

(21) Tomek jest mił-y / fajn-y / inteligentn-y / wysportowan-y.

Tom.NOM is nice-NOM / great-NOM / intelligent-NOM / sporty-NOM

‘Tom is nice / great / intelligent / sporty.’

In (21), we see that the adjective agrees in case with the subject Tomek ‘Tom.’

The two predicates, Tomek and the adjective, are connected via an overt copula być ‘to be’. The

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24 As mentioned in chapter three, adjectives agree with their associated DP also in number and gender. However, when these features match and are not relevant for the discussion, I gloss over them.

25 I will not discuss instances of secondary predication as in (i) in this section.

(i) Widziałem Piotr-a pijanego / pijan-ym.

I saw Peter-ACC drunk-ACC / drunk-INST

‘I saw Peter drunk.’

I will discuss these structures in chapter ten. Note that in example (i) the adjective agrees in accusative case with the DP it modifies. Instrumental is an option as well, though it is restricted (unlike in Russian), while agreement is always available.
The proposed outline is shown in (22). For readability, English words have been inserted into the tree structure.

\[
(22) \quad a. \quad [\text{TP} \ Tom \ [\text{CopP} \ Tom \ \text{is} \ [\text{AP} \ nice]]]
\]

b. \hspace{1cm}

\[
\begin{array}{c}
\text{TP} \\
\text{Tom} \\
\text{T'} \\
\text{T} \\
\text{CopP} \\
\text{Tom} \\
\text{Cop'} \\
\text{Cop} \\
\text{is} \\
\text{AP} \\
\text{nice}
\end{array}
\]

The derivation runs as follows: The adjective *mily* ‘nice’ is merged as the complement of the copula *być* ‘to be’. The subject *Tom* is base-generated in Spec,CopP. The adjective has no valued phi- or case features and undergoes phi-feature sharing with *Tom* (Frampton and Gutmann 2000; Pesetsky and Torrego 2007), a mechanism which is also present in Bondaruk’s (2013) work which I adopt. CopP introduces the copula which is in line with Bondaruk in that it is a functional projection that introduces the copula. I am reluctant to call it little vP though, as there are a lot of theoretical implications that come with little vP depending on which theory one follows: For Chomsky (2000) it introduces the subject, for Alexiadou, Anagnostopoulou and Schäfer (2015) it introduces a cause variable. In order to avoid a possible clash with these assumptions, I will project the copula in its own functional phrase, namely the CopP. The Cop-head may establish predication between *Tom* and the adjective. Here, I follow den Dikken (2006) in assuming that all functional projections may establish predication, and as long as there is no additional evidence for more structure (like a PredP), we will assume that the functional projection that is already there may be able to create predication. In den Dikken’s (2006) terms, the CopP corresponds to his RP (Relator Phrase) and can therefore establish predication. The structure in (22) also captures the intuition that the copula *być* ‘to be’ has an active part in predication; here it is the head of the phrase that establishes predication relations. In Bondaruk’s (2013) work, the copula is merged after predication has been established. The derivation continues with *Tom* valuing the phi-features of *T* and the latter assigning case in return (Chomsky 2000, 2001; Landau 2008).

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26 If one assumes a universal hierarchy of functional projections where we only get TP once vP is merged, a vP might be needed, see Adger (2003: 196-197).
Once this process is completed, the case feature is transmitted to all copies and the elements that entered feature-sharing, here the adjective – now the adjective agrees in case, here nominative, with the DP Tom. Tom further moves up to Spec,TP for EPP reasons.

6.3.2 DP Predication

In this subsection, I will provide an analysis for the behaviour of predicative nouns in Polish. Remember, these predicates do not appear in matching case, but strongly prefer instrumental.

I will start with this general pattern, namely instrumental-marked predicates, and follow with the restricted class of nominative-marked predicates. The data under scrutiny are illustrated in (23).

(23) a. Tomek jest pedagogi-em / *pedagog.
   Tom.NOM is educator-INST / educator.NOM
   ‘Tom is an educator.’

   Kate.NOM is journalist-INST / journalist-NOM
   ‘Kate is a journalist.’

What we need to account for is the instrumental case marking on the predicates pedagog ‘educator’ and dziennikarka ‘journalist’. However, first let me clarify why I would call these predicated nouns DPs and not NPs.27

As is well-known, DPs cannot function as predicates due to them being of the type <<e,t>t> (Partee 1986). However, Partee (1986) shows that DPs can actually appear in predicative position, see (24).

(24) Mary considers John [competent in semantics] and [an authority on unicorns].

   (Partee 1986: 118)

Partee (1986: 118) states that the occurrence of an element with consider is a good diagnostic for predicative NPs. The problem is that in (24), we see that, in addition to an AP (competent in semantics), we have a DP in predicative position. We can assume the element to be a DP as we can spot the article an. Furthermore, we have examples where we find a predicative DP even with the definite determiner the, see (25):

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27 This is not an uncontroversial claim, as usually it is assumed that predicative nouns are NPs (Zamparelli 1995). However, I will assume these elements to be DPs to distinguish them from the class of predicative nouns that do not appear in instrumental case marking. I will say more about this in section 6.3.3.
In order to account for the possibility of having DPs in predicative position, Partee (1986) applies a type-shifting operation. In a nutshell, this type-shifting operations turns an element which is of the type $<e,t,t>$ (like a DP) into a predicate of the type $<e,t>$ (see also Chierchia (1998)). So, we can have DPs in predication which have to be turned into predicates. As a next step, we have to see now why these instrumental-marked nouns in (23) constitute DPs.

An argument put forward is that possessors are encoded inside the D-layer (Alexiadou et. al. 2007; Cardinaletti 1998). If we now embed a possessive phrase in predication, we get the following.

(26) Piotr jest moj najlepszy przyjaciel-em.

Peter.NOM is my-INSTR best-INSTR friend-INSTR

‘Peter is my best friend.’

(Lindert 2017a: 399)

In (26), the phrase mój najlepszy przyjaciel ‘my best friend’ is introduced by the possessive pronoun mój ‘my’. If we assume that possessive elements appear in the D-layer, then the whole string should be a DP.28 29

Recall, I have argued that instrumental-marked DPs give rise to a literal reading of the noun, whereas a nominative-marked noun does not have this strong literal reading, see (15), repeated for convenience in (27).

(27) a. Piotr jest aktor.

Peter.NOM is actor.NOM

‘Peter is a good liar.’

b. Piotr jest aktor-em.

Peter.NOM is actor-INSTR

‘Peter is an actor.’

I assume that the relevant feature that gives the instrumental-marked nouns this literal interpretation is located in the D-layer. If then nominative-marked nouns lack the D-layer, that

28 I remain agnostic as to whether mój ‘my’ appears in Spec,DP or in the D-head.
29 One should mention that identifying what exactly the D-layer introduces can vary cross-linguistically. In addition, not all tests seem to work in all languages. On top of that, Polish, being a Slavic language, lacks a determiner system – the pivotal elements that occupy D – making it even harder to test. See Caruso (2012) for arguments of a D-layer in the Slavic languages.
is, they do not project as far as D, they should not get the obligatory literal interpretation and are open for a figurative interpretation as well.\textsuperscript{30, 31}

Another argument comes from coordination. Recall, I assume that instrumental nouns and nominative nouns are not of the same type. That is to say, the former are DPs, the latter are NPs, consider the data in (28).

(28) \textit{*On jest lekarz-em, a zarazem zapalony wedkarz.} \\
he is doctor-INST, and at.the.same.time passionate-NOM angler.NOM \\
‘He is a doctor, and at the same time a passionate angler.’

\textit{(Bogusławski 2001:112)}

In (28), it seems to be impossible to coordinate the DP \textit{lekarz} ‘doctor’ with the string \textit{zapalony wedkarz} ‘passionate angler’. This is expected if these two coordinated elements are not of the same type. Here, \textit{lekarz} ‘doctor’ would be a DP, whereas the latter element would constitute an NP. If both were of the same type, the data in (28) would be unexpected.

Having now shown that DPs can be projected in predicative position (which are then type-shifted), and that instrumental predicative nouns are projected as DPs, let us now come to the source of the instrumental case. Recall, for Bondaruk (2013), the Pred-head is responsible for case marking of the predicative noun.

One possibility to account for the case marking of predicative nouns would be to hand over this job to the copula być ‘to be’, namely by assuming that there exist two copulas. Why two? We have seen that when the predicate is an adjective, the copula is transparent to case marking. That is, whatever case the associated DP has, it will appear on the adjective as well.

So, in order to say that the copula is responsible for case marking, we would have to assume that there are two copulas, namely one that is transparent to case assignment (with adjectival predicates) and one that assigns instrumental case (with nominal predicates). Such an approach is proposed by Geist (2002) for Russian predicational structures. It is conceivable

\textsuperscript{30} Alexiadou et al. (2007: 127-131) propose to split the DP into at least two projections, which they call DP\textsubscript{1} and DP\textsubscript{2} which each layer being the locus of a different part of interpretation of the nominal projection. They propose that the higher DP\textsubscript{1} encodes discourse/pragmatic aspects and the lower DP\textsubscript{2} expresses determination. In a similar way, we could use the idea of a split DP. Assume that the DP that encodes pragmatic aspects may be split even further into a lower DP\textsubscript{1l} that encodes literal usage and a higher DP\textsubscript{1r} that encodes referentiality. The predicative DP would then project as far as DP\textsubscript{1l} but not up to DP\textsubscript{1r}.

\textsuperscript{31} A valid point of criticism might be the following: A phrase like \textit{actor} ‘actor’ is a predicate to begin with, i.e. it is an NP. I propose to project it as a DP, thereby it loses its predicative status only to project FP atop to make it a predicate again. On top, this happens for the default scenario, i.e. instrumental is the rule, not the exception. I argue, however that the instrumental case option comes with a very strong literal reading, whereas the nominative case option is in general open to more interpretations. As the instrumental noun is stricter when it comes to interpretation, we might assume more syntactic structure than for the nominative noun.
that this happens in Polish, however, I will not follow this route. Assuming a syncretic form of the same element is an option, but it should be the last resort option. That is, we should prefer an analysis that does not posit two forms of an element which do not differ in morphological and phonological structure, but rather derive the patterns with one element. Thus, I conclude that być ‘to be’ does not assign case. Still, the instrumental case must have a source. Therefore, we must assume that there is some case assigner between CopP and the predicative DP. We will call this phrase FP, for functional projection, to stay neutral as to its nature. The structure is sketched in (29).

The derivation runs as follows: It starts with the DP pedagog ‘educator’ being merged with the F-head. This F-head assigns instrumental to its complement. Atop, CopP is merged taking FP as its complement. CopP introduces the copula być ‘to be’ as well as the DP Tom in its specifier. The Cop-head establishes predication between the two elements. The DP Tom gets assigned nominative case and moves to Spec,TP to check the EPP. Before going into more details, let us consider the nature of FP more closely.

One idea would be to assume that FP is actually PredP. That way, we would get rid of the defective/non-defective Pred-heads distinction, and could assume that it is only projected when needed, namely in DP predication as a head with a full phi-feature set. A defective Pred-head would be redundant. In addition, as it has been argued that the Pred-head is the locus of the instrumental case, thus the case marking on the predicative noun would be derived. Even though there are these advantages of calling FP a PredP, I will not opt to do so as it would create more problems than it would solve. For one, it is not clear why PredP is
projected in DP predication, but not in AP predication. The only reason for this would be the case assignment facts. Remember, PredP was originally introduced to establish predication; but in DP predication it would not be needed for this as CopP is able to establish predication. What exactly is then the job of PredP? It would be stipulated for having instrumental case, but it would be redundant for establishing predication. If PredP was involved in DP predication, we would expect that it is also PredP that establishes predication. That is, *Tom* in (29) should be merged in Spec,PredP with the head Pred establishing predication. Two problems arise: First, it is not clear what the copula would then be doing as it is introduced after predication. This is a weakness already present in Bondaruk’s (2013) analysis. The second problem is the non-uniformity of predication. In AP predication, CopP would establish predication – as PredP would not be projected – while in DP predication it would be PredP. This non-uniformity is unlikely and will not be pursued. The aim is to establish predication the same way, no matter whether there is a DP or an AP. I conclude that it is CopP that establishes predication (in the sense of den Dikken 2006), and PredP does not exist (see also Matushansky 2015 for arguments against PredP).

Having now established that FP is not an instance of PredP, we should still find some proof that there is indeed a functional projection available in DP predication while absent in AP predication.

One fact is that there is case assignment going on that we do not witness in Polish AP predication. There is instrumental case marking on the noun. I have argued that this case does not constitute a default case in Polish, therefore it cannot come by default. I have shown that this case behaves like a lexical case. We have furthermore rejected the idea that the copula assigns instrumental case in Polish, as we observe a different behaviour in AP predication, where the copula is transparent for case assignment. So we need a functional projection to account for case assignment in Polish.

Another argument is of a semantic nature. Recall that Partee (1986) encoded a type-shifting operation to DPs when they are in predicative position. We can make use of this mechanism, by assuming that the type-shifting operation is expressed in the syntax by FP. That is, the FP turns, or type-shifts, the saturated DP into a predicate (and in addition assigns instrumental case to it). That way, we may independently motivate the existence of a functional projection in DP predication, namely that it is there to fulfill Partee’s (1986) type-shifting operation. Then, this projection may (presumably as a by-product) also assign case to the DP, in Polish instrumental case.
Taking all of these ideas together, we might have enough evidence to assume some functional projection atop of DP being present in the structure of predication. Let us consider the data and derivation once again going through the structure step by step incorporating all of the presented assumptions.

\[(30)\hspace{1em} a. \text{[TP Tom [CopP Tom is [FP [DP educator ]]]]}\]

The derivation starts with the DP *pedagog* ‘educator’ being merged in the structure. By projecting the D-layer, we obtain a literal reading. As the DP is not a natural predicate, we project FP to perform a type-shifting operation (Partee 1986) that turns the DP into a predicate. The F-head also assigns instrumental case to the predicate. Atop, CopP is merged taking FP as its complement. CopP introduces the copula *być* ‘to be’ as well as the DP *Tom* in its specifier. The Cop-head establishes predication between the two elements (den Dikken 2006). The DP *Tom* is assigned nominative case. Importantly, as there is no feature matching of the type proposed in AP predication, no feature (including case) percolates down to the predicate. The predicates case feature has already been valued by F. The DP *Tom* then moves to Spec,TP for EPP reasons.

In the next section, I will briefly outline how the restricted class of nominative predicative nouns fit into this analysis.

### 6.3.3 NP Predication

As already mentioned in the beginning of this section, there exists a restricted class of nouns that may appear in nominative case – a sample is given in (31).
We have seen that these nouns are usually used as insults (31a) or compliments (31b). Taking Swan’s (1993) idea that these agreeing nominative elements signal adjectival properties, one take would be that these elements are actually not nouns, but projected as APs. As already stated, I assume that the predicative elements are NPs, and not APs. However, let us see whether we would find empirical evidence for the elements being projected as APs into the syntax. This approach would make the following prediction: As is well-known, attributive adjective can be ‘stacked’, that is added without intervening elements (32a), while predicative adjectives can be coordinated via i ‘and’ and albo ‘or’ (32b). We would predict it to be possible to stack adjectives and nominative predicative nouns. The prediction is not borne out, see (33).

(32) a. Kasia to jest fajn-a, ładn-a, utalentowan-a dziennikark-a.
Kate.NOM TO is great-NOM beautiful-NOM talented-NOM journalist-NOM
‘Kate is a great, beautiful, talented journalist.’

b. Kasia jest fajn-a i ładn-a.
Kate.NOM is great-NOM and beautiful-NOM
‘Kate is great and beautiful.’

(33) *Kasia jest świni-a i ładn-a.
Kate.NOM is swine-NOM and beautiful-NOM
‘*Kate is a swine and beautiful.’

As can be seen in (33), it is not possible to coordinate adjectives with nominative predicative nouns. The judgment in (33) is unexpected if these two predicative elements are projected as APs, as it should be no problem coordinating two elements that are of the same type.

What I will propose is that these predicative nominative nouns are indeed at their core nouns. That is, they are projected as NPs in the structure. By being projected as NPs, one can explain...
the ungrammaticality of (33). In addition, since they are NPs, we predict that they lack the feature that gives rise to a literal meaning, that is, they can be interpreted as figurative. Recall, I proposed that the corresponding feature is located in the D-layer.\textsuperscript{32} As is well-known, bare NPs can participate in predication due to their simpler semantic structure; they are natural predicates (Partee 1986). As a consequence, no FP would have to be projected for a type-shifting operation, and no instrumental case is expected.

To summarize so far: I have argued against the projection of PredP in predicational structures (\textit{pace} Bondaruk 2013, in line with Matushansky 2015). Instead, I have argued that any functional projection can establish predication (den Dikken 2006). I have submitted that it is CopP that establishes predication between the two elements involved – these elements may be AP, NP, or FP, which is projected atop of DP to make it a predicate. I have furthermore argued that nominative predicative nouns constitute NPs and do not project a D-layer; thus, there is no need for FP, and by extension, there is no instrumental case (just as with adjectives).

In the next section, I will briefly present how the findings of this chapter may help us with control data involving adjectives.

\textbf{6.3.4 Predication and Control: An Outlook}

Having now elaborated on the issue of predication, we should see how this investigation helps us understand control. This will be elaborated on in more detail in the chapters eight and nine, when all ingredients for the analysis are put together. However, let me briefly show at this point already how the discussion about predication helps us with control. Recall the following set of subject control data.

\begin{align*}
(34) & \quad a. \text{Jan \ próbuje być mil-y.} \\
& \quad \text{Jan.NOM tries be.INF nice-NOM} \\
& \quad \text{‘Jan tries to be nice.’} \\
& \quad b. \text{Jan \ próbuje być mil-ym.} \\
& \quad \text{Jan.NOM tries be.INF nice-INST} \\
& \quad \text{‘Jan tries to be a nice one.’}
\end{align*}

\textsuperscript{32}Zamparelli (1995) proposes that a noun like \textit{student} is an NP to begin with and something may be added on top (e.g. the D-layer) to add additional information, e.g. referentiality from the D-layer. In a similar fashion is the D-layer added in the present proposal in order to obtain the literal reading which is absent in pure NPs.
The data in (34a) show a structure with an embedded adjective that agrees in case with the subject Jan. In (34b), we have an instrumental-marked adjective. I submit that the two types of predication discussed in this chapter, namely AP predication and DP predication, are projected in control deriving the two case patterns.

For (34a), the idea would be that the adjective and PRO undergo the same operations as an adjective and a pronounced DP in primary predication. In addition, the control relation is established by matrix little v creating predication between the controller and PRO (Landau 2015), thereby valuing PRO’s features and via feature sharing (Frampton and Gutmann 2000), PRO transmits its valued case feature to the adjective. So, for control the difference to primary predication is that the case comes from the controller via PRO, whereas in primary AP predication, it comes from the DP directly, see (35) for a brief illustration.

(35) [TP Jan [vP Jan tries … [FinP PRO [TP PRO [CopP PRO be [AP PRO nice]]]]]]

The structure in (35) shows how AP predication is projected in control, where the adjective and PRO undergo the same operations and movements as we have observed in primary AP predication. The only difference is that PRO itself gets its reference from the controller Jan via predication as well (Landau 2015).

For (34b), I assume that a predicative DP is projected in the structure and thus all operations of DP predication apply to (34b). Again, the only difference is that the subject DP in this case is PRO. I assume that the head noun of the predicative DP is optionally elided with the instrumental case on adjective being a residual of case assignment within DP predication. In neutral contexts (as in (34b)), I assume that the elided noun corresponds to a very generic expression like człowiek or osoba, both either meaning ‘man’ or ‘person’, see (36).

(36) [TP Jan [vP Jan tries … [TP PRO [CopP PRO be [FP F [DP nice person]]]]]]

As can be seen in (36), DP predication is projected in the non-finite clause and follows the predicational rules discussed in section 6.3.2. Therefore, we get instrumental case in this construction. In addition, we get optional NP-ellipsis. The details of how this ellipsis process works will be laid out in the next chapter. The details of control structures of all types will be dealt with in chapters eight and nine. For now, we should keep in mind that we find the same two case types in control as well as in primary predication and that both types can be derived by the same mechanisms.
6.4 Summary

In this section, I have taken a closer look at predicative structures in Polish. The thorough investigation of these structures is necessary to give us more insights into control, that is, it has been shown that standard predicational rules can already derive the case properties found in control. Therefore, additional control rules are superfluous.

I have argued that predication with APs is established by CopP which introduces the copula. For DPs, I have assumed that the same phrase establishes predication. The difference is that atop of DP, an FP is projected, which turns the DP into a predicate and assigns instrumental case to it. In addition, I have argued that the restricted class of nominative predicative nouns constitute bare NPs and do not project up to DP; therefore no FP is projected and no instrumental case is assigned.
7. NP-Ellipsis

So far in part two of this thesis, I have introduced some of the important ingredients for my proposal. These were aspects from case theory and predication. I have already elaborated as to why understanding these two fields might help us to understand control in Polish better. In this last section of part two, I will outline the last ingredient for the proposed analysis, namely NP-ellipsis and how this operation comes into play when talking about control.

I will first introduce the notion of NP-ellipsis and how it is understood in this thesis. Then I will briefly show how NP-ellipsis and control in Polish may interact with one another. This is followed by Alexiadou and Gengel’s (2012) analysis of NP-ellipsis, and eventually the application of their analysis to the Polish data and a discussion about the predictions this approach makes.

7.1 Some Background

In this section, we will explore the question of what exactly NP-ellipsis is and how it can help us to account for the presented control data. I will follow Sleeman’s (1996: 13) definition of this phenomenon which is given in (1).

(1) NP-ELLIPSIS

Noun ellipsis is the omission of a noun that can be recovered from the linguistic or extra-linguistic context.

The definition in (1) basically states that NP-ellipsis (NPE) covers the eliding of nouns in appropriate contexts. Examples are given in (2):

(2) a. Hans hat einen grünen Schal und Katharina einen roten Schal gekauft. (German)

John has a green scarf and Katharine a red bought

‘John bought a green scarf and Katharine are red one.’

b. Zij heft een zwarte auto, maar ik heb een groen auto. (Dutch)

She has a black car, but I have a green

‘She has a black car, but I have a green one.’ (Sleeman 1996: 13) ¹

¹ A doubly crossed out element indicates ellipsis.
It has often been argued that adjectival inflection does play a crucial role in the licensing of NPE (Delsing 1992; Kester 1995, 1996; Kester and Sleeman 2002; Corver and van Koppen 2011; Ruda 2016). Polish, a highly inflected languages, also admits NPE, see (3).

(3) Piotr kupił małego królika a Kasia kupiła dużego królika.
Peter bought small-ACC rabbit-ACC and Kate bought big-ACC rabbit-ACC
‘Peter bought a small rabbit and Kate bought a big one.’

While the presence of adjectival inflection can explain why it is available in the Germanic and Slavic languages, it cannot explain why French and English do allow NPE despite lacking the appropriate adjectival morphology, see (4).

(4) a. Of these tables, I prefer the small one. (Sleeman 1996: 13)

   b. De ces robes, je préfère la vert foncé. (French)
      of these robes, I prefer the green deep
      ‘Of these dresses, I prefer the deep green one.’ (Sleeman 1996: 14)

The data in (4) suggest that it not just adjectival inflection that is responsible for NPE, but that there might be other factors as well. I will return to this observation in section 7.3 when I will discuss the analysis of Alexiadou and Gengel (2012) of NPE.

### 7.2 NPE and Control in Polish: A Brief Summary of their Relation

Before diving into the mechanism of NPE, let me at this point already briefly present in what way the discussion of NPE is relevant to our research questions. In Polish, when NPE takes place, all features (number, gender, case) surface on the modifier, see (5).

(5) a. Joasia kupiła czerwone jabłko
    Joasia bought red-PL.~/m1.ACC apple-PL.N.ACC
    ‘Joasia bought (the) red apples.’ (Ruda 2016: 650)

   b. Joasia kupiła czerwoną.
    Joasia bought red-PL.~/m1.ACC
    ‘Joasia bought (the) red (ones).’ (Ruda 2016: 650)

2 Sleeman (1996: 14) states that composed color adjectives (like vert foncé ‘deep blue’) do not inflect. While French usually shows adjectival morphology signalling number and gender, these morphemes are often not pronounced in contemporary French. In addition, gender and number are visible on the determiner in French.

3 Ruda (2016) glosses the gender of czerwone ‘red’ as ~/m1 for ‘non-masculine personal’.
The data in (5a) contains a full noun phrase, whereas in (5b) the head noun *jabłka* ‘apples’ has been elided. Crucially, the adjective in (5b) still shows the morphological effects of feature agreement with the head noun. That is, all attributive adjectives surface with phi-features and Case of the respective head noun, irrespective of whether the head noun is elided (5b) or not (5a).\(^4\)

Keeping this information in mind, let us review the data from the previous sections here again, see (6) and (7).

(6) a. Piotr jest mil-y.
    Peter.NOM is nice-NOM
    ‘Peter is nice.’

b. Piotr jest mil-ym nauczciel-em.
    Peter.NOM is nice-INST teacher-INST
    ‘Peter is a nice teacher.’

(7) a. Jan próbuje być mil-y.
    Jan.NOM tries be-INF nice-NOM
    ‘Jan tries to be nice.’

b. Jan próbuje być mil-ym.
    Jan.NOM tries be-INF nice-INST
    ‘Jan tries to be a nice one.’

The data in (6) show simple predication constructions. In (6a) we have AP predication where there is agreement in case between the subject and the predicate. In (6b), we have DP predication, where the subject carries nominative, while the predicate carries instrumental case. I have presented and analyzed this data set in chapter six. In (7), we have simple subject control data with case agreeing adjectives (7a) and instrumental case ones (7b). I submit that the data in (6) actually mirrors the data in (7). That is to say, (7a) embeds AP predication of

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\(^4\) Ruda (2016) gives an account of NPE in Polish within DM. For her, NPE takes place when a little *n* head is merged without a root. Little *n* then merges with *aP*. Agree takes place (between *aP* and *n*) thus valuing the adjectives phi-features and linking the case features of the two. This linking is similar to Frampton and Gutmann’s (2000) proposal of phi-feature matching which is also assumed in this thesis. Once case is assigned, either by Voice, little *v*, or *V*, to *n*, the case feature is copied to the adjective as well. The presence of agreement features on the adjective makes it possible for the *n* head to be elided in accordance with the Principle of Chain Reduction. However, morphological marking of, e.g. instrumental case, is different on noun compared to adjectives. That is, we would expect the adjective to surface with the nominal instrumental ending, and not with the adjectival one. In addition, it might be expected that in the case of no ellipsis the adjective appears with no overt case morphology, contrary to facts.
the type in (6a) and (7b) embeds DP predication of the type in (7b). Case is then assigned in (7) by the same mechanism as in (6). In consequence, the underlying structure of (7b) must be something like (8).

(8) Jan próbuje być miłym człowiekiem.

Jan. NOM tries be.INF nice-INST man-INST

‘Jan tries to be a nice person.’

Control involving instrumental adjectives then involves a whole DP, and not bare APs, where the adjective is projected as a modifier of the noun. The head noun, człowiek ‘man’ in (8), is then optionally elided in a process of NPE. How this mechanism works in detail, how the empirical facts support this idea and how one makes sure that we do not overgenerate structures with NPE will be elaborated on in section 7.3.2, as well as in part three of this thesis, where I will present the control analysis in more detail.

First, I will present Alexiadou and Gengel’s (2012) approach to the phenomenon of NPE in the languages they investigate (Italian, Dutch, English). As a second step, I will apply their system to Polish to show that it can predict the correct results. This will conclude the second part of this thesis, and will be followed by part three, where all the ingredients will be put together and the control relations will be derived for all the relevant Polish control data.

### 7.3 Alexiadou and Gengel (2012)

#### 7.3.1 The Proposal

Alexiadou and Gengel (2012) (henceforth A&G) look at a number of languages with the aim to unify the occurrences of NPE, see (9)-(12) taken from A&G (2012: 178-183).

(9) a. Un/*Uno libro grande está encima de la mesa.

a book big is on the table

‘A big book is on the table.’

b. Uno grande está encima de la mesa.

a big is on the table

‘A big (one) is on the table.’
Let us go through the data step by step. In (9), data from Italian is provided. (9a) shows a structure where NPE has not taken place, that is, the noun libro ‘book’ is overtly realized. The corresponding article must therefore be un ‘a’ and not uno ‘a’. Once the head noun is elided, the article must appear with additional morphology, namely as uno ‘a’, see (9b). For English (10), NPE is only licensed when one is inserted. That is to say, it looks as if one is projected instead of the full noun. (10b) shows that one is not a numeral in this case, as it can be combined with a numeral like two. In Dutch (11), eliding the noun seems to come with additional adjectival morphology. In (11), the adjective zwart ‘black’ carries additional inflectional morphology, namely the schwa ending -e; without this inflection, NPE cannot take place.\(^5\) The same phenomenon can be observed in German (12), where NPE is not licensed if the article is uninflected (12a), but is possible once the article carries inflectional endings (12b).\(^6\)

\(^5\) There is a lot of discussion going on concerning the actual trigger for NPE in Dutch. Corver and van Koppen (2006) argue that it can either be adjectival inflection or focus that licenses NPE in Dutch. Thus, they argue for a FocP in the DP. Under the Foc-head, it is assumed that adjectival inflection is projected. If the adjective is focused, it moves to Spec,FocP thereby licensing NPE. A&G (2012) argue against this analysis showing that adjectival inflection is always necessary for NPE and that in some cases focus might help facilitate NPE, but that it is never a licensing factor for this operation.

\(^6\) Adding more evidence against the Focus Analysis (Corver and van Koppen 2006) mentioned in fn. 5, A&G (2012: 183) show that focus bears no role in the licensing of NPE in German, that is, focus without the additional morphology does not lead to NPE, see (i), where the all-caps indicate focus.

(i) *? … ich habe das LILA-Ø gekauft
    I have the purple bought
A&G (2012) then propose that all the occurrences of NPE in (9)-(12) have the same source, namely that it boils down to the presence of a classifier phrase (ClassP). This combines ideas from Bernstein (1993), who has proposes that NPE is licensed by specific morphology, which he calls word-markers, and the observation that adjectival inflection also contributes to the availability of NPE (Lobeck 1995; Kester 1995, 1996). A&G (2012) assume that ClassP hosts different kinds of morphology depending on the language; the Class-head in Italian hosts the final vowel on the indefinite determiner, in English it hosts *one* (see also Borer 2005 and Barbiers 2005), and in Dutch and German, it hosts the appropriate adjectival/nominal inflection. These ideas are illustrated below.

'(Speaking of dresses), I have bought the purple one.'
To summarize so far: The difference morphological pieces found in NPE across languages are analysed by A&G (2012) as the spell-out of one and the same head, namely Class; see Table 1 for an illustration of the elements under Class that license NPE in the different languages so far.

<table>
<thead>
<tr>
<th>Language</th>
<th>Spell-out of Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian</td>
<td>Theme vowel (‘o’)</td>
</tr>
<tr>
<td>English</td>
<td>One</td>
</tr>
<tr>
<td>Dutch</td>
<td>Adjectival morphology</td>
</tr>
<tr>
<td>German</td>
<td>Adjectival/nominal morphology</td>
</tr>
</tbody>
</table>

Table 1: Elements merged in Class in different languages

A&G (2012) add one more factor into the interplay of NPE and inflection, namely the notion of partitivity. They observe that often the same morphology that appears in NPE constructions, also appears in partitive constructions, which, they conclude, is not an accident. They follow Sleeman’s (1996) definition of partitivity given in (17):
(17) **PARTITIVITY**

(i) Partitivity means properly or improperly included within a set.

(ii) Partitivity also means potentially but not necessarily specific.\(^7\)

(Sleeman 1996: 34)

Consider the Italian data in (18), which is taken from A&G (2012).

(18) a. un problema grave
    a problem serious
    ‘a serious problem’

b. uno _ grave
    ‘a serious one’

c. uno de tus problemas
    one of your problems
    ‘one of your problems’

The data in (18a) show a simple construction which is not partitive and also does not display NPE. In (18b), we see that once we have NPE, the final theme vowel must be attached to the determiner *un* ‘a’. Crucially, the same morphology appears in partitive constructions (18c), where no NPE has taken place. Thus, A&G (2012) conclude that these two constructions must be related. The following hypothesis can be formulated:

(19) If the classifier licenses NPE, and if the classifier is also present in partitive constructions, partitivity may also license NPE.

Sleeman (1996), in investigating NPE in French, also concludes that it is partitivity that is a licensing factor for NPE, and not necessarily (just) inflection. Building on all these observations, A&G (2012) propose then that the necessary inflection in NPE is projected under a ClassP. This ClassP is a requirement for NPE. In addition, partitive constructions project a ClassP, which can then license NPE. That way, all factors for NPE find their appropriate place and role in A&G’s system.

In the following section, I will demonstrate how the observations by Sleeman (1996) and A&G (2012) can be applied to Polish, more precisely Polish control, and how this system correctly predicts the occurrence of NPE.

\(^7\) The difference between proper and improper inclusion is of no great importance here. In addition, part (ii) of Sleeman’s definition will not play a role for the data under discussion in this thesis.
7.3.2 Polish and NPE

In section 7.2 I briefly outlined the general idea when it comes to control in Polish and NPE: Instrumental adjectives are actually projected as modifiers of nouns whose head noun has been elided; thereby receiving their case marking via predicational rules, and not due to some control restriction or by default. The relevant data is repeated below.

(20) Jan próbuje być mil-y.
Jan.NOM tries be.INF nice-NOM
‘Jan tries to be nice.’

(21) Jan próbuje być mil-yм чłowieki-em.
Jan.NOM tries be.INF nice-INST person-INST
‘Jan tries to be a nice one.’

The data in (20) show the projection of a bare predicative adjective, whereas in the case of (21) a DP is projected with an attributive adjective. In addition, NPE has taken place. The question that needs to be addressed at this point is how can we make sure that we do not overgenerate this process – that is, where and when can NPE take place? For this, we need to take a closer look at what predictions this approach makes. Two important points need to be addressed:

First, do non-subsective adjectives appear in instrumental case marking? As it has been argued that non-subsective adjectives can appear in attributive position, but not in predicative position, one prediction would be that instrumental marked adjectives in control can be of a non-subsective nature. With the same line of reasoning, it is expected that in the case of nominative predicative adjectives, non-subsective adjectives should not be allowed as such adjectives are not allowed in predicative position.

Second, is a gender mismatch between adjective and the subject expected? That is, since the instrumental marked adjective is the modifier of a silent noun, one could imagine a scenario where the adjective modifies a noun that does not carry the same gender markings as the subject. No such gender mismatch is expected with predicative nominative marked adjectives.

7.3.2.1 Non-Subsective Adjectives

An important point which needs to be addressed concerns the split of predicative and attributive adjectives. In the vast literature on adjectives, it has been agreed upon that these two types of adjectives do not behave alike in certain respects (Alexiadou and Wilder 1998;
Cinque 2010). Let us take a look at adjectives which allow to be used in attributive as well as predicative position, see (22).

(22) a. the nice president
    b. The president is nice.
    c. the ruthless murderer
    d. The murderer is ruthless.

The predicates in (22) may be used attributively (22a, c) as well as predicatively (22b,d) without problems. Very strikingly not all kinds of adjectives are allowed predicatively, see the data in (23).

(23) a. the former senator
    b. *The senator is former.
    c. the alleged murderer
    d. *The murderer is alleged.

In (23), the adjectives former and alleged can be projected in attributive positions (23a, c). However, they cannot appear in predicative position (23b, d). These types of adjectives are called non-subsective adjectives (Partee 1995).\(^8\)

Partee (1995) mentions that an example like (23a) is not subsective as former senator is not a proper subset of the set of senators. This adjective is also non-intersective (Larson 1998) as there is no intersection of former and senator. All intersective adjectives are subsective, but not all subsective adjectives are also intersective. In this thesis, we will be looking at examples involving the adjectives former and alleged which can be called non-intersective (Larson 1998) and non-subsective (Partee 1995), therefore I will use these two notions interchangeably. The same split can be observed in Polish, see (24) and (25).

(24) a. mil-y prezydent
    nice-NOM president.NOM
    ‘the/a nice president’

   b. Ten prezydent jest mil-y.
      this.NOM president.NOM is nice-NOM
      ‘This president is nice.’

---

\(^8\) Note that Larson (1998) calls this group of adjectives ‘non-intersective adjectives.’
c. bezwzględn-y morderca
   ruthless-NOM murderer.NOM
   ‘the/a ruthless murderer’

d. Ten morderca jest bezwzględn-y.
   this.NOM murderer.NOM is ruthless-NOM
   ‘This murderer is ruthless.’

(25)  a. był-y prezydent
   former-NOM president.NOM
   ‘the/a former president.’

      this.NOM president.NOM is former-NOM
      ‘*This president is former.’

   c. rzekom-y morderca
      alleged-NOM murderer.NOM
      ‘the/a alleged murderer’

   d. *Ten morderca jest rzekom-y.
      this.NOM murderer.NOM is alleged-NOM
      ‘*This murderer is alleged.’

This striking contrast in the behavior of adjectives has spurred a lot of research with finer-grained distinctions being made for adjectives (see also Alexiadou and Wilder 1998; Landmann 2001; Partee 2010; Szabó 2015). Independently of how the differences shown in (22) and (23) may be derived, the behavior makes a clear prediction of what should be possible in Polish control: Non-subsective adjectives should not be allowed in agreeing case, as the adjectives with agreeing case are projected in predicative position. However, instrumental marked adjectives, being attributive modifiers, should in principle be possible with non-subsective adjectives. However, the pattern does not seem to follow this prediction, see (26).

   Peter.NOM NEG wants be.INF alleged-INST murderer-INST
   ‘Peter does not want to be an alleged murderer.’ (Lindert 2016: 16)
(26b) shows the predicted behavior for predicative adjectives: A non-subsective adjective, like rzekomy ‘alleged’ cannot be projected in this position, therefore the sentence is illicit. The prediction is fulfilled.

(26a) shows control with instrumental case marking on the adjective. However, despite being attributive, the non-subsective adjective is not licensed when NPE has taken place. Without NPE, the structure in (26a) is fine, as expected.

While the data in (26a) looks as if the proposed theory makes the wrong prediction, on closer inspection we will see that the prediction is actually incorrect in the first place. Here is where A&G’s (2012) theory of NPE comes into play. Remember, for A&G (2012) one of the core aspects for NPE to be licensed in the first place is partitivity. This notion is defined by the idea that it signals inclusion within a set (17).

Let us consider first the data where NPE is licensed, see (27).

(27) Piotr nie chce być okropnym człowiekiem.

‘Peter does not want to be an awful one.’

The intersective adjective okropny ‘awful’ and the head noun człowiek ‘person’ built an intersective set. This means that we can intersect entities which are awful and entities which are persons and the outcome will be awful persons. This means that we will find a proper set of awful entities and person entities. This set of ‘awful person’ is in turn included in the bigger set ‘persons’, that is, there will be not an ‘awful person’ that is not a person at the same time. The adjective is therefore subsective. By extension, we have partitivity. A visualization is offered in (28).

---

9 ‘Inclusion’ is a bit different from ‘intersection’; the term ‘inclusion’ refers to the situation where one set is a subset of another set (like dogs being a subset of the set animals). Whereas ‘intersection’ refers to two sets intersecting like awful and people (creating awful people). Intersection predicts that there should be other awful entities (like animals) and that there should be people that are not awful. In contrast, when it comes to inclusion, the prediction is that there will be no dogs that are not animals (as dogs is a subset of the set of animals), but there might be different animals than dogs.

10 According to an informant, the sentence is not too good once negation is removed. The reason for this might be of a semantic nature, as the adjective signals a negative property.
Since there is partitivity in the structure (27), there has to be ClassP and ClassP is a precondition for NPE to be licensed. What about (26a), repeated as (29)?

(29) Piotr nie chce być rzekom-ym *(morderc-a).
    Peter.NOM NEG wants be.INF alleged-INST murderer-INST
    ‘Peter does not want to be an alleged murderer.’ (Lindert 2016: 16)

The crucial aspect is that the data in (29) does not display a partitive construction in the sense of Sleeman (1996), meaning that the set of ‘alleged murderer’ is not included in the set of ‘murderer’. One cannot be a ‘murderer’ and an ‘alleged murderer’ at the same time, see (30).11

(30)

As the set of ‘alleged murderer’ is not included in the set of ‘murderer’, partitivity is not given. Translating this into syntactic structures this means that we do not project ClassP. Since there is no ClassP, no NPE can be licensed. The prediction is borne out.12

To recapitulate so far, I have proposed to analyze control construction embedding instrumental adjectives as actually embedding DPs, where the head noun is elided. I will

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11 Substituting the head noun *morderca* ‘murderer’ with *człowiek* ‘person’ would lead to the same result. However, I chose a less generic noun for this example as one can picture an *alleged murderer* better than an *alleged person*.

12 Note that here partitivity is defined according to Sleeman’s (1996) notion of sets, and inclusion within sets. It is not strictly speaking the same as the syntactic partitivity displayed by *one in one of your problems*, where just one element can be partitive. In this work, it is more of a semantic approach where we have sets within sets.
elaborate more on this idea, and its syntactic and semantic consequences, in the following chapters. For the time being, I have shown that the theory of NPE by A&G (2012) predicts the correct usage of NPE still respecting the split between attributive and predicative adjectives. In addition, I have derived why non-subsective adjectives cannot appear in instrumental case and NPE at the same time.\(^{13}\)

However, what we also need to address is the question whether the system overgenerates. That is, can we expect NPE across the board in all constructions involving instrumental adjectives in DP predication? So far, the analysis proposed should not discriminate between structures of simple predication, and simple predication embedded in larger structures like control. However, we do find a clear difference between control and other copula structures, see (31).

\[
\begin{align*}
(31) & \quad \text{a. Janek jest mił-y} / {?*mił-ym}. \\
 & \quad \text{John.NOM is nice-NOM/ nice-INST} \\
 & \quad \text{‘John is nice.’} \quad \text{(Przepiórkowski 1999: 204)}
\end{align*}
\]

\[
\begin{align*}
& \quad \text{b. Piotr jest okropn-ym ?(człowieki-em).} \\
& \quad \text{Peter.NOM is awful-INST person-INST} \\
& \quad \text{‘Peter is an awful one.’} \quad \text{(Lindert 2016: 18)}
\end{align*}
\]

The structure in (31a) shows that having bare instrumental adjectives in simple predication is borderline ungrammatical. Przepiórkowski (1999) also mentions that the only way one could interpret this structure is by assuming that there must be some silent noun, but even then the structure remains questionable. The question remains why we cannot apply NPE in (31a) in a similar way as in control (27)? One possible factor in the licensing of NPE might be locality. Przepiórkowski (2004a) notes that distance seems to favour instrumental adjectives, that is, they become more acceptable the more distance is created between adjective and subject, see (32).

\[
\begin{align*}
(32) & \quad \text{i. Piotr nie jest niezdarn-ym chirurgi-em, ale Tomek jest zręczn-ym chirurgi-em.} \\
& \quad \text{Peter.NOM NEG is clumsy-INST surgeon-INST but Tom.NOM is skilful-INST surgeon-INST} \\
& \quad \text{‘Peter is a clumsy surgeon, but Tom is a skilful one.’}
\end{align*}
\]

The notion of subsets and subsectivity thus seems to play a large role in the licensing of NPE (Sleeman 1996; A&G 2012).

\(^{13}\) When it comes to adjectives that are subsective, but non-intersective like \textit{skilful} (Partee 1995), the prediction for the theory presented here is that NPE should be fine. The prediction is borne out, see (i)
Jan feared even want to try to seem happy.

(Przepiórkowski 2004a: 107)

While the observation about the licitness of instrumental adjectives is attributed to Przepiórkowski (1999; 2004a), he does not trace it back to an elliptical structure, but states that default values seem to be more probable in these constructions. I will argue that the phenomenon can be traced to NPE when we assume that one of the factors that licenses NPE in Polish is locality. To put it differently, the more distance we have between an adjective and a subject, the more likely is a structure projected where NPE takes place, presumably because it is more economical to project DP predication in these structures than to create dependencies across a number of phrases.

7.3.2.2 Gender

As introduced in chapter three, Polish nouns are marked for one of three genders (masculine, feminine, and neuter). Adjectives agree with their associated noun in gender marking, as can be seen in (33).

(33) a. miła dziewczyn-a
   nice-F girl-F
   ‘a/the nice girl’

b. mil- y chłopak
   nice.M boy.M
   ‘a/the nice boy’

---

14 The example is taken from Przepiórkowski (2004a:107), however, I added the part in brackets.

15 Another potential source for this asymmetry of NPE might be linked to semantics. When we have AP predication as in (i), we (the speaker) ascribe a property of ‘being awful’ to Piotr.

(i) Piotr jest okropny.
   Peter.NOM is awful.NOM
   ‘Peter is awful.’

(ii) Piotr nie chce być okropn-y
    Peter.NOM NEG want be-INF awful-INST
    ‘Peter does not want to be an awful one.’

When he have DP predication as in (ii), Peter does not want to have this property, that is, he does not want to belong to the set of ‘awful (people)’.
c. mił-e dziecko
nice-N child.N
‘a/the nice child’

When looking at control, we have the following situation: I have argued that the instrumental-marked adjective is not a modifier of PRO/the subject, but rather of a silent/elided noun. Hence, it agrees with this elided noun when it comes to number, case, as well as gender. This predicts that in principle we should have a scenario where we have a subject in different gender marking than the instrumental adjective carries. In fact, this prediction is borne out. However, we need to consider a bit more data to get the complete picture of these gender markings in Polish. Consider the data in (34).

(34) Maria chce być miłym *(człowieki-em).
Mary.NOM wants be.INF nice-INST.M man-INST.M
‘Mary wants to be a nice one.’

As can see seen in (34), NPE is not licensed when there is a gender mismatch between the subject and the adjective. Please consider that Polish has two generic nouns both meaning ‘man’ or ‘person’, namely człowiek (which is masculine) and osoba (which is feminine), see (35).

(35) Maria chce być miłą osobą.
Mary.NOM wants be.INF nice-INST.F man-INST.F
‘Mary wants to be a nice one.’

We see that NPE is licensed in (35) but not in (34). We cannot argue that the numeration of such a sentence will always involve the feminine version of the word man, because data like (34) are fine without NPE. Here, I argue that it is not a syntactic problem that NPE is not licensed in (34) but that semantics/pragmatics play a role here. In (34), in a neutral environment and without context, the elided noun is not recoverable. That is, a native speaker cannot properly interpret the sentence and therefore, at PF, the operation of NPE is not applied. In (35), the elided noun is recoverable.

In general, in Polish, the gender of a noun (usually of a profession) can be manipulated by an additional morpheme, -ka. By attaching this morpheme, the noun becomes feminine, see (36).
As can be seen in (36), the attachment of the morpheme –ka transforms the masculine noun into a member of the feminine class. This is productive in Polish. Here, I will follow Kramer (2015) and Alexiadou (2017) in assuming that gender is not on the root, but comes on little n when merged.\(^{16}\) That way, we can actually assume that the feminine version is not a separate lexical entry, but is rather built atop of the respective root, as in (37).

(37) \([n \, n\text{-gender} \, \sqrt{\text{root}}]\) \hspace{1cm} (Alexiadou 2017: 12)

There exists a number of nouns whose gender cannot be manipulated by the attachment of a morpheme though. That is, these nouns seem to have a fixed, inherent gender. These noun may pose a good testing ground for the predictions made in this section. Some of these nouns are presented in (38).

(38) politik / rodzic
    politician / parent

In (38), the nouns are masculine and are always declined according to masculine declension rules, even if the noun refers to a woman.\(^{17}\) That is, it seems to be that these nouns are lexically specified for a certain gender. However, following Alexiadou (2017) we can assume that we would still project a little n atop of the root with the little n carrying gender information, it is just that in these cases, the gender information is non-morphological. That

\(^{16}\) Kramer (2015) mentions, among other arguments, that nominalizations carry gender information as well, as can be seen in French (la faibl-esse ‘the.f weakness’). That is, gender seems to come from little n, and not from the root itself, as little n can also be projected atop of little v, or little a showing gender. Alexiadou (2017) also shows this for German and Greek.

\(^{17}\) This is not completely correct. A feminine version of politik is emerging in Polish, see (i), taken from https://oko.press/rozprawa-policji-kontrdemonstracjami-polityczka-pis-wzywa-tlum-zatrzymania-demonstrantki/ (accessed 14\(^{th}\) August 2017).

(i) Politycz-ka [... wezwala tłum do zatrzymania kobiet.
    Politician-F called-on crowd to stop women
    ‘The politician called on the crowd to stop the women.’

However, native speakers still accept the male version of politik to be applied to women.
is, morphology does not reflect the gender information. For our present purposes it is of interest what happens when we modify the noun with an adjective. As we have a potential gender mismatch here, the question arises whether the adjective will agree with the male predicative noun or the feminine subject. Consider the data in (39).

(39) a. Kasia jest *mił-q /mił-y m politiki-em.
    Kate.NOM is nice-INST.F / nice-INST.M politician-INST.M
    ‘Kate is a nice politician.’

In (39a), the predicative noun politik ‘politician’ has a masculine ending. An attributive adjective, here mily ‘nice’, agrees in case, number as well as gender with the predicative noun. That is, the adjective agrees in all features with the predicative noun, not with the female subject Kasia. We conclude that attributive adjectives of masculine predicative nouns must be masculine as well, even if the subject is feminine. In the context of control, we would then predict that NPE should be fine in a case where the subject is feminine and the elided noun is masculine. The prediction is borne out, see (40).

(40) a. Gosia jest zl-y m politiki-em,
    Gosia.NOM is bad-INST.M politician-INST.M
    ale Kasia bardzo chce być dobr-y m politiki-em.
    but Kate.NOM very wants be.INF good-INST.M politician-INST.M
    ‘Gosia is a bad politician, but Kate really wants to be a good one.’

    b. Gosia nie jest dobr-y m polityki-em,
    Gosia.NOM NEG is good-INST.M politician-INST.M
    ale Kasia bardzo chce być tak-im politiki-em.
    but Kate.NOM very wants be.INF such-INST.M politician-INST.M
    ‘Gosia is not a good politician, but Kate really wants to be such one.’

In (40a), we have a feminine subject, Kasia ‘Kate’ and a masculine predicative noun, politik ‘politician’. The predicative noun is modified by an adjective that also appears with masculine morphology. NPE under identity may take place here, as the elided noun is not of a generic nature and is recoverable by the context; meaning that the predicted gender mismatch is
actually a possibility in Polish and even expected. We see the same scenario in (40b) where instead of an adjective, we have the demonstrative pronoun taki ‘such’.18 19

7.4 Summary

In this section I have outlined how a theory of NPE can account for the case properties found in Polish control involving predicative adjectives. It was proposed that agreeing adjectives are indeed projected in predicative positions, thereby following AP predication rules (41a), and that instrumental adjectives are actually attributive modifiers of elided nouns (41b).

(41) a. Jan próbuje być mił-y.
   Jan.NOM tries be.INF nice-NOM
   ‘Jan tries to be nice.’

b. Jan próbuje być mił-y m człowieki-em.
   Jan.NOM tries be.INF nice-INST person-INST
   ‘Jan tries to be a nice one.’

The proposed idea raises two issues: How to make sure that non-subsective adjective are not projected as attributive modifiers and NPE taking place at the same time as in (41b) and how to restrict the operation of NPE so that cases of simple predication are not expected to allow NPE across the board.

For the first issue, it has been proposed that A&G’s (2012) theory of NPE actually predicts the right outcome. If we assume partitivity as one of the factors for NPE, non-subsective adjectives will not be found in an NPE context.

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18 I have checked the data with three native speakers and they all accept the data with NPE.
19 When it comes to masculine subjects with feminine predicative nouns, we may construct examples and contexts for these, see (i).

(i) a. Jan jest dobr-a królewn-q.
   Jan.NOM is good-INSTR.F queen-INSTR.F
   ‘Jan is a good queen.’

   (Błaszczak, p.c.)

b. Jan jest dobr-q part-q dla Bas-i.
   Jan.NOM is good-INSTR.F match-INSTR.F for Basia-GEN
   ‘Jan is a good match for Basia.’

   (Błaszczak, p.c.)

In (i,a), we have the predicative noun królewna ‘queen’ and the predicative adjective dobra ‘good’ shows feminine gender. The sentence in (i,a) is a bit weird out of context, but might work in a context when talking about a carnival. (i,b) shows the predicative noun partia ‘match’ which is feminine. While the subject Jan is masculine, the adjective dobra ‘good’ shows feminine gender. The data in (i) reinforced the idea that it is always the predicative noun that governs agreement even if that means creating a gender mismatch with the subject.
For the second issue, I proposed that locality is a factor atop that governs the availability of NPE. It has been shown that the more distance is created between the predicate and the subject, the more likely will DP predication with NPE be projected, see the data in (42).

(42)  

a. Janek jest mił-y[m] *(człowieki-em).*  
John.NOM is nice-INsT person-INsT  
‘John is a nice one.’

b. Jan próbuje być mił-y[m] **człowieki-em.**  
Jan.NOM tries be.INF nice-INsT person-INsT  
‘Jan tries to be a nice one.’

c. Jan bał się nawet chcieć próbować wydawać się  
Jan.NOM feared REFsL even want.INF try.INF seem.INF REFsL  
??szczęśliw-y [ szczęśliw-y[m] *(człowieki-em).*  
happy-NOM/ happy-INsT person-INsT  
‘John was afraid to even want to try to seem happy.’

NPE is not licensed when the two elements are in a very local configuration (42a), once the configuration is loosened a bit, NPE becomes a possibility (42b), is even more structure projected in between subject and predicate, an NPE structure is even preferred (42c). The data show that atop of having the appropriate partitive constructions, we also need to adhere to locality considerations when NPE is performed.

In addition, we have looked at data where the subject/controller carries a different gender value than the predicative noun. In consequence when the predicative noun is modified, the adjective will agree in gender with the predicative noun. In principle, NPE should not be affected by different gender values and this is indeed borne out; NPE may take place with the instrumental adjective surfacing in different gender markings from the controller.

This chapter completes the second part of this thesis, in which I have discussed ingredients for the derivation of control, namely case theory, a theory of predication and what theory of NPE is assumed. In the next section, all the ingredients will come together and the control data will be derived within Landau’s (2015) control model.
PART 3: BRINGING IT ALL TOGETHER –
THE ANALYSIS PROPER
8. Control in Polish

In the last part of this thesis, we will bring all the considerations from the earlier chapters together. It will be shown that the case phenomena documented in Polish control can (in most cases) be reduced to already existing principles of the language. In this part, I will present the individual derivations and considerations for all the various control constructions with predicative adjectives presented in chapter three.

In chapter eight, I will derive the data for subject control with and without complementizers, object control as well as arbitrary control. Chapter nine is devoted to non-nominative controllers in the form of numeral phrases. There, we will also take a closer look at the internal structure of these complex DPs, and then derive how, when, and why case transmission is possible when embedded in control. Control with embedded semi-predicates will be discussed in chapter ten.

8.1 On Phases

Before diving into all the derivations of Polish control, we need to be clear about the status of phases in the presented analysis. Phases have been introduced by Chomsky (1998) and have ever since been further refined (Chomsky 2001), see (1).

(1) PHASE IMPENETRABILITY CONDITION (PIC)

The domain of H is not accessible to operations outside HP; only H and its edge are accessible to such operations. 

(Chomsky 2001: 13)

Chomsky states that the head H corresponds to little v and C, that is, vP and CP constitute phases.¹ The edge corresponds to the specifier position. In addition, Chomsky (2001: 13) formulated the following rule:

(2) Ph(ase)_1 is interpreted/evaluated at the next relevant phase Ph(ase)_2.

For Chomsky then, the creation of a phase is determined by the presence of the next higher C or little v head. That is, once vP or CP are created, their complement domain is accessible until the merger of the next little v or C head. A sketch is shown in (3).

¹ Chomsky states that this is so due to CP/vP being ‘reconstruction sites, and they have a degree of phonetic independence’ (Chomsky 2001: 12).
The tree in (3) shows that the complement of the embedded little $v$ is accessible as long as the next higher phase head, here $C$, is not merged. After the merger of $C$, the complement of the lower $v$ is inaccessible. In the same fashion, the complement of $C$ is open until the next higher phase head, here little $v$, is merged into the structure.²

I will essentially follow this interpretation of the PIC. That is, I also assume that the complement of a phase head is rendered inaccessible once the next higher phase head is merged. However, I will not assume that this mechanism happens automatically, meaning, I assume that the null hypothesis is that the complement of phases is always accessible unless otherwise stated. That means that in general the complement of phases is open, but when there is a rule that renders them inaccessible, it follows Chomsky’s (2001) system of phases.

Before elaborating more on this idea, let us briefly review Witkoś’ (2008, 2010a, 2010b) system again. Recall, he models his theory in phase-based framework, that is, the notion of phases is very important to him. In addition to adhering to Chomsky’s (2001) approach to

² Note that Chomsky (2001) states that not all types of little $v$ constitute phases, only those which are transitive and have an external argument ($v^*P$). That means, that unaccusatives and passives phrases are not phrases, but see Legate (2003) for arguments in favour of these phrases also being phases. I assume that little $v$ with an AP complement is treated like a transitive $v$. 

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phases, he lists the following additional rules and stipulations to account for the Polish control data discussed in this thesis.

(4) a. Every maximal verbal projection is a phase only when saturated with all its arguments.

b. Only T can be a [+multiple] Probe.

c. Obligatory control PRO (t_{NP}) carries no case.

d. Predicative adjectives and *sam* ‘alone’ appear in instrumental/dative as a default option.

e. Phi-features of \( v \) are not a [+multiple] Probe in object control.

f. All infinitives under control verbs are underlying CPs:

   i. Null C cliticises either to \( v \) (then the CP is not a phase),

   ii. or to Appl (CP is an optional phase).

   iii. CPs filled with a lexical C are optional phases.

g. Both Null C and lexical C are optionally selected either with [+phase] or [-phase] properties.

h. Interrogative CP functions as a [+phase].

   i. Spell-Out Economy: Heads C and \( v \) count as phase-inducing heads when their complements can be spelled out independently of each other.

   (Witkoś 2010a: 213-217; simplified)

As can be seen from the assumptions in (4), a rather lengthy list of considerations is necessary to derive the control data in a phase-based model. What the rules in (4) do is essentially relaxing the PIC even further and further until nothing of its original motivation is left. Recall from chapter four that all of the stipulations in (4) were necessary in Witkoś’ system to derive the data.³

Instead of complicating the grammar with lengthy lists of rules, I submit the following: The null hypothesis is that the complement domain of the phase heads little \( v \) and C is open for syntactic derivations. That is, the default picture is that these phase heads have open complements. CP and vP constitute potential phases in that they can be activated as phases in certain syntactic environments; when they are activated, the derivation follows the PIC as formulated in (1). In our case such an environment would constitute structures where case agreement (nominative) is not possible. The only context was the NOC data with the overt

³ However, recall as well that even with this list of rules, he cannot derive instrumental case marking in C-less subject control or accusative case marking with a numeral accusative DP as controller.
interrogative complementizer *jak ‘how’.*\textsuperscript{4} For this, I propose to reduce the number of rules in (4) to the ones in (5).

(5) Interrogative CP functions as a [+phase] (=4h).

The assumption in (5) is necessary to derive that matrix T (or the controller) cannot value nominative case on an embedded adjective. If we assume that the complement of phases are in general open, we reduce the number of stipulation to (5). Admittedly, (5) would still constitute a stipulation, but the number of stipulation is greatly reduced.\textsuperscript{5} \textsuperscript{6}

To summarize, I assume that the complement of phase heads (little v and C) is open. This is the default scenario. However, when we have a rule that makes the complement domain of a phase head inaccessible (like the rule in (5)), that is, a rule that activates the phase, then it follows Chomsky’s (2001) definition of phases, namely that the phase’s complement domain is inaccessible once the next higher phase head is merged.

8.2 Obligatory Subject Control\textsuperscript{7}

8.2.1 Subject Control and AP Predication

In this subsection, we will revisit subject control data involving adjectives which agree in case with their controllers. The respective data in presented in (6).

    Jan.NOM tries be.INF nice-3SG.M.NOM
    ‘Jan tries to be nice.’

\textsuperscript{4} Recall, in control with the overt complementizer *jak ‘how’ no nominative is possible on the adjective, see (i):

(i) Piotr pytał jak być *uczciw-y / uczciw-ym.
    Peter.NOM asked how be.INF honest-NOM / honest-INST
    ‘Peter asked how to be honest.’

\textsuperscript{5} Note that the formulation in (5) is taken from Witkoś (2010a) and might be a bit misleading. vP and CPs always constitute phases, the important question is whether their complement domains are accessible or not. So, when Witkoś talks about [+/- phases], he is talking about the accessibility of the complement domain. Therefore, [+phase] means that this phase’s complement is inaccessible once a higher phase head is merged and [-phase] means that this phase’s complement is in general open.

\textsuperscript{6} Note that one could also argue the other way around, namely that phases are always active and that once we see that phases seem to be open to operations from higher elements, e.g. case assignment by finite T, we could expand or cancel the phase (á la Witkoś 2010a). However, the data discussed in this thesis seems to point to open phases as the default scenario, as only interrogative C does not allow any operations below the phase head (see (i) in fn. 4). Therefore, from a minimalistic point of view it is more elegant and efficient to assume that only interrogative C acts as an active phase.

\textsuperscript{7} In all of the following sections, I have simplified the tree as well as bracketing structures for space reasons. The matrix VP is not represented, however, it is still assumed to be projected in the complement position of vP.
b. Piotr przestał być niegrzeczn-y.
   Peter.NOM stopped be.INF naughty-3SG.M.NOM
   ‘Peter stopped being naughty.’

The data in (6) show the predicative adjectives *miły* ‘nice’ (6a) and *niegrzeczny* ‘naughty’ (6b) agreeing with the controllers in nominative case. They also agree in number and gender features with the controllers.

I submit that control structures as in (6) embed AP predication. Therefore, all the rules of AP predication apply to control as well, as long as we do not encounter a (control) principle. If we can derive the structure in (6) via the rules of AP predication, nothing more must be stated about this particular control configuration. Let us take a closer look at the infinitival clause first, see (7).

(7) a. [TP PRO [CopP PRO be [AP nice[uCase:_]]]]

b. 
   \[ \begin{array}{c}
   \text{TP} \\
   \text{PRO} \\
   \text{T'} \\
   \text{T} \\
   \text{CopP} \\
   \text{PRO} \\
   \text{Cop'}
   \end{array} \]

The derivation proceeds as follows: The adjective is merged as the complement of Cop with PRO in the specifier of CopP. Predication is established by the Cop-head (in the sense of den Dikken 2006). The adjective and PRO match their features (Frampton and Gutmann 2000; Pesetsky and Torrego 2007; Bondaruk 2004, 2013).8 This basically means that once PRO has its phi-features valued, it will value those of the adjective automatically as well. Instead of having two elements at work, the work is done by one of the elements. PRO moves up to TP where it checks the EPP. The non-finite clause is derived. The derived clause mirrors AP predication in primary predication with two differences: Instead of a pronounced DP, we have PRO in the Spec,CopP and phi- and case values are not checked in this minimal clause; that is, the derivation must continue for these features to be checked. The rest of the structure is presented in (8):

8 Here I follow Bondaruk (2013) in that elements with an unvalued case feature may also probe.
(8) a. [TP Jan [vP Jan tries [FinP PRO [non-finite clause]]]]

The derivation proceeds with PRO moving to Spec,FinP to turn the FinP into a predicate (Landau 2015). Then, once little v is merged, syntactic predication can be established via little v between Jan and the FinP.\(^9\) Jan is theta-marked by the verb, as well as case-marked by T.\(^10\) Via Agree, PRO has valued phi-features, as well as nominative case from Jan. Due to phi-feature sharing chain with the adjective, the latter’s phi-features are valued as well, together with the case value.\(^11\) The complete derivation is presented in (9).

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\(^9\) Following Landau (2015, 2016b) I assume that Agree takes place at PF after syntax. For ease of illustration, I will represent the Agree mechanism in the syntactic tree.

\(^10\) I will leave it open whether T assigns case downward the tree to the DP’s base position, or whether it is assigned in a Spec-head-relation with the DP moving into Spec,TP and then getting case. I am leaning towards the first option as in this scenario phi- as well as case-features may be valued at the point of predication and does not need to be delayed further.

\(^11\) Following Frampton and Gutmann (2000) I assume that ‘[c]ase chains are formed by agreement’ (28), which means that the process of Agree (or feature sharing/matching) guarantees case agreement between two associated elements.
In line with Landau (2015), who tentatively states that FinP is not a phase, I assume the same which makes the non-finite structure open for syntactic processes, like case assignment. By combining AP predication with Landau’s (2015) model on control, we can then derive subject control with agreeing adjectives. Next, we will see how we can derive the (apparently) same structure involving instrumental adjectives.

### 8.2.2 Subject Control and DP Predication

In this section, we will see how control with instrumental adjectives is derived. Consider the data below:

(10) a. Jan próbuje być miłym.

    Jan.NOM tries be.INF nice-3SG.M.INST

    ‘Jan tries to be a nice one.’

b. Piotr przestał być niegrzecznym.

    Peter.NOM stopped be.INF naughty-3SG.M.INST

    ‘Peter stopped being a naughty one.’
As already briefly mentioned in chapter seven when discussing NPE, I propose that the structures in (10) do not embed AP predication, but DP predication. That is, the instrumental adjective is the modifier of an elided noun, and not a predicative adjective as in (6). Therefore, I submit that the corresponding interpretation of (10) differs slightly from (6), namely in that the former can be translated as *being a nice sober ONE*, while the latter is interpreted as *being nice sober*. This difference in interpretation can be derived if NPE is assumed. The underlying structures for (10) are displayed in (11).

(11) a. Jan próbuje być miłym człowiekiem.
    Jan.NOM tries be.INF nice-3SG.M.INST man-INST.SG.M
    ‘Jan tries to be a nice one.’

b. Piotr przestał być niegrzecznym człowiekiem.
    Peter.NOM stopped be.INF naughty-3SG.M.INST man-INST.SG.M
    ‘Peter stopped being a naughty one.’

Without any more context, I assume that the elided noun is of a very generic nature, namely *człowiek* ‘man’ as in (11). If there is more context, the elided noun may also be more specific. Let us first take a closer look at the non-finite clause, see (12).

(12) a. [TP PRO [CopP PRO be [FP [DP nice INST man INST]]]]
During the derivation in (12b), phi-features of the adjectives are valued by the elided noun—here *człowiek* ‘man’ having the features [3SG.M]. The adjective therefore appears with these features.\(^\text{12}\) That is, it looks as if the subject *Jan* formally matches the phi-features of the adjective, but it is actually the elided noun.\(^\text{13}\) The adjective (as well as the noun) have now valued phi-features but their case-features still need to be valued. As DP predication is projected here, atop of DP we project FP (for reasons stated in chapter six), which assigns instrumental case to its complement. The DP, and all elements inside the DP that have an unvalued case feature, appear in instrumental case. CopP is projected with PRO in its specifier. Predication between specifier and complement is established. PRO moves to Spec,TP checking the EPP. The non-finite clause is derived. In addition, optional NPE may take place (at PF) due to the presence of Class. In contrast to agreeing adjectives, the instrumental case on the adjective is already determined in the non-finite clause. That is, it is independent of the control relation and therefore not surprising that it is independent of the EC/PC split. In addition, it is not a default mechanism, as other analyses propose, but rather syntactically assigned. If control embeds predication, and Polish has two forms of predication (AP/DP), both routes should in principle be available. Therefore, the two case markings arise from two different structures that can be embedded in control. The complete derivation is shown in (13):

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\(^{12}\) I assume that attributive adjectives are introduced in the specifier of a functional projection (see Lohrmann 2010 for data and discussion). I remain neutral as to the nature of this functional projection and label it XP.

\(^{13}\) See the discussion about gender and NPE in chapter seven, section 7.3.2.2, where it is clear that the valued features on the adjective come from the elided noun.
We see that once the controller Jan values PRO’s features via predication (Landau 2015), no features are transmitted to the adjective. The embedded adjective matched its features with the elided noun (in the sense of Frampton and Gutmann 2000) and case valuation took place in the non-finite clause as well. PRO never entered a feature matching process with the adjective and therefore case agreement is not expected.

Summing up so far, subject control may embed AP prediction, resulting in case agreeing adjectives, or DP predication, resulting in instrumental case adjectives. There is nothing default about the latter’s scenario, but rather shows another route for control constructions.
8.3 Obligatory Subject Control with the Complementizer żeby ‘so that’

In this section, we will take a closer look on control verbs that select for a complementizer, more precisely, the complementizer żeby ‘so that’, as in (14).

(14) a. Piotr marzy, żeby być bogat-y.

Peter.NOM dreams so-that be.INF rich-NOM

‘Peter dreams to be rich.’

b. Piotr marzy, żeby być bogat-ym.

Peter.NOM dreams so-that be.INF rich-INST

‘Peter dreams to be a rich one.’

It has been argued in this thesis that structures like (14) display OC (in line with Bondaruk 2004 and Witkoś 2008, 2010a), just like subject control structures without overt complementizers presented in the previous section. In theory, they should then embed both types of predication as well, which is indeed the case. Let us consider the respective structures – with agreeing adjectives and instrumental ones – in turn. The underlying representation of (14b) is represented in (15).
As can be seen in (15), the case marking of the adjective is already determined in the non-finite clause, so that it is independent of the control relation or of the operations performed in the finite clause. Also note that as instrumental is not a default in this analysis, it is no indication of whether the CP has become an active phase (as in Witkoś’ 2008, 2010a). Following Fischer (2017), I assume that PRO moves as high as Spec,CP to establish an Agree relation. Without a complementizer, CP is not projected and PRO moves as high as Spec,FinP, which suffices to establish predication (Landau 2015). We also do not need to stipulate that C is an optional phase, as Witkoś (2010a) does, to derive the two options. The assignment of instrumental case is always independent of the fact whether the complement of

14 For space reasons, I have left out ClassP above the elided NP.
C is accessible or not. Once nominative case is available, it is an indicator that the non-finite clause must still be transparent, see the data and derivation in (16).

\[(16) \quad \text{a. } [\text{TP } \text{Peter} \ [\text{vP } \text{Peter dreams} \ [\text{CP } \text{so-that} \ [\text{FinP } \text{PRO} \ [\text{TP } \text{PRO} \ [\text{CopP } \text{PRO} \ [\text{AP } \text{richNOM}]]]]]]]]\\]

b. \quad \begin{array}{c}
\text{TP} \\
\text{Peter} \\
\text{T} \\
\text{vP} \\
\text{Peter} \\
\text{v} \\
\text{v'} \\
\text{FinP} \\
\text{PRO} \\
\text{C} \\
\text{Fin'} \\
\text{PRO} \\
\text{Fin} \\
\text{TP} \\
\text{PRO} \\
\text{T'} \\
\text{T} \\
\text{CopP} \\
\text{PRO} \\
\text{Cop'} \\
\text{Cop} \\
\text{AP} \\
rich
\end{array}

For the structure in (16), nominative case on the adjective comes from the feature sharing process with PRO. PRO then goes on looking for phi-features as well as case, and once it has found those (in the finite clause), it all percolates down to the adjective as well.

Note that some speakers do not like structures like (16) with case agreeing adjectives, and only accept those with instrumental adjectives. Here, one could say that for these speakers, not only do [+interrogative] C establish a phase, but all types of Cs that are filled with lexical material. This would still capture the whole empirical picture: We could explain why there are native speakers who accept both structures, and those who only accept the instrumental adjectives. Those who accept both simply embed both types of predication and perform the operations. Those who do not like agreeing adjectives, have the CP as a phase. For these speakers, DP predication is, however, still possible as all necessary operations are performed.
in the non-finite clause. In addition, this theory predicts that there should be no speakers who accept nominative case, but not instrumental case. This is indeed true as well. This approach captures the empirical picture without further stipulations as Witkoś’ system has to. Recall, Witkoś proposes the following: C when filled with żebie is an optional phase. That is, those speakers who have it as a [+phase] will not get nominative case on the adjective and default instrumental appears, while those speakers who have it as a [-phase] will get nominative case and there is no need to resort to the default instrumental. However, in such a system, it is then not easy to account for speakers who accept both possibilities. In the presented proposal, all options (either both, or just instrumental) can be derived accordingly and without further stipulations.

8.4 Non-Obligatory Control

In this section, we will see how we can derive NOC data, more precisely, subject control with jak complements and arbitrary control. These structures are characterised by the impossibility of agreeing/nominative adjectives, instead only instrumental appears as an option. Let us first take a look at subject control with the complementizer jak ‘how’.

8.4.1 Subject Control with the Complementizer jak ‘how’

In this section, we will derive the the (im)possibility of the following structures:

(17) a. Maria nie wie, jak być pięk-na.
    Maria.NOM NEG knows how be.PIK=NOM
    ‘Maria does not know how to be beautiful.’

b. Maria nie wie, jak być pięk-q.
    Maria.NOM NEG knows how be.PIK=INST
    ‘Maria does not know how to be a beautiful one.’

The data in (17a) show the adjective piękna ‘beautiful’ agreeing in case with the subject Mary. This structure is illicit. In (17b), we see the adjective in instrumental case resulting in a good structure. Let us first take a look at the structure of (17a).
The non-finite clause is built up the same way as with żeby complements. However, jak spells out interrogative C. In this system, interrogative C is a potential phase (à la Witkoś 2010a), whose complement domain is closed once the higher vP is merged. Thus, the adjective is trapped in the non-finite clause. The adjective’s phi-features as well as case feature cannot be valued and the derivation crashes. Important to note is that no valuation of default case happens here. The derivation simply crashes. For the licit construction, a new structure needs to be projected, namely one involving DP predication, see (19).
The fact that the complement of $C$ is not transparent anymore, does not have an effect in (19) as all phi- and case-features are already properly checked and valued in the non-finite clause, as DP predication is projected.\footnote{Note that I have left out the ClassP above the elided NP in (19) for space reasons.}

### 8.4.2 Arbitrary Control

In this section, we will take a closer look at arbitrary control, represented in (20).
Arbitrary control (20) is characterized by only allowing instrumental adjectives, like all NOC environments. In (21), I have sketched the derivation of the licit construction with instrumental adjectives.

(21)  

a. \([TP [CP \text{be nice man}] \text{TO} [CP \text{be stupid man}]]\)

b. 

As can be seen, DP predication can be easily projected in arbitrary control, as case markings come with the structure inside DP predication. As PRO finds no controller, it gets an arbitrary for anyone interpretation. As there is no controller, there are no nominative adjectives – with no controller, there is no DP that can agree with PRO in phi-features and case, and these values further cannot be assigned to the adjective. As there is no finite T – presumably the locus of nominative case – it is expected not to get nominative in constructions like (21). That non-finite T cannot be the host of nominative case, can be shown by Polish object control data, as in (22).

(22)  

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As can be seen in (22), nominative case on the predicate *miły* ‘nice’ results in ungrammaticality in object control structures. If non-finite T had a nominative case feature, (22) would be unexpected. Therefore, we also do not expect nominative case in arbitrary control as it also involves a non-finite T. The prediction is borne out, see (20). The only way then to derive a licit arbitrary control construction in Polish is via DP predication with additional NP-ellipsis. Recall that NPE is optional; the nouns may be overtly realized, as in (23).

(23) *Być mił-yem człowieki-em to być głup-im człowieki-em.*

be.INF nice-INST man-INST TO be.INF stupid-INST man-INST

‘To be a nice person is to be a stupid person.’

As one can see, the generalization is that Polish builds control structures via embedding of predication. I have argued that Polish has two types of predication that differ in their syntax, namely AP and DP predication. The default scenario is that both forms of predication can be embedded in control, deriving case agreeing and instrumental adjectives. That is the case for obligatory subject control. However, when one of the routes is not available (which usually is AP predication as it is the least local one), it clashes with other rules of the language. For example, *jak* complements cannot embed AP predication, as case from finite T cannot reach the adjective due to the [+phase] status of interrogative C. In arbitrary control, AP predication is also not possible, as there is no finite T and no controller to value case features on the adjectives with nominative case. Therefore, Polish then only allows these structures with embedded DP predication.\(^\text{16}\)

Next, we will turn to more complex control data – namely object control. This form of control seems to be a mixture of these we have analysed so far. On the one hand, it has all the characteristic of OC, thus patterning with C-less subject control and subject control with *żeby*. On the other hand, it only allows instrumental adjectives, and prohibits case agreeing adjectives, thereby patterning with the presented NOC data.

### 8.5 Obligatory Object Control

Simple object control data to be analysed in this section involve structures as in (24).

\[^{16}\text{This might also explain why NPE is so productive in arbitrary control. Since DP predication is the only route anyway in these structures, speakers intuitively know that there must be a noun, so it can be easily dropped and thus locality is not a decisive factor for its application.}\]
Characteristic of Polish object control is that these structures prohibit case agreement with the (object) controller. This is independent of the structural/lexical case split. In (24a), the controller carries structural accusative, whereas in (24b), the controller carries lexical dative. In both scenarios appears the adjective in instrumental case. This is a strong contrast to closely related languages like Russian and Czech, where case agreement is possible with structurally case marked controllers (as in (24a)). Therefore, whatever regulates case transmission possibilities in Polish, it seems to be a different rule than in Russian and Czech.

In the next section, I will derive the licit option with instrumental adjectives. There, DP predication is embedded and case on the adjective is then independent of the case properties of the controller. In the following sections, I will discuss two different possibilities that might account for the impossibility of agreeing case in Polish object control. As we are dealing with control and predicational rules interacting with one another in (24), there are two possible sources where we could find a restriction – it could be of a predicative nature, or of a control nature.

### 8.5.1 Object Control and DP Predication

Let us now derive the only licit version when it comes to object control, namely where the adjective carries instrumental case. Consider the data and structure in (25).

(25)  

\begin{align*}
\text{a. Piotr} & \quad \text{kazał Tom-owi być mił-yym.} \\
& \quad \text{Peter.NOM ordered Tom-DAT be.INF nice-INST} \\
& \quad \text{‘Peter ordered Tom to be a nice one.’}
\end{align*}
c.  TP
   Peter  T'
   T  vP
      Peter  v'
         v  RP
            Tom  R'
                R  CP
                   PRO  C'
                      C  FinP
                         PRO  Fin'
                            Fin  TP
                               PRO  T'
                                  T  CopP
                                     PRO  Cop'
                                        Cop  FP
                                           F  DP
                                              D  XP
                                                 AP  N
                                                    nice  Class'
The derivation runs as follows: DP predication is projected in the non-finite clause, that is, a generic DP *człowiek* ‘man’ with a modifier *miły* ‘nice’. Atop FP is projected turning the DP into a predicate and assigning instrumental case to the complement. The noun as well as the adjective now carry instrumental case marking. CopP is then projected with PRO in its specifier, a predication relation is established between PRO and the FP. Then the non-finite TP is projected; PRO moves to its specifier to check the EPP. Next, the FinP is created, PRO moves there via operator movement creating an open variable (Landau 2015). Following Bondaruk (2004), I project a CP in object control due to her observation that all object control verbs can be paraphrased with a *żeby* complement. Following Fischer (2017), I assume that PRO moves as far as up as Spec,CP. Then the controller is introduced via Relator Phrase (RP). The verb is introduced, and the controller is marked dative. The subject is introduced, receives nominative case from T, and moves to Spec,TP. At the end, the generic noun may be elided in a process of NP-ellipsis due to ClassP. All nouns and adjectives are properly case marked.

Important to note here is that unlike in all other proposed analyses so far, the instrumental marking is not a result of impossibility of case transmission, but is rather regular and syntactically assigned. In general, two routes are open for control in Polish, namely either projecting DP predication or AP predication in these structures; AP predication results in agreeing case (usually nominative) while DP predication results in instrumental case. However, as can be seen from the data, object control does pose a challenge for this approach, as it does not allow AP predication to be embedded in control.

In the following sections, we will take a closer look at the impossibility of case agreeing adjectives in Polish object control. As I have argued that predicational structures are projected in the non-finite clause in control, there are in theory two possible sources for the impossibility of said scenario. Either the module of predication stores a rule that prohibits case transmission of non-nominative cases, or it is the control module that imposes more restrictions on the relations established. I will discuss these two options in turn, eventually concluding that the impossibility finds its source in a control restrictions concerning case transmission.

18 Recall that the generic noun may also be overtly realized and can only appear in instrumental case marking.

(i)  Piotr kazal Tomk-owi być mil-y mczłowieki-em.
Peter.NOM ordered Tom-DAT be.INF nice-INST man-INST
‘Peter ordered Tom to be a nice man.’
8.5.2 Object Control and AP Predication

In this section, we want to explore why the following structures are illicit:

(26)  a. *Piotr uczył Tom-a być mił-ego.
Peter.NOM taught Tom-ACC be.INF nice-ACC
‘Peter taught Tom to be nice.’

b. *Piotr kazał Tom-owi być mił-emu.
Peter.NOM ordered Tom-DAT be.INF nice-DAT
‘Peter ordered Tom to be nice.’

In (26b), the accusative controller *Tom may not transmit its case to the respective adjective *miły ‘nice’. In the same fashion, the dative controller *Tom in (26b) can also not transmit the case to the adjective. As one can see from (26), the restriction cuts through the lexical/structural case split found in natural languages. That is, no matter whether we have a structural (26a) or a lexical case (26b), transmission of either is not allowed. Recall that in Czech and Russian transmission of case to the adjective is possible if the transmitted case is of a structural nature. That is, the equivalent Czech/Russian data of (26a) is grammatical. So, for Russian and Czech there is a restriction coming from Case Theory which states that transmission of structural cases is allowed, while transmission of lexical cases is prohibited. Such a rule cannot possibly exist in Polish (see (26a)). We have to look further.

8.5.2.1 No AP Predication in Object Control: Predicational Restrictions

As I have argued that Polish control with embedded adjectives actually embeds predication, the expected picture is that these structures follow predicational rules. That is, once we embed predication, the rules and restrictions of predication also apply to the newly formed structure and thus, they might already explain some of the phenomena in control without stipulating more rules to the grammar.

One possible restriction from the predicational module might be that there are no predicative adjectives carrying accusative or dative.\textsuperscript{19} If there is such a morphological gap, it could explain why in control they do not exist either. However, we must be precise at this point when it comes to the introduction of morphological gaps. Such a gap would include the

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\textsuperscript{19}I will ignore the possibility of genitive case which seems to be possible once the matrix verb is negated and a structural case (genitive) is assigned to the verb’s complement.
morphology of predicative adjectives, however, not of attributive ones, as these can appear in all cases the language offers, see (27).

(27)   a. ladn-a dziewczyna
       beautiful-NOM girl
       ‘a/the beautiful girl’

       b. Ja widzę ladn-ego psa.
          I.NOM see beautiful-ACC dog.ACC
          ‘I see a beautiful dog.’

       c. Ja pomagam biedn-ym uczni-om.
          I.NOM help poor-DAT student-DAT
          ‘I help the poor students.’

       d. Ja nie jem spleśniał-ych brzoskwini.
          I.NOM NEG eat moldy-GEN peaches-GEN
          ‘I am not eating moldy peaches.’

       e. Ja jestem dobr-ym uczni-em.
          I.NOM am good-INST pupil-INST
          ‘I am a good student.’

       f. Ona jest w duż-ym dom-u.
          She.NOM is in big-LOC house-LOC
          ‘She is in a big house.’

As (27) shows, there is adjectival morphology for all Polish cases. However, we are concerned with the marking of predicative adjectives. In order to test this, we would have to find a predicational structure, where the case marked DP is not nominative, and where we embed a predicative adjective that cannot absorb the case in question. In (28), we have an (apparent) example for this.

(28)   Piotr-owi było zimno / *zimn-emu.
       Peter-DAT was cold / cold-DAT
       ‘Peter was feeling cold.’
In (28), we have an experiencer, Piotr, marked dative.\textsuperscript{20} If we embed a predicate there, it cannot show up with dative morphology. This might indicate that the non-nominative DP cannot transmit its case to the adjective, as there is a ban on non-nominative predicative adjectives.\textsuperscript{21}

As tempting as this sounds, we need to take a closer look at the structure in (28) to see whether we are not comparing apples and oranges. Striking is that the embedded element does not behave like an adjective, but rather like an adverb. Adverbs in Polish can be easily distinguished from adjectives: Adverbs do not appear with case markings at all, and they always appear in a default, third person singular form. That is, they do not establish agreement with a DP, see (29).

\begin{quote}
(29) Kobiet-om jest zimno / *zimn-ym.

\begin{itemize}
\item women-DAT is cold / cold-DAT.F.PL
\end{itemize}

‘The women are feeling cold.’
\end{quote}

Therefore, we can conclude that the element embedded in (28) is not an adjective, but an adverb. In consequence, different rules apply. I conclude then, that the data in (28) does not support the idea of a morphological gap.

If we actually consider more data, the idea of a morphological gap becomes even harder to entertain. Consider the data in (30).

\begin{itemize}
\item a. Pamiętam go mił-ym / mił-ego.
\begin{itemize}
\item I.remember him.ACC nice-INST / nice-ACC
\end{itemize}

‘I remember him as nice.’ (Przepiórkowski 1999: 203)

\item b. Lubiłem Jank-a trzeźw-ego / ?trzeźw-ym.
\begin{itemize}
\item I.liked John-ACC sober-ACC / sober-INST
\end{itemize}

‘I liked John (when he was) sober.’ (Przepiórkowski 1999: 203)

\item c. Zjadł kurczak-a posolon-ego / ?*posolon-ym.
\begin{itemize}
\item He.ate chicken-ACC salted-ACC / salted-INST
\end{itemize}

‘He ate the chicken salted.’ (Przepiórkowski 1999: 203)
\end{itemize}

\textsuperscript{20} See Anagnostopoulou (1999c) on the topic of experiencers and Bondaruk and Szymanek (2007) for experiencers in Polish.

\textsuperscript{21} Note that this would not be a contradiction when it comes to the instrumental marked adjectives in control since, as I have argued, these constitute attributive adjectives of elided noun.
The data in (30) display secondary predication. We see that there are two strategies to case mark a secondary predicate in Polish. Either it agrees in case with its associated DP or it is marked instrumental. However, Przepiórkowski (1999) notes that the instrumental option is not as productive as the agreeing version, as can be seen by the data in (30b) and (30c). In the former, instrumental is judged marked or slightly worse than agreeing, while in (30c) the instrumental option is not existent. For our purposes, it is interesting to note that the adjectives can always agree in case with the corresponding DP, be it nominative or accusative or any other case. The data in (30) thus might pose a problem if we assume that there is a morphological cap for predicative adjectives. Let me already note at this point that we might also be comparing apples and oranges here. In order to show that the data in (30) are really an argument against the morphological gap idea, we need to show that the agreeing adjectives are really predicative adjectives. On the surface, they look like predicative adjectives, but one needs to show a derivation of those to really prove that they are not maybe attributive adjectives with the head noun being moved to a different position.

Even if we do not go the step from primary predication to secondary predication, we already find counterexamples in primary predication, as is shown in (31).

(31) Pięć kobiet było miły-ch / mił-e. 

five.ACC women.GEN was nice-GEN / nice-ACC

‘Five women were nice.’ (Przepiórkowski, p.c.)

The data in (31) shows primary predication with a non-nominative DP. Here, the numeral is marked accusative (Przepiórkowski 2004b) and its complement is marked genitive. Both cases may be transmitted to the predicative adjective. So, the data in (31) show that the predicational module does not operate with morphological gaps, it actually has access to the morphology of these cases. Therefore, it would be unexpected if control prohibited these case markings to which the predicational module has clearly access (see (31)).

8.5.2.2 No AP Predication in Object Control: Control Restrictions

In this section, I will discuss the option that the control module prohibits AP predication in object control by imposing a specific rule onto the relation.

Let us first look at the descriptive facts. When nominative controllers are involved, case transmission is fine. However, when there is a non-nominative controller, case transmission is blocked. This could mean that PRO might be selective and could not absorb any case that is not nominative. Bondaruk (2004) actually argues that PRO cannot transmit non-nominative
(objective, for her) case to the embedded adjective, and therefore default instrumental appears. While I have argued against the consequence of Bondaruk’s system, maybe the intuition about the transmission of non-nominative cases is correct. However, that cannot be the end of the story as we can see that PRO can transmit accusative and (marginally) genitive case as well, when looking at data involving numeral DPs, see (32).

(32) Pięć dziewczyn chce być mił-e / ??miłych / mil-ymi.

five.ACC girls.GEN want.3SG.N be.INF nice-ACC / nice-GEN / nice-INST

‘Five girls want to be nice.’

In (32), we can see that accusative on the adjective is fine; genitive seems to be available as well, though it is judged as worse as accusative; instrumental appears as the preferred option. I will provide a thorough analysis for the data in (32) in the next chapter; at this point, we can use this data to show that it is not nominative in itself that makes it easily transmittable, as we can observe the same for the accusative. Therefore, if we say that accusative is not available in object control because PRO cannot transmit accusative, we would then have to come up with a rule why it is suddenly possible in (32).

When it is not nominative in itself that makes it a good candidate for transmission, maybe it is what this nominative signals or shows about the deeper structure. Nominative case is usually characteristic for subjecthood; that is, nominative-marked elements tend to be subjects. So, a new hypothesis is that it is subjects that can transmit cases; it just happens that subjects are very often nominative, and therefore one could mistake the nominative for the reason for transmission, when it is in fact, the subjecthood status. Let us go back to the pivotal object control data, see (33).

(33) a. Piotr kazal Tomkowi być mił-y / *mił-emu.

Peter.NOM ordered Tom-DAT be.INF nice-INST / nice-DAT

‘Peter ordered Tom to be a nice one.’

b. *[TP Peter [vP Peter ordered [RP Tom] [CP PRO [FinP PRO [TP PRO [CopP be [AP niceDAT]]]]]]]

I propose the following: Once the controller Tom is merged and is marked dative by little v;²² the controller transmits its features to PRO via predication; that is person, number, gender, as

²² I remain agnostic when it comes to the exact source of dative case in (33). For simplicity, I will assume (following Witkoś 2010a) that little v is the locus of objective case (be it accusative or dative), but nothing crucial rests on this assumption. R (den Dikken 2006), vAppl (McFadden 2004) or Appl (Pylkkänen 2002) may also be the locus of dative case.
well as case, here dative. It is generally assumed that Polish does not have dative-marked subjects (Wolińska 1978; Tajsner 1990; Dziwirek 1994; Śpiewak 2000; Bondaruk and Szymanek 2007) of the type that Icelandic (Zaenen, Maling and Thráinsson 1985; Sigurðsson 1989), Russian (Franks and Greenberg 1988; Moore and Perlmutter 2000), Japanese, Korean, Hindi, and Tamil (Ura 2000) presumably have. Thus, dative case is never found on subjects.23

Going back to the control data in (33); there we have PRO which is a subject (Landau 2015), and it is assigned dative case via predication with the controller Tom. These two properties are contradictory. Yet, I submit that this is a PF problem; that is, everything is fine as long as PRO’s conflicting properties are not spelled out – the only way to spell out those conflicting features is by copying them onto associated elements like adjectives. Therefore, in order not to pronounce a contradiction, features are not transmitted to the adjective. This leads to unvalued features on the adjective and the derivation crashes. The proposed mechanism is summarized in (34).

(34) PRO AND CASE

At PF, when PRO’s case needs to be morphologically realized, this must not signal conflicts with independent requirements of the language.

The principle in (34) makes sure that no conflicting properties – like being dative-marked and a subject – are realized on a phonological level. This goes hand in hand with Landau (2015, 2016a) where it is assumed that morphological features are inserted at PF. Note that the rule in (34) is similar to an idea proposed by Bondaruk (2004: 257-259). She proposes that once PRO is assigned an objective case (namely accusative, dative, and presumably genitive), it cannot be copied onto the adjective and therefore the adjective appears in the elsewhere case, namely instrumental for her. She does not link this impossibility of transmission to the notion of subjecthood, as it is proposed here. In addition, I do not assume that instrumental appears

---

23 Thus, the Polish structure (i) resembles the German structure (ii), where it has also been argued that the dative DP does not have subject properties:

(i) Adam-owi było zimno.  
   Adam-DAT was cold.ADV  
   ‘Adam felt cold.’

(ii) Dem Hans war kalt.  
    The.DAT John was cold  
    ‘John felt cold.’  
    (German)

For Polish, there are different ideas how the dative-marked DP is introduced. For Bondaruk and Szymanek (2007) these DPs are internal arguments that eventually occupy a position that is TP-adjoined after topicalisation. The exact mechanism is not important for this thesis, only the unequivocal observation that dative-marked DPs do not act as subjects.
as a rescue option, but that it is assigned when a different structure is embedded in control. Therefore, if we embed AP predication – which results in case agreement – the derivation crashes for object control because of (34).24 25

8.6 Summary

In this section, I have laid out a potential analysis of Polish control data involving embedded adjectives. I have argued that predicational structures are projected in the non-finite clause in control. Furthermore, I have shown that Polish has two distinct predicational structures, on the one hand AP predication resulting in case agreement and DP predication resulting in instrumental case on the other hand. If control embeds predication, then both routes of predication should in theory be open. I have shown this to be true for simple subject control, as well as subject control with the complementizer żeby. Furthermore, I have shown why only one route, namely DP predication, is open for subject control with the complementizer jak, namely that interrogative C constitutes a phase and therefore its complement domain is no longer accessible. In addition, for arbitrary control there is also only DP predication due to its specific structural configuration, most notably, by the absence of an overt controller. The last point was about object control, where only DP predication is possible. For this, we concluded that it is subjects that may transmit their case, but not objects (see also Landau 2013).

In the following section, I will advance the principle that PRO can only transmit subject cases to the adjective, as to not create a PF dilemma. For this, I will show that complex subject/object control data involving numeral DPs as controllers serve as a good testing ground for such a principle: There we have a subject that is marked DP-internally with

24 The same is true for accusative:

(i)  Ew-ę fascynuje Meksyk.
     Eve-ACC fascinated Mexico_NOM
     ‘Eve is fascinated by Mexico.’ (Bondaruk and Szymanek 2007: 24)

Bondaruk and Szymanek (2007) argue that accusative marked elements, like the one in (i), behave exactly as the respective structure with a dative DP. I have nothing to add here, only that while the dative DP may appear without a nominative marked element, the accusative one is usually accompanied by a nominative DP (as Meksyk ‘Mexico’ in (i)), therefore, one could argue that the accusative DP is an object in the first place and scrambling has taken place.

25 It could be argued that genitive DPs may also occupy subject positions, namely in negated [existential-] locative BE-sentence (Błaszczak 2007).

(i)  Jan-a nie był-o na przyjęci-u.
     John-GEN NEG was-3SG.N at party-LOC
     ‘John was not at the party.’ (Lit.: ‘There was no John at the party.’)

However, as argued by Błaszczak (2007: 142-150), the genitive DP does not behave like a subject.
accusative case. The prediction then is that this accusative case should be transmittable, if the principle in (34) is correct.
9. Numeral DPs and the Theory of Control in Polish

In this section, we will derive the distribution of case possibilities in Polish subject and object control, where numeral DPs act as controllers for PRO. I will show that the case properties found can be reduced to projecting predication in the non-finite clause coupled with the principle in (1), introduced in the preceding chapter.

(1) PRO AND CASE

At PF, when PRO’s case needs to be morphologically realized, this must not signal conflicts with independent requirements of the language.

The chapter is organized as follows: I will first introduce data involving numeral DPs outside of control. I will show that these DPs are not marked nominative, but rather accusative (Przepiórkowski 2004b). In the next section, I will introduce an analysis that derives the accusative status of these DPs which is based on Miechowicz-Mathiasen (2012). Then, we will embed these structures in control, and see how the ideas introduced in this thesis can derive the respective data, for subject and object control.

9.1 Numeral DPs: The Data

Polish, like many other Slavic languages, displays a curious and interesting array of structures involving numerals phrases, see (2).

(2) Trzy kobiet-y przysz-ły / *przysz-ło.

three.NOM women-NOM come-PAST PRT.PL.F / came-PAST PRT.SG.N

‘Three women came.’ (Przepiórkowski 1999: 190)

The data in (2) show a structure with a paucal numeral, namely a numeral from 2-4; in these structures we can see that the numeral agrees in case with the noun it modifies. Therefore, these numerals seem to behave like adjectives as they are subordinate to the noun. The Table in 1 summarizes the pattern of the numerals from 2-4.

<table>
<thead>
<tr>
<th>Case</th>
<th>Numerals</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>trzy, trzy-kobiety</td>
<td>nom, acc</td>
</tr>
<tr>
<td>Accusative</td>
<td>trzy, trzy-kobiety</td>
<td>nom, acc</td>
</tr>
<tr>
<td>Genitive</td>
<td>trz-ech, kobiety-gen</td>
<td>gen</td>
</tr>
<tr>
<td>Dative</td>
<td>trz-em, kobiety-dat</td>
<td>dat</td>
</tr>
<tr>
<td>Instrumental</td>
<td>trz-ema, kobiety-inst</td>
<td>inst</td>
</tr>
<tr>
<td>Locative</td>
<td>trz-ech, kobiety-loc</td>
<td>loc</td>
</tr>
</tbody>
</table>

Table 1: Non-virile declension paucal numerals (Przepiórkowski 1999: 189)
While the numerals 2-4 show the typical behavior of adjectives, numerals higher or equal to five exhibit a different behavior, see the data in (3)-(6).\(^1\)

(3) Pięć-\text{iu} facet-\text{ów} weszł-o do kin-a.
\hspace{1cm} five-\text{ACC} guys-\text{GEN} entered-3\text{SG.N} into cinema-\text{GEN}
\hspace{1cm} ‘Five guys entered the cinema.’ \hspace{1cm} (Przepiórkowski 1999: 165)

(4) Pięć kobiet / okien / stoł-ów / kot-ów leżał-o.
\hspace{1cm} five-\text{ACC} women-\text{GEN} / windows-\text{GEN} / tables-\text{GEN} / cats-\text{GEN} lied-3\text{SG.N}
\hspace{1cm} ‘Five women / windows / tables / cats lied.’ \hspace{1cm} (Przepiórkowski 2004b: 133)\(^2\)

(5) Kilka drzew był-o wyrwan-e / wyrwan-ych z ziemi.
\hspace{1cm} a.few-\text{ACC} trees-\text{GEN} was-3\text{SG.N} torn-\text{ACC} / torn-\text{GEN} from earth-\text{GEN}
\hspace{1cm} ‘A few trees were uprooted.’ \hspace{1cm} (Przepiórkowski 2001: 160)

(6) Pięć kobiet był-o miło-\text{e} / miło-ych.
\hspace{1cm} five-\text{ACC} women-\text{GEN} was-3\text{SG.N} nice-\text{ACC} / nice-\text{GEN}
\hspace{1cm} ‘Five women are nice.’ \hspace{1cm} (Przepiórkowski, p.c.)

In (3) and (4), we have a DP headed by the numeral \textit{pięć} ‘five’; numerals higher than or equal to \textit{pięć} ‘five’ display different phenomena compared to paucal numerals as in (2).\(^3\) It is argued that the numeral is marked accusative. The complement is clearly marked genitive and the verb does not agree with the DP in phi-features, but rather appears in a default form, namely 3\text{rd} person singular, neuter. In (5) and (6), we have the DP headed by the numeral \textit{pięć} ‘five’ and with an embedded adjective. The characteristics of (3) and (4) can be spotted in (5) and (6) as well, namely accusative marking of the numeral and the default form of the verb/copula. In addition, we have predicative adjectives that may appear either in accusative or genitive.

In the following, I will show that the numeral DPs in (3)-(6) are headed by an accusative numeral and that these DPs have subject properties. I will largely draw from Przepiórkowski’s (1996 et seq.) work. If the numeral is accusative and the DP is a subject, we have a quirky subject. This makes predictions for control, where I have argued that PRO may transmit features as long as they are not contradictory. Therefore, it is expected that in these

\(^1\) Except for \textit{tysiéc} ‘thousand’ and \textit{milion} ‘million’.
\(^2\) The gloss and translation of the examples from Przepiórkowski (2004b) are mine, as the paper is written in Polish.
\(^3\) In the following, when I refer to ‘numeral phrases’, only the class of numerals higher or equal to five are covered by this term.
constructions the adjective may appear with accusative. I will return to these kind of data in section 9.3.

### 9.1.1 Higher Numerals (5+) are Accusative (Przepiórkowski 2004b)

In this section, I will present arguments in favor of the numeral as in (4), repeated in (7), being accusative.

(7) Pięć kobiet / okien / stołów / kotów leżał-o.

five.ACC women.GEN / windows.GEN / tables.GEN / cats.GEN lied-3SG.N

‘Five women / windows / tables / cats lied.’ (Przepiórkowski 2004b: 133)

Let us first have a look at the case properties of the numerals phrases, see Table 2 and Table 3 below.

<table>
<thead>
<tr>
<th>Case</th>
<th>five</th>
<th>women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>pięć?nom/?acc kobiet_gen</td>
<td>kobiet_gen</td>
</tr>
<tr>
<td>Accusative</td>
<td>pięć acc kobiet_gen</td>
<td>kobiet_gen</td>
</tr>
<tr>
<td>Genitive</td>
<td>pięć-iu gen kobiet_gen</td>
<td>kobiet_gen</td>
</tr>
<tr>
<td>Dative</td>
<td>pięć-iu dat kobiet-om dat</td>
<td>kobiet-om dat</td>
</tr>
<tr>
<td>Instrumental</td>
<td>pięć-iu / pięć-ioma inst kobiet-ami inst</td>
<td>kobiet-ami inst</td>
</tr>
<tr>
<td>Locative</td>
<td>pięć-iu loc kobiet-ach loc</td>
<td>kobiet-ach loc</td>
</tr>
</tbody>
</table>

Table 2: Non-Virile Declension of pięć ‘five’

<table>
<thead>
<tr>
<th>Case</th>
<th>five</th>
<th>guys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>pięć-iu ?nom/?acc/?gen facet-ów gen</td>
<td>facet-ów gen</td>
</tr>
<tr>
<td>Accusative</td>
<td>pięć-iu ?acc/?gen facet-ów gen</td>
<td>facet-ów gen</td>
</tr>
<tr>
<td>Genitive</td>
<td>pięć-iu gen facet-ów gen</td>
<td>facet-ów gen</td>
</tr>
<tr>
<td>Dative</td>
<td>pięć-iu dat facet-om dat</td>
<td>facet-om dat</td>
</tr>
<tr>
<td>Instrumental</td>
<td>pięć-iu / pięć-ioma inst facet-ami inst</td>
<td>facet-ami inst</td>
</tr>
<tr>
<td>Locative</td>
<td>pięć-iu loc facet-ach loc</td>
<td>facet-ach loc</td>
</tr>
</tbody>
</table>

Table 3: Virile Declension of pięć ‘five’

The tables are to be read as follows:

<table>
<thead>
<tr>
<th>Environment</th>
<th>The numeral five will appear in …</th>
<th>And the complement will be marked …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominative</td>
<td>pięć-iu ?nom/?acc/?gen facet-ów gen</td>
<td>facet-ów gen</td>
</tr>
</tbody>
</table>

Table 4: Explanation of tables

The tables show the typical declension pattern of the numeral pięć ‘five’ and its complement. As we can see, the complement appears in genitive case, when the numeral carries a structural
case (NOM/ACC), and displays case concord when a lexical case is involved (DAT/INST/LOC).\(^4\)

In addition, the nominative case row has sparked a lot of discussion in the literature. That is, it is not agreed upon whether numerals higher and equal to five actually have nominative morphology in the first place. There exist three hypothesis as to how the data is to be analysed:

- The nominative-genitive hypothesis: The numeral is marked nominative, the complement genitive (Klemensiewicz 1968; Bartnicka and Satkiewicz 1990; Mieczkowska 1994; Rappaport 2003).

- The nominative hypothesis: Both elements are actually nominative (Saloni and Świdzinski 1998; Andrejewicz 1996; Kopcińska 1997).


In the following I will present arguments in favour of the last hypothesis, namely the accusative hypothesis. I will discuss two arguments, namely combinations with demonstratives and case agreement with predicative adjectives that support this thesis. Let us start with demonstratives, see (8):

\[
\begin{align*}
\text{Tych} & \quad / \quad \text{te} \quad \text{pięć} \quad \text{kobiet} \quad \text{leżał-o}. \\
\text{these.GEN} & \quad / \quad \text{these.ACC/ACC} \quad \text{five.ACC} \quad \text{women.GEN} \quad \text{lied-3SG.N} \\
\text{‘These five women lied.’} & \quad \text{(Przepiórkowski 2004b: 134)}
\end{align*}
\]

The data in (8) show that we can combine the numeral DP with a demonstrative. This demonstrative can be marked genitive (tych) thus agreeing with the complement of the numeral, here kobiety ‘women’ in case. In addition, it can appear with syncretic accusative/nominative marking (te). The question is, what case does the demonstrative te carry? For agreement with feminine DPs, it is impossible to tell due to the observed syncretism. However, the virile version of the demonstrative is distinct for the two cases, as can be seen in (9):

\[
\begin{align*}
\text{Tych} & \quad / \quad *\text{ci} \quad \text{pięc-iu} \quad \text{meżczyzn} \quad \text{leżał-o}. \\
\text{these.GEN/ACC} & \quad / \quad \text{these.NOM} \quad \text{five-ACC} \quad \text{men.GEN} \quad \text{lied-3SG.N} \\
\text{‘These five men lied.’} & \quad \text{(Przepiórkowski 2004b: 134)}
\end{align*}
\]

\(^4\) The pattern with genitive case is a challenge here. We have not dealt with the classification of the genitive case in Polish in this thesis. We cannot apply the tests introduced in chapter five to the genitive. Przepiórkowski (1999) eventually concludes that there are different types of the genitive case.
In (9), we can see that the genitive and accusative case marking of the demonstrative overlap (tych), but there is clear distinct morphology for the nominative version (ci). As can be seen in (9), we cannot combine a nominative version of the demonstrative with a numeral DP. This is surprising if the numeral is actually nominative, as then one would expect that it may combine with a nominative-marked demonstrative. However, if the numeral is accusative, the two possibilities for the demonstrative (ACC/GEN) in (8) and (9) can be easily derived.\(^5\)

The other argument in favor of the accusative hypothesis is the case pattern of predicative adjectives. Consider the data below.

\[(10)\]

\[
\text{a. Sześć samolotów został zakupion-e / zakupion-ych}
\]
\[
six.ACC planes-GEN became-3SG.N bought-ACC/NOM / bought-GEN
\]
\[
we wrześni'u.
\]
\[
in september-LOC
\]
\[
‘Six planes were bought in September.’ \hspace{1em} (Przepiórkowski 2004b: 135)
\]

\[
\text{b. Sześćiu niewolników został *zakupieni / zakupion-ych}
\]
\[
six.ACC slaves-GEN became-3SG.N bought.NOM / bought-GEN/ACC
\]
\[
w 1756 r.
\]
\[
in 1756
\]
\[
‘Six slaves were bought in 1756.’ \hspace{1em} (Przepiórkowski 2004b: 135)
\]

The data in (10a) show that the predicative adjective may appear either with genitive marking or with syncretic nominative/accusative. The genitive marking can be derived by assuming that the complement of the numeral transmits the case. The question is again, whether the syncretic case is accusative or nominative. The data in (10b) show a numeral DP, which is virile, where we do not have an overlap of nominative and accusative morphology. There we can see that a nominative-marked adjective is ungrammatical. Therefore, we have to assume that the syncretically case marked adjective in (10a) is actually accusative. This case pattern can be easily derived if the numeral is actually accusative.\(^6\)

---

\(^5\) The possibility of accusative case on the determiner in (8) and (9) is unexpected for proponents of the other two hypothesis concerning case markings of numerals.

\(^6\) For more discussion and data, the interested reader is referred to Przepiórkowski (1999 and subsequent work). The pattern in (10) is unexpected for proponents of the other two hypotheses. Another problem for the advocates of the numeral being nominative is that it is not easily derived why there is no subject-verb-agreement between the DP and verb. Usually, nominative DPs trigger agreement, but these numeral phrases do not. This is expected, if the DP is actually not nominative, but accusative.
Embedding these structures into control environments, also yields interesting case possibilities:

\(11\)

\begin{align*}
a. \text{Pięć dziewczyn chce być mił-e / ??miłych / mił-ymi.} \\
&\text{five.ACC girls GEN want.3SG.N be INF nice ACC / nice GEN / nice INST} \\
&\text{‘Five girls want to be nice.’}
\end{align*}

\begin{align*}
b. \text{Pięć-iu facet-ów chce być miły-ch / miły-ymi.} \\
&\text{five ACC guys GEN want.3SG.N be INF nice ACC GEN / nice INST} \\
&\text{‘Five guys want to be nice.’}
\end{align*}

The data in (11) show that in control, the adjective may easily appear in accusative. This is most likely derived, if we assume that the numeral carries accusative case and the adjective agrees in case with the numeral. Genitive is less liked by native speakers (11a), however, still available. In addition, instrumental emerges as a third option. I will discuss these data in more detail in section 9.3. Let me just mention at this point that in (11) we seem to have AP predication (resulting in agreeing accusative) and DP predication (resulting in instrumental) embedded in control, just like with simple subject control, thereby deriving the case patterns.

Having now presented evidence in favor of the accusative hypothesis, we will continue with the classification of these DPs.\(^7\) To be more precise, in the next section, I will present data that support the idea that these DPs have subject properties, that is, they are quirky subjects.

### 9.1.2 Numeral DPs are Subjects

In this section, we will examine the status of these numeral DPs more closely, especially with respect to their status as subjects. Remember that I have argued that dative/accusative elements as controllers cannot transmit case as this would spell out contradictory features of PRO, namely being a subject and being case-marked with a non-subject case. In order to test the validity of such a claim, one needs to find quirky subjects in the respective language. The literature is in agreement that dative DPs, usually experiencers, do not behave like subjects (Wolińska 1978; Tajsner 1990; Dziwirek 1994; Śpiewak 2000; Bondaruk and Szymanek

\(7\) Note that in Russian these numerals are argued to be nominative (cf. Pesetsky 2013: 2)

\begin{align*}
(i) \ &\text{èt-i posledn-ie p'iat' krasiv- } \text{stol-ov} \\
&\text{these-NOM last-NOM five-NOM beautiful-GEN tables-GEN} \\
&\text{‘these last five beautiful tables’}
\end{align*}

Pesetsky (2013) argues that \(N\) is associated with genitive and \(D\) with nominative. Therefore, all D-elements in (i) carry nominative, while the noun and adjective carry genitive. His system cannot account for the parallel Polish data as the DP is clearly marked accusative (which is associated with V in Pesetsky’s system).
However, numeral DPs have been claimed to be subjects (Przepiórkowski 1999), and in addition marked accusative case, which would make them quirky subjects. Before turning to the pivotal control data, I will briefly revise the arguments as to why these numeral DPs are supposed to be subjects. For this, I will apply the following subjecthood tests to the numeral DPs: binding of reflexives, control into gerundive clauses, control of the phrase po pijanemu ‘when drunk’, adverbial clauses, coordination, and resumptive pronouns.

As is well-known, subjects easily bind reflexives pronouns, while objects do not. The data in (12) show numeral DPs binding reflexives.

(12) Pięć-iu facetów zobaczył-o się/siębie w lustrze.
    five-ACC guys-GEN saw-3SG.N REFL/SELF in mirror-LOC
    ‘Five guys saw themselves in the mirror.’ (Przepiórkowski 1999: 168)

Also, numeral DPs may control into gerundive clause, as can be seen in (13).

(13) Po PROi przyjściu do dom-u, pocałował-o pięć-iu facetów dziewczynę.
    after coming to home-LOC kissed-3SG.N five-ACC guys-GEN girl-ACC
    ‘After coming home, five guys kissed the/a girl.’

The data in (13) show that the DP pięć facetów ‘five guys’ can control PRO, which is usually reserved for subjects (see also Dyla 1981; Bondaruk and Szymanek 2007). The next test involves control of the phrase po pijanemu ‘while drunk’, see (14).

(14) Pięć-iu facetów po pijanemu skoczył-o z most-u.
    five-ACC guys-GEN while drunk jumped-3SG.N from bridge-LOC
    ‘Five guys jumped from a bridge while drunk.’ (Przepiórkowski 1999: 168)

The data in (14) show that the numeral DP can control the phrase po pijanemu ‘while drunk’ which has been argued to be subject-oriented. Objects cannot control this phrase, see (15).

---

8 Note that these quirky subjects in Polish do not behave like the quirky subjects attested in Icelandic. For Icelandic, it has been observed that the quirky subject partially determines agreement on the verb. The object in these constructions carries nominative case and also partially determines agreement on the verb. In Polish, there is no verbal agreement with any element in the structure, but the verb rather appears in a default, non-agreeing form.

9 Some proposed tests for subjecthood, like ECM, are not applicable to Polish, for language-specific reasons.
The data in (15a) is illicit if it is John who is drunk; the only licit reading the sentence can have is that Eve is drunk while she gives the ring to John. (15b) works the same way; the sentence can only mean that it is Mark who is drunk, never that Mary is drunk while fighting. Therefore, the phrase po pijanemu ‘while drunk’ picks subjects for modification. However, one could argue that there is a hierarchy for the modification of this phrase. That is, the phrase po pijanemu ‘while drunk’ prefers to modify subjects when they are available. However, if they are not available, internal arguments might also be modified by it. In order to make sure that this phrase really targets only subjects, one would have to take a structure where we only have one DP which is not a subject. Dative (experiencer) DPs have been argued not to be subjects, see (16).

(16) Adam-owi było zimno.
Adam-DAT was-3SG.N cold
‘Adam was feeling cold.’

In (16) we thus have an example of a sentence where we only have one DP, but that DP does not come with subject properties. If the phrase po pijanemu ‘while drunk’ really targets subjects, we expect ungrammaticality. If the phrase is just strongly subject-oriented in that it will always modify subjects, but may also modify objects if no subject is presented, we expect grammaticality.

The ungrammaticality might be explained if we trace it back to the properties of the dative object DP. However, even when we change the verb to an accusative case assigner, the phrase po pijanemu ‘while drunk’ cannot modify the object, see (i)

(i) *Ewa uczył-a Jank-a niemiecki-ego język-a po pijanemu.
Eve.NOM taught-3SG.F John-ACC German-ACC tongue-ACC while drunk
(Intended) ‘Eve taught John German while he was drunk.’
(17)  *Adam-owi było zimno po pijanemu.

Adam-DAT was-3SG.N cold.ADV while drunk

‘Adam was feeling cold while he was drunk.’

The data in (17) show a tendency for ungrammaticality. I have asked three native speakers how natural the data in (17) sound; one judged it as ungrammatical, while two found it borderline. Eventually, we probably cannot conclude anything definite but comparison between (17) and (14) shows that when a numeral DP is involved, these are more easily modified by po pijanemu ‘while drunk’, thereby patterning more with clear subjects (14) than objects ((15), (17)).

The next test involves adverbial clauses, which are also restricted to subjects (Dziwirek 1994; Przepiórkowski 1999), see (18).

(18) Pięcio facetów szlo śpiewając.

five-ACC guys-GEN walked-3SG.N singing

‘Five guys walked singing.’ (Przepiórkowski 1999: 169)

The data in (18) show that the numeral modification by adverbial clauses is possible, thus arguing for their status as subjects.

In addition, coordination structures have been proposed to show subjecthood. To be more precise, if we can coordinate the numeral DP with a nominative phrase, which is clearly a subject, then we have another argument for the numeral DP’s subject status, see (19).

(19) Do kin-a poszlo [pięcio facetów] i [ich bracia].

to cinema-GEN went-3SG.N five-ACC guys-GEN and their brothers.NOM

‘Five guys and their brothers went to the cinema.’ (Przepiórkowski 1999: 169)

The last test involves resumptive pronouns and needs further elaboration. In Polish, the relative pronoun który ‘which’ can be substituted by the pronoun co ‘what’ in colloquial speech. 11 Consider the data in (20).

(20) Dziewczyna dał-a książkę chłopc-u.

girl.NOM gave-3SG.F book-ACC boy-DAT

---

11 Klemensiewicz (1985) actually argues that both forms were rather interchangeable in Old Polish, while in Middle Polish it was the pronoun co ‘what’ that was preferred. The relative pronoun który ‘which’ emerges as the favored option in contemporary Polish.
‘The girl gave the book to the boy.’  
(Dziwirek 1994: 42)

Consider now what happens when the nominals are relativized with the pronoun co ‘what’, see (21).

(21)
a. Ta dziewczyn-a, co (*ona) dal-a książk-ę chłopc-u ...
that.NOM girl-NOM what (she.NOM) gave-3SG.F book-ACC boy-DAT
‘That girl, who gave the book to the boy ...’  
(Dziwirek 1994: 43)

b. Ta książk-a, co *(ją) dziewczyn-a dal-a chłopc-u ...
that.NOM book-NOM what (her.ACC) girl-NOM gave-3SG.F boy-DAT
‘That book, which the girl gave the book ...’  
(Dziwirek 1994: 43)

c. Ten chłopiec, co *(mu) dziewczyn-a dal-a książk-ę ...
that.NOM boy.NOM what (him.DAT) girl-NOM gave-3SG.F book-ACC
‘That boy, who was given a book by the girl ...’  
(Dziwirek 1994: 43)

Once one of the objects in (20) is relativized, the relative clause has to contain a pronoun that agrees in phi-features with the relativized nominal (21b, c). However, such a pronoun is banned when the subject is relativized (21a). Therefore, one must drop the pronoun once a subject is involved. By extension, this might then be a good subjecthood test for Polish. The corresponding data is presented in (22).

(22)
five-ACC guys-GEN gave-3SG.N book.ACC boy-DAT
‘Five guys gave the book to the boy.’

b. Tych pię-ciu facet-ów, co dal-o książk-ę chłopc-u ...
these GEN/ACC five-ACC guys-GEN what gave-3SG.N book-ACC boy-DAT
‘These five guys that gave the book to the boy ... ’

As can be seen in (22b), the sentence is perfectly grammatical without a pronoun in the relative clause. As shown in (21), relativized objects have to realize a pronoun in the relative clause, while subjects must not. Here, the sentence does not contain a pronoun and it is grammatical.

Summing up, I have presented previously known and new data when it comes to arguing for the subjecthood of numeral phrases. These phrases pass all the subjecthood tests presented here. The results are presented below.
<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binding of reflexives</td>
<td>✓</td>
</tr>
<tr>
<td>Control into gerundive clauses</td>
<td>✓</td>
</tr>
<tr>
<td>Control of <em>po pijanemu</em> ‘while drunk’</td>
<td>✓</td>
</tr>
<tr>
<td>Adverbial clauses</td>
<td>✓</td>
</tr>
<tr>
<td>Coordination</td>
<td>✓</td>
</tr>
<tr>
<td>Resumptive pronouns</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 5: Results -- Subjecthood of numeral DPs

9.2 An Analysis of Numeral DPs

9.2.1 The Nature of the Accusative on Numeral DPs

While many researchers assume that numerals like *pięć* ‘five’ are marked accusative, very little is said about the source of this case. That is, how does the case end up on the numeral? Is it a lexical case or a structural one?\(^{12}\) We can apply the proposed tests from chapter five, namely the Genitive of Negation and nominalizations, which should tease apart these two cases. However, as for virile DPs, accusative and genitive case overlap, the proposed tests will not reveal anything. No such syncretism exists with feminine DPs though, see (23).

(23) Piotr lubi pięć kobiet.
    Peter.NOM likes five.ACC women.GEN
    ‘Peter likes five women.’

(24) a. Piotr nie lubi pięć-iu kobiet.  
    Peter.NOM NEG likes five-GEN women.GEN
    ‘Peter does not like five women.’

b. lubienie pięć-iu kobiet (przez Piotr-a) Nominalization
    liking.GRND five-GEN women.GEN by Peter-ACC
    ‘Peter’s liking of five women’

When we put the data in (23) into the environments in (24), we see that the accusative case on *pięć* ‘five’ is turned genitive in the scope of negation (24a) or when it appears as the complement of a nominalized verb (24b). These results indicate that the case marking on the numeral is of a structural nature.

\(^{12}\) It cannot be default; as argued in this thesis, the default in Polish is nominative (see chapter five). See Willim (2015) who argues that the accusative on the numeral acts as a default.
However, the data might not be as telling as it looks at first sight. Depending on the applied theory of case, one might argue that we are testing the wrong case here. In (24), the verb *lubić* ‘to like’ marks its complement in accusative case always, see (25).

(25)  Piotr  lubi  Tomk-a.
Peter.NOM likes  Tom-ACC
‘Peter likes Tom.’

Uncontroversially, there is accusative case available in the verbal domain of *lubić* ‘to love’. So, one could argue that the numeral is marked accusative DP-internally, then it is marked accusative again when put into the complement position of the verb, which would result in multiple cases being assigned (Caha 2009; Pesetsky 2013). Since the verbal accusative was assigned last, it is very likely that we are testing this kind of case in (24), and not the accusative case which is assigned within the DP.

In order to test it properly, one would have to consider the numeral DP in a subject position. However, the GoN does not target external arguments (see Błaszczak 2007 for data and discussion), and external arguments per se cannot be the complement of nominalized verbs. There is one construction though in which negation does seem to influence the case marking of the subject, namely in existential locative constructions (Błaszczak 2007).

(26)  a. Jan  nie  był  na  przyjęci-u.
Jan.NOM NEG was  at  party-LOC
‘John was not at the party.’ (Błaszczak 2007: 9)

   b. Jan-a  nie  był-o  na  przyjęci-u.
John-GEN NEG was-3SG.N at party-LOC
‘John was not at the party.’ (Lit.: ‘There was no John at the party.’)
(Błaszczak 2007: 9)

We can see in (26b) that the subject *Jan* can appear in genitive case marking when the sentence is negated. Błaszczak (2007) argues that the structure in (26a) displays a locative construction, whereas (26b) shows an existential structure. In (26a) is the DP *Jan* is base-generated as an external argument. In (26b), the DP is generated in an object position, whereas the locative phrase is merged as a quasi-external argument. As a consequence, the
GoN rule applies to (26b) but not to (26a), as the GoN targets internal arguments.\textsuperscript{13} \textsuperscript{14} Since we have argued that numeral DPs have subject properties, the environment is (26) is also not a good testing ground for our purposes.

However, I will show in section 9.3.2.1 that we test the correct case in (24). Following Caha (2009) I assume that when more than one case is assigned to a DP, it is not the last case assigned that is spelled-out but the more complex one (\textit{pace} Pesetsky 2013). I will argue that accusative case from within the nominal domain is more complex than accusative case assigned by the verb. So, eventually, (24) does show that the case on the numeral is of a structural nature.

\textbf{9.2.2 A Proposed Analysis (Miechowicz-Mathiasen 2012)}

Couched within the Minimalist framework, Miechowicz-Mathiasen (2012) (henceforth MM) offers an account as to how the accusative ends up on the numeral. I will briefly present her account for this phenomenon, which I will follow when constructing control configurations with numeral DPs as controllers.

\textsuperscript{13} The GoN targets only internal arguments when there is an external argument present; arguments of unaccusatives are left untouched by the GoN, see (i):

\begin{verbatim}
(i)  Piotr /*Piotr-a nie zginął.
    Peter.NOM/  Peter-GEN NEG died
    'Peter did not die. '
\end{verbatim}

\textsuperscript{14} Miechowicz-Mathias (2012: 14) actually gives the following data, which she claims involves the GoN:

\begin{verbatim}
(i)  Nie był-o około pięć / pięć-ku tysięcy Polaków.
    NEG was-3SG.N around five.ACC / five-GEN thousand-GEN Poles-GEN
    'There were around five thousand Poles absent/missing.'
\end{verbatim}

Due to (i) she argues that the accusative on numeral DPs must be structural. While I do believe it is structural as well, one must be careful whether the data in (i) really show the application of the GoN in the light of the following data:

\begin{verbatim}
(ii) Był-o około pięć / pięć-ku tysięcy Polaków.
    was-3SG.N around five.ACC / five-GEN thousand-GEN Poles-GEN
    'There were around five thousand Poles.'
\end{verbatim}

\textsuperscript{14} (Blaszczyk, p.c.)

\begin{verbatim}
(iii) Był-o pięć / *pięć-ku tysięcy Polaków.
    was-3SG.N five.ACC / five-GEN thousand-GEN Poles-GEN
    'There were five thousand Poles.'
\end{verbatim}

In (ii) there is no negation only the preposition \textit{około} ‘around’ and genitive on the numeral is fine. When \textit{około} ‘around’ is missing, genitive case is impossible, see (iii). This indicates that the genitive case marking on the numeral in (i) is not due to negation, but something else. Four native speakers report that genitive on the numeral in (ii) is perfect, for (iii) one speaker reports ungrammaticality for genitive on the numeral and three rate genitive there as marginal.
MM proposes that numerals are introduced by a light preposition $p$ into the syntax. This light preposition is also the source for accusative case. It is merged with DP and does not project to a PP, but becomes Spec,DP. The idea is illustrated in (27):

\[(27)\]
\[
\begin{array}{c}
\text{DP} \\
p/pP \\
\text{iT} \\
\text{D'} \\
\text{D} \\
\text{uT} \\
\text{Num} \\
\text{NumP} \\
\text{nP/NP}
\end{array}
\]

(MM 2011: 12)

The structure is to be understood as follows: light $p$ is merged in the specifier of DP. It must, based on the descriptive facts, select a DP containing a numeral which is higher than or equal five.\(^{15}\) Based on Pesetsky and Torrego (2004), MM assumes that light $p$ comes with an interpretable tense feature, while the D-head comes with an uninterpretable tense feature.\(^{16}\) Independent of the structure of numeral phrases, it is important for MM (2012) to demonstrate that light $ps$ exist in Polish. She takes the preposition "około ‘around’ to be a lexical realization of the light $p$. One argument for this claim is that this preposition may co-occur with other prepositions (28):

\[(28)\]
\[
\text{Czekał-em do (około) pięć-iu godzin.}
\]
\[
\text{I.waited to around five-GEN hours.GEN}
\]
\[
\text{‘I waited up to around five hours.’} \quad (\text{MM 2012: 15})
\]

As MM assumes that there are full prepositions which project up to PP and light preposition that do not project and become Spec,DP, it is then fair to assume that we have empty light $ps$. The structure for a numeral phrase like (29a) is shown in (29b).

\[(29)\]
\[
\text{a. pięć kobiet } /*\text{kobiet-y}
\]
\[
\text{five.ACC women.GEN / women-NOM/ACC}
\]
\[
\text{‘five women’}
\]

\(^{15}\) MM (2012) does admit that this is a stipulation based on descriptive observations.

\(^{16}\) MM (2012) assumes that $p$ comes with a T-feature as Pesetsky and Torrego (2004) propose and that case is a reflection of tense. Thus, assignment of case is contingent on an uninterpretable (presumably also unvalued) tense feature. For our considerations here, we may ignore the T-feature.
Light $p$ becomes Spec,DP of a numeral phrase containing a higher numeral. It then assigns accusative downward the tree to the numeral. The whole DP acts like an accusative-marked element (Przepiórkowski 2004b), the numeral itself then assigns genitive case to its complement.\(^{17}\)

Summing up so far, we have seen that numeral DPs in Polish are marked accusative. In addition, by applying specific tests, we have seen that these DPs behave like subject. That is, they are non-nominative subjects, so-called quirky subjects. Furthermore, I have presented a proposal by MM (2012) to account for the (structural) accusative marking on the numeral.

In the following, we will take all ingredients together to derive all the possible control structures with numeral DPs as controllers.

### 9.3 Numeral DPs as Controllers\(^{18}\)

In this section, we will see how numeral DPs as controllers might shed more light onto control structures in Polish. Recall, that I have proposed the following rule that governs case realizations in control.

\[(30) \text{ PRO AND CASE} \]

At PF, when PRO’s case needs to be morphologically realized, this must not signal conflicts with independent requirements of the language.

The rule in (30) makes it possible for subjects to transfer their cases through PRO to the adjective. That is, nominative case is always expected where we have a nominative controller. This is borne out. In addition, we expect that oblique cases assigned within the verbal domain

\(^{17}\) We end up with an element that is a case assigner and a case assignee at the same time, which is not very desirable. One could solve the problem by probing the numeral phrase whether we do find more structure in there and there might be an additional layer that is responsible for the case marking of the genitive NP. Such an investigation is not within the scope of this thesis and is left for future research.

\(^{18}\) In all of the following sections, I have simplified the tree as well as bracketing structures for space reasons. The matrix VP is not represented, however, it is still assumed to be projected in the complement position of $vP$. 

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(dative, accusative, genitive) not to be able to be transmitted. As we saw with object control data, this prediction is also borne out. Now, interestingly, numeral DPs are non-nominative subjects, therefore we expect them to transfer their case even though they are not marked nominative. We will look at the two data sets in turn, starting with subject control data.

9.3.1 Subject Control

The respective data which we will examine in this section is repeated below, see (31).

(31) a. Pięć dziewczyn próbuje być mił-ymi.

\[
\text{five.ACC} \quad \text{girls.GEN} \quad \text{try.3SG.N} \quad \text{be.INF} \quad \text{nice-INST}
\]

‘Five girls try to be nice ones.’ \hspace{1cm} DP Predication

b. Pięć dziewczyn próbuje być mił-e / ??mił-ych.

\[
\text{five.ACC} \quad \text{girls.GEN} \quad \text{try.3SG.N} \quad \text{be.INF} \quad \text{nice-ACC} / \quad \text{nice-GEN}
\]

‘Five girls try to be nice.’ \hspace{1cm} AP Predication

According to the analysis proposed in this thesis, (31a) embeds DP predication with an elided noun, whereas (31b) embeds AP predication. We will first derive (31a) which works in parallel to simple subject control.\(^{19}\)

\(^{19}\) For space reasons, I have left out the ClassP above the elided NP.
The derivation runs as follows: In the non-finite clause DP predication is projected. That is, a noun with its modifier are introduced and they share their phi-features (Frampton and Gutmann 2000; Pesetsky and Torrego 2007). F assigns instrumental to the DP. CopP is projected which establishes predication (den Dikken 2006). Crucially, PRO does not enter any (feature sharing) relation with the adjective. PRO moves to Spec,TP checking the EPP and to FinP establishing predication between the finite and the non-finite clause. Once the controller DP is merged in the verbal domain, predication is established between PRO and the numeral DP (Landau 2015). PRO moves up to Spec,TP to check the EPP. As there was no feature sharing relation between PRO and the adjective, PRO/the controller and the adjective carry different case markings. In addition, optional NP-ellipsis takes place. Recall, that the elided noun can be spelled out as well, see (33).

(33) Pięć dziewczyn próbuje być mil-ymi osob-ami.

five.ACC girls.GEN try.3SG.N be.INF nice-INST persons-INST

‘Five girls try to be nice people.’
Let us now turn to the data which embed AP predication, that is, adjectives that agree in case with the controller. The respective data is repeated in (34a) with the underlying structure represented in (34b).

(34) a. Pięć dziewczyn próbuje być mił-e / ??milych.
    five.ACC girls.GEN try.3SG.N be-INF nice-ACC / nice-GEN
    ‘Five girls try to be nice.’

The structure in (34b) shows embedded AP predication; in contrast to DP predication, we do have feature matching between PRO and the adjective, thereby establishing a link between these two elements. When PRO starts to move and eventually lands in Spec,FinP establishing predication between the finite and the non-finite clause, the crucial thing happens: PRO establishes Agree with the controller DP, thereby inheriting phi-features as well as case. In this example, it is accusative case. This accusative case is then transmitted to the adjective. Now, why is that possible? Accusative case allocated DP-internally by a light $p$ is assigned to a DP that is a subject. That is, it signals a subject case. Therefore, PRO does not carry conflicting properties: PRO itself is a subject and has now accusative case that signals
subjecthood. By extension the rule in (30) is not violated as no conflicting properties are spelled out and the adjective may receive accusative case.20

Summing up, the two prevalent case patterns on adjectives in Polish subject control with numeral DPs can be derived by the mechanisms proposed in this thesis. Instrumental case is the reflex of embedded DP predication with optional NP ellipsis. Accusative case is possible on the adjective, as the controller is marked as a subject and therefore, case can be easily transferred. Let us now turn to object control, which will tell us even more about the interplay of case markings and subjecthood.

9.3.2 Object Control

Object control poses a nice playground for the control rule proposed in (30). When a subject case is involved (nominative by T or accusative by p), transmission should be possible. However, controllers merged in object control are always objects and therefore not many new revelations might be expected. Yet, there might be some indications that the rule in (30) is still accessible even in object control.

9.3.2.1 Dative Object Controllers

Let us first see what happens when we merge a numeral DP into the object position of a verb that assigns dative case to its argument, see (35) and Table 6 showing native speakers’ judgements.

(35) Piotr kazał pięciu facetom być miłymi / *miłym.

Peter.ordered five-DAT/ACC guys-DAT be-INF nice-INST / nice-DAT

‘Peter ordered five guys to be nice (ones).’

<table>
<thead>
<tr>
<th></th>
<th>Ok</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dative</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Instrumental</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6: Results -- complex object control (dative controllers)

Before going into the respective control analysis, a few remarks are in order here. For these, let us take a closer look at the matrix VP to see what happens there and ignore for the moment the non-finite clause.

20 Note that genitive case is also (marginally) possible. I do not have a definite answer as to why some speakers allow transmission of genitive case. I assume that it has something to do with semantic agreement in that some property of the subject is semantically reflected on the adjective (Danon 2013; Corbett 2006: 155ff.).
In the structure in (36), the controller is introduced by RP (Landau 2015). Inside the DP, light $p$ assigns case to its complement marking the numeral as accusative (MM 2012). In addition, the numeral assigns genitive to its complement. Note that these case assignment mechanisms are always active and available independent of the merging position of the numeral DP. As a next step, little $v$ is merged which assigns lexical dative to its complement, thereby overriding the cases assigned DP-internally, see (37).\(^{21}\)

The complement of the numeral is clearly marked with dative case, as can be seen by the ending -om. Thus, case assigned by the numeral is overridden by dative case. Presumably, this also happens with the numeral itself, however, accusative and dative are syncretic and therefore, we cannot say so conclusively by just looking at (35). Looking at the Tables 2 and 3 again, where the pattern of numerals is shown, we can see that the only clear morphological case marking can be found with instrumental case, where pięciu as well as pięcioma is possible. The latter is clearly instrumental. Let us now see what happens, when we embed these numeral phrases under different case assigners:

\(^{21}\) I remain agnostic when it comes to the exact source of dative case. For simplicity, I will assume (following Witkoś 2010a) that little $v$ is the locus of objective case (be it accusative or dative), but nothing crucial rests on this assumption. R (den Dikken 2006), $v_{Appl}$ (McFadden 2004) or Appl (Pylkkänen 2002) may also be the locus of dative case.
(38) a. Kasia lubi pięc-iu facet-ów.
Kate.NOM likes five-ACC guys-GEN
‘Kate likes five guys.’

b. Kate pomaga pięc-iu facet-om.
Kate.NOM helps five-DAT guys-DAT
‘Kate likes five guys.’

c. Kate kieruje pięc-oma firm-ami.
Kate.NOM drives five-INSTR companies-INSTR
‘Kate manages five companies.’

(38a) shows the numeral DP in the scope of the little v that usually assigns accusative to its complement. As can be seen, the genitive marking on facetów ‘guys’ remains. When we have little v assigning dative as in (38b), the complement facetom ‘guys’ carries clear dative. The question is whether the numeral also carries dative, or remains accusative. I argue that it is dative, also based on (38c); there we have little v assigning lexical instrumental. The complement of the numeral carries instrumental case marking, but crucially, the numeral also appears with clear instrumental marking. This suggests that when the case of the numeral’s complement is overridden (38b, c), the case of the numeral is as well; due to syncretism it is just not easily spotted. There seems to be case overriding mechanisms at work. This is most clearly shown in (38b) and (38c). These case overriding mechanisms need to be regulated so that we can make the right predictions. For this, I follow Caha’s (2009) idea of a case hierarchy.

Caha (2009) argues that one DP may be assigned more than one case given the syntactic environment. However, eventually, the DP can only appear with one case affix (in most languages) and one needs a tool that governs and predicts the correct case affix. Caha submits that there is a case hierarchy when it comes to case stacking. He argues that the more complex case that is available overrides the less complex case. Such a hierarchy is presented in (39).

(39) Dat> Acc/Gen > Nom

22 Caha’s (2009) theory on case is quite comprehensive and different to the approaches to case presented in this thesis. Caha assumes that case categories come in a hierarchical structure. This hierarchical structure is represented in the syntax by each case heading their own phrase as a KP (Case Phrase). Crucially, Caha assumes that a case higher in the hierarchy contains the case(s) lower in the structure, thus he can account for many cases of syncretism found in natural languages. For our purposes, we will make use of the notion of a case hierarchy (which already goes back to Blake 2001) and that it is the higher/more complex case, that is, the case on the left in the hierarchy that is finally spelled out if more than once case is assigned.
The hierarchy in (39) is to be understood as follows: When a DP gets two cases assigned, it is always the case on the left that will be morphologically realized. The hierarchy is not universal and might vary. Based on the data above, we can at least argue that dative is more complex than accusative and genitive as both cases are overridden by the assignment of dative case. As dative is more complex, it will be spelled out after the derivation is completed. For the moment, we cannot fix the ordering between accusative and genitive, important to note for now is that dative is more complex than both. Let us now consider the whole control constructions and derive how the case markings can be explained, see (40).

  
  Peter.NOM ordered five-DAT/ACC guys-DAT be.INF nice-DAT
  ‘Peter ordered five guys to be nice.’

b. 

```
D
  p
  D' R FinP
  D #P PRO Fin' 
  # NP Fin TP
  five gen guysgen
  Acc

PRO
  T
  CopP
  PRO
  Cop
  AP
  be
  nice

AGREE
Phi and case

Acc

Feature sharing
```

The derivation in (40b) shows an illicit structure where AP predication is embedded. The adjective is merged in the complement position of CopP and PRO in the specifier of CopP; both elements share their features. PRO moves to Spec,TP checking the EPP and finally to Spec,FinP establishing predication between finite and non-finite clause. Once the controller is merged, syntactic predication between PRO and controller is established. The controller DP is marked accusative (DP internally by little p). PRO agrees with the numeral DP and as a result

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23 Witkoś and Dziubala-Szrejbrowska (2016) analyze the structure of the numeral DP also within Caha’s system. They assume that the entire DP (which they call Q_H) moves to the AccP, thereby licensing accusative on the numeral. As the complement NP is still caseless, it further moves to Spec,GenP and pied-pips the entire DP with it, thus marking the NP with genitive.
carries structural accusative. As PRO is a subject (Landau 2015) and carries a potential subject case (case assigned by little \( p \)), PRO may transmit this case to the embedded adjective. However, once little \( v \) is merged, it assigns dative case to the numeral DP. According to Caha’s (2009) case hierarchy, the cases inside the DP are overridden by dative case. This then causes problems with the transmitted accusative case to the adjective. A mismatch has been produced (controller carries dative and the adjective accusative) and the derivation crashes. Note that one cannot save the derivation by overriding the case on the adjective (accusative) with dative case from PRO as this would violate the principle in (30). An illustration is presented in (41).

(41)

However, as the language offers two types of predication, object control data with numeral DPs as controllers can still be formed. The only way to do it is via projecting DP predication in the non-finite clause and optionally elide the head noun, as shown in (42).²⁴

²⁴ For space reasons, I have left out the ClassP above the elided NP in (43).
9.3.2.2 Accusative Object Controllers

Let us now turn to structures where we have a matrix verb that assigns accusative case. Recall, that in these structures we have (marginally) more options, see (43).

(43) Piotr uczył pięć facetów być miły / mił-ych.
    Peter.NOM taught five-ACC guys-GEN be-INF nice-INF / nice-GEN/ACC
    ‘Peter taught five guys to be nice.’

<table>
<thead>
<tr>
<th></th>
<th>Ok</th>
<th>?</th>
<th>*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accusative</td>
<td>0</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Instrumental</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 7: Results -- complex object control (accusative controllers)

The instrumental option surfaces as the favored candidate amongst native speakers. Interestingly, some speakers judge accusative case marking as not as bad as dative marking (see Table 6 for comparison). While still marginal, it is more felicitous than dative. Let us first look at the derivation of the instrumental option, see (44).
The internal structure of the numeral phrase is not important for (44) to derive instrumental case on the adjective, as case on the adjective is already allocated in the non-finite clause and thus independent of the case status of the potential controller. However, the case status of the object is crucial when deriving the (marginal) option with an accusative marked adjective, see (45).

(45) a. ??Piotr uczył pięć-iu facet-ów być mił-yich.

Peter.NOM taught five-ACC guys-GEN be.INF nice-GEN/ACC

‘Peter taught five guys to be nice.’
The structure is built up with the CopP introducing the AP as well as PRO. The latter moves to Spec,TP checking the EPP. It finally moves to Spec,FinP establishing predication between the finite and the non-finite clause. There, it finds its controller DP. This controller DP is a numeral DP, therefore little $p$ assigns accusative to the numeral, and the numeral assigns genitive to its complement. PRO and the numeral DP enter Agree. PRO inherits all of the latter’s phi-features as well as case, here accusative case. PRO transmits all of these features to the adjective. Case can be transmitted as well as it does not pose a violation of (30); accusative case assigned by $p$ is a case that can be carried by subjects.\(^{25}\) Next, little $v$ is merged, see (46).

\(^{25}\) Note that we are dealing with an object here, not a subject. Crucially, accusative case assigned by $p$ can be on subjects as well, which seem to suffice for some speakers not to violate (30).
Once $v$ is merged, it assigns structural accusative to the DP. The question now is whether this case overrides the cases in the DP or whether the accusative case assigned within the DP is more complex. This is not a trivial question, as the case marking of the complement inside the DP are of no help. Remember, accusative and genitive case overlap in morphology in case of virile nouns like *facetci* ‘guys’; therefore, the case marking on this element might be structural genitive from the numeral or structural accusative assigned by $v$ from an overriding mechanism. It boils down to the question whether we have the case hierarchy in (47a) or (47b).

(47)  
   a. Acc$_p$>>Acc$_v$
   b. Acc$_v$>>Acc$_p$

In scenario (47a), the accusative assigned by $p$ is more complex than the accusative assigned by $v$. In scenario (47b), it is the structural accusative assigned by $v$ which is more complex. We can test this by creating a scenario where the complement of the numeral shows case which is unequivocally accusative or genitive. As stated, virile DPs do not help, but feminine DPs do discriminate between the two case markings, see (48).

(48)  
   a. Piotr widzi dziewczyn-y.
   Peter.NOM sees girls-ACC
   ‘Peter sees (the) girls.’
b. Piotr nie widzi dziewczyn.
   Peter.NOM NEG sees girls.GEN
   ‘Peter does not see (the) girls.’

c. Piotr widzi pięć dziewczyn / *dziewczyn-y.
   Peter.NOM sees five.ACC girls.GEN / girls-ACC
   ‘Peter sees five girls.’

d. Piotr nie widzi pięc-iu dziewczyn / *dziewczyn-y.
   Peter.NOM NEG sees five-GEN girls.GEN / girls-ACC
   ‘Peter does not see five girls.’

As can be seen in (48a) and (48b), genitive and accusative markings on dziewczyny ‘girls’ is not syncretic (unlike with virile DPs). (48b) also indicates that genitive case is more complex than accusative case. We see that the accusative case assigned by $v$ in (48a) is overridden by genitive case assigned by the negation (48b). We can, therefore, at this point conclude that genitive is more complex than accusative.

However, we want to see how the two types of accusative case (assigned by $p$ or by $v$) relate to one another. (48c) gives us some insights. There, we see that once a numeral DP containing a feminine noun is put into the object position of a verb that assigns accusative case, the genitive marking on the complement of the numeral remains. This indicates that the numeral DP is left untouched by the accusative assignment of $v$. In other words, the DP’s accusative case, assigned by $p$, is more complex than that assigned by the verb. In addition, (48d) shows that when the numeral DP is in the scope of negation, accusative marking on the numeral turns genitive. Genitive seems to be more complex than both instances of accusative. We should have then the following hierarchy:

\[(49) \quad \text{Dat} \gg \text{Gen} \gg \text{Acc}_p \gg \text{Acc}_v \gg \text{Nom}\]

With these insights, how can we explain the marginal possibility of accusative case in (45)? PRO agrees with the controller, and the controller carries $\text{Acc}_p$. Crucially, this case is also a subject case, therefore we do not create a contradiction. PRO is a subject and PRO carries $\text{Acc}_p$ – no problem at PF, and therefore case may be transmitted to the adjective.

This explains the contrast in judgments between dative numeral controllers, as well as simple dative/accusative controller and accusative numeral controllers. Let us look at the respective numbers again.
<table>
<thead>
<tr>
<th>Object Control</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple acc controller</td>
<td>*</td>
</tr>
<tr>
<td>Simple dat controller</td>
<td>*</td>
</tr>
<tr>
<td>Numeral dat controller</td>
<td>*</td>
</tr>
<tr>
<td>Numeral acc controller</td>
<td>??</td>
</tr>
</tbody>
</table>

Table 8: Results -- ratings for case markings on adjectives

Native speakers do not accept transmission of dative case to the adjective in any environments, be it from numeral DPs or simple DPs. In both scenarios has the dative case the same source (namely little v) and dative is not a subject case in Polish. Thus, we predict that dative may not be transmitted in these constructions. Accusative is more complex; no participant accepted the transmission of accusative case to the adjective in simple object control sentences, however, some participants did (marginally) accept the transmission of accusative case from numeral DPs that are marked accusative. The difference can be then explained by the different sources of accusative case. In the case of simple accusative objects as controllers, the source of accusative is little v. This is not a subject case and therefore cannot be transmitted to the adjective. However, we have seen that in the case of complex numeral accusative DPs, the accusative that ends up on the DP comes from little p – which assigns a potential subject case.

There are a couple of explanations as to why not all speakers accept accusative case in example (45):

(i) they might have a different case hierarchy with Acc_v >> Acc_p which would result in the attempt to transfer a non-subject case to the adjective.\(^{27}\)

(ii) the two cases (Acc_v/Acc_p) are morphologically the same and very hard to tease apart, so they might be treated as the same.

(iii) the formal agreement with T is missing which would make the numeral DP a clear subject.

More research on this question is needed to determine which explanation suits the empirical facts best. For the moment we can conclude that ideas about subjeckthood seem to factor in when it comes to case transmission.

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\(^{26}\) One informant reports that she prefers the dative marking on the adjective in (40) compared to the accusative marking on the adjective in (45). None of the participants in the study preferred dative over accusative. This shows that the topic of numeral DPs, control, and case is far from being exhausted.

\(^{27}\) However, then we would expect these speakers to have different judgments when it comes to the internal structure of the numeral DP when it is in the object position of an accusative case assigner. These speakers should then have the complement of the numeral marked accusative. This was not tested in any study/questionnaire of mine.
9.4 Summary

This section was devoted to numeral DPs in Polish. We have first looked at their properties when it comes to case, namely in that the numeral is assigned structural accusative and the complement of the numeral is assigned genitive case. We have then embedded numeral DPs as controllers (in subject and object control) with different case possibilities arising on the embedded adjective:

For subject control, accusative and instrumental case are available (genitive is marginal). Instrumental case is derived by embedding DP predication just as in control with simple controllers. Accusative case is derived by embedding AP predication. The difference to simple subject control is that it is not nominative that is transmitted by the controller, but rather accusative. It has been shown that the numeral DP has subject properties and therefore its case (assigned by a light $p$ in the DP-domain) qualifies as a subject case. Case transmission of accusative is therefore expected.

For object control, we have a more complex picture: When the controller is marked dative, only instrumental appears on the embedded adjective. Instrumental case has here the same source as in the subject control examples. Dative is not an option, as this case is not connected to subjects in any way in Polish.

When the controller is marked accusative, instrumental is the favored option. However, accusative surfaces as a marginal possibility on the adjective. This was explained by showing that the numeral DP carries accusative case assigned by $p$ which is also carried by subjects. Therefore, for some speakers, no contradiction is created. For those speakers who do not accept accusative marking on the adjective, we might theorize that the formal agreement between the DP and T is missing and therefore no transmission of case is allowed.
10. Open Questions

In this chapter, I will be looking at some phenomena which have been excluded from the main body of this thesis, which, however, deserve a closer look as they pertain to the phenomena discussed in this study. One section is about the semi-predicate *sam* ‘alone’ which does not behave like other adjectives, in that it allows dative case-marking in some environments and disallows instrumental in all of them. The other section is about the issue of secondary predicates; that is structures where we do not have the copula *be* but a full verb in the infinitive. We will explore whether the presented analysis can be adapted one to one to control structures where we do not have a copula verb.

10.1 Case Markings on Semi-Predicates

So far, we have seen control structures that embed an adjective like *miły* ‘nice’, *pijany* ‘drunk’ or *sprawny* ‘fit’. However, not all adjectives behave the same way when it comes to case marking; the so-called semi-predicates like *sam* ‘alone’ get dative, where other adjectives usually get instrumental. This phenomenon has been thoroughly discussed for Russian (Landau 2008). I will first present the well-known Russian data, and then compare them to the Polish ones.

10.1.1 Russian

In Russian, it has been observed that predicative adjectives can either agree with the noun they modify or appear in default instrumental case (1).

   Taras.NOM came drunk-INST / drunk.NOM
   ‘Taras came drunk.’ (Landau 2008: 882)

   I.NOM found him.ACC drunk-INST / drunk-ACC
   ‘I found him drunk.’ (Landau 2008: 882)

As can be seen from the data in (1), the instrumental form is actually preferred, while the agreeing case marked predicate is slightly marked. Much attention has been devoted to the so-called semi-predicates *sam* ‘alone’ and *odin* ‘oneself’ (Comrie 1974; Neidle 1988; Greenberg and Franks 1991; Franks and Hornstein 1992; Babby 1998; Franks 1998; Babby & Franks 1998; Landau 2008) as these do not seem to allow default instrumental, but must always agree, see (2):
Comparison between the data in (1) and (2) leads to the conclusion that while adjectives may receive default instrumental, semi-predicates need to agree always with the noun they modify (Landau 2008: 882). By extension, when being projected in control infinitives, they might reveal PRO’s case, see (3).

(3) a. Ona ugovorila ego pogovorit’ sam-ogo /sam-omu /*sam-ym
she.NOM convinced him.ACC talk.INF himself-ACC/ himself-DAT/ himself-INST
s ejo roditeljami.
with her parents
‘She convinced him to talk himself to her parents.’ (Landau 2008: 888)

b. Ivan dumajet cto [pojti domoj odn-omu /*odn-ym] vazno.
Ivan.NOM thinks that go.INF home alone-DAT/ alone-INST important
‘Ivan thinks that it is important to go home alone.’ (Landau 2008: 883)

c. Ivan prigrozil Tanje potratit’ den’gi sam / sam-omu
Ivan.NOM threatened Tanya spend.INF money himself.NOM/ himself-DAT
/*sam-ym na sledujuščij god.
/ himself-INST on next year
‘Ivan threatened Tanya that he would spend the money himself next year.’
(Landau 2008: 890)

The data in (3) show that the embedded semi-predicate odin ‘alone’ can appear in dative, but not in default instrumental.1 In (3a), we have a case of object control; as Russian allows case transmission of structural cases in object control (unlike Polish), the semi-predicate odin ‘alone’ may appear in accusative. However, dative is also possible; preferred even according to Landau’s results. In (3b), we have a case of NOC, where only dative is possible. Neither

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1 I have added the impossible instrumental option to the data in (3).
nominative nor instrumental are licit on the semi-predicate. Subject control (3c) poses the most complex case. Subject control across an object yields case optionality, i.e. the semi-predicate can either agree in nominative case with the controller, or it may appear in dative. Landau (2008) assumes that semi-predicates always agree with the noun they modify. By extension, Landau concludes that PRO carries dative case. He further assumes that dative is assigned by C and the semi-predicate may agree with PRO in case. Thus, these semi-predicates reveal PRO’s case marking. The (im)possibility of dative marking in certain forms of subject control is proposed to show the syntactic difference of EC and PC (Landau 2008).

In a nutshell, partial control readings are only obtained when dative is involved; however, this is a one-way direction, meaning that dative case does not automatically signal PC. That is, PC is obtained when control is mediated through C (the locus of dative case), whereas EC arises when Agree directly targets PRO, and not C.

10.1.2 Polish

Russian semi-predicates have received a lot of attention in the literature. Here, I would like to present the data of semi-predicates in Polish. For this, we have conducted a questionnaire asking native speakers to rate sentence on a scale from 1 (which equals ungrammaticality) and 7 (which represents a perfect sentence). The questionnaire was done online and all instructions were in Polish. The questionnaire contained the target items as well as randomized fillers. Four environments were tested: Subject exhaustive control, subject partial control, object control, as well as finite sentences. We have split subject control into EC and PC as Landau (2008) argues that the dative option on the semi-predicates signals this split. We have also tested finite environments as Landau (2008) shows that in Russian the semi-predicate can never appear in dative in these environments. Here are the results:

(4) a. Piotr musi być sam.
   Peter.NOM must be.INF alone.NOM
   ‘Peter must to be alone.’ 6.87/31

   b. Piotr próbuje być samemu w dom-u.
   Peter.NOM tries be.INF alone-DAT in house-LOC
   ‘Peter tries to be alone at home.’ 3.03/31

---

2 Landau (2008) argues that exhaustive control yields agreeing case with the subject, whereas partial control yields dative marking on the predicate. The details are rather complex, and most of the data showing dative in partial control involve floating quantifiers.

3 I only aim to give an overview of the data here; for an analysis and discussion concerning the connection between dative and partial control, the interested reader is referred to Landau (2008).
The data in (4) show exhaustive subject control with the semi predicate either agreeing in case (4b), appearing in dative (4b) or instrumental (4c). As can be seen from the ratings, the agreeing version is fully acceptable in Polish; dative and instrumental are not really acceptable with dative being slightly preferred over instrumental. This is in line with Landau’s (2008) findings for Russian as he claims that dative becomes an option once a PC reading is at stake and the data in (4) show EC environments. Let us now take a look at subject partial control data:

   ‘Gary wants to be alone.’

b. Michał boi się być samemu w domu.
   ‘Michael is afraid of being alone at home.’

c. Robert nienawidzi być samym w restauracji.
   ‘Robert hates to be alone at the restaurant.’

Again we see that agreeing (5a) is preferred amongst native speakers. In contrast to the EC examples, however, dative becomes better here (5b) with a mean rating of 5.00. The data might indicate that Polish patterns like Russian when it comes to case markings of semi-predicates. As with EC data, instrumental is not possible on the semi-predicate (5c). Let us now turn to object control.

(6) a. Bożena namówiła Piotra być sam w ten weekend.
   ‘Bozena convinced Peter to be alone this weekend.’

b. Gosia poprosiła Bogdana być samemu w ten weekend.
   ‘Gosia asked Bogdan to be alone this weekend.’
c. Kasia poradziła Tom-owi być sam-y m podczas sport-u.
   Kate.NOM advised Tom-DAT be.INF alone-INST while sport-DAT
   ‘Kate advised Tom to be alone when doing sports.’

Somewhat surprisingly the ratings of all the data in (6) reflect ungrammaticality. That is, no matter whether the semi-predicate agrees (6a), appears in dative (6b) or instrumental (6c), no sentence is accepted by native speakers. This is especially surprising as all three sentences involve PC predicates, that is, dative should at least be rated higher. One might argue that object control with an embedded semi-predicate is no liked by native speakers in general and thus the ratings of the individual case markings do not tell us anything.

We were also interested whether the semi-predicate may appear in dative marking in a finite environment. Recall, Landau (2008) claims that in Russian semi-predicates do not appear in dative when we are dealing with a finite environment, but they rather show agreement with the subject. While in Polish agreement is strongly preferred (and was therefore not tested in the questionnaire), dative seems to be an option as well, see (7).

(7) Michał bawił się sam-emu w pokoj-u.
   Michael.NOM played REFLECT alone-DAT in room-LOC
   ‘Michael played in his room all by himself.’

The data in (7) receives a mean rating of 5.00 which means that native speakers do accept dative marking of the semi-predicate outside of control as well.

To summarize so far: The semi-predicate agrees in case when we have a subject control predicate; when the predicate is of the PC class, dative marking is also fine. Both markings are also fine in finite contexts, and object control seems to resist embedding semi-predicates in the first place. We have not tested NOC contexts in our study, but we have data from Przepiórkowski (1999) for these environments, see (8).

(8) a. Być sam-emu / *sam-y m / *sam to być głup-im / *głup-i.
   be.INF alone-DAT / alone-INST / alone.NOM TO be.INF stupid-INST / stupid-NOM
   ‘To be alone is to be stupid.’ (Przepiórkowski 1999: 218)

b. Wrócić sam-emu / *samy-m / *sam to dyshonor.
   return.INF alone-DAT / alone-INST / alone.NOM TO dishonour
   ‘To come back alone is dishonour.’ (Przepiórkowski 1999: 218)
We see that in NOC contexts, only dative marking is fine; neither nominative nor instrumental are allowed in these contexts. All results are summarized in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Nominative/Agreeing</th>
<th>Dative</th>
<th>Instrumental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Control (EC)</td>
<td>✓</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>Subject Control (PC)</td>
<td>✓</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Object Control</td>
<td>*</td>
<td>*</td>
<td>✓</td>
</tr>
<tr>
<td>NOC</td>
<td>*</td>
<td>✓</td>
<td>*</td>
</tr>
<tr>
<td>Finite Contexts</td>
<td>✓</td>
<td>✓</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 1: Case markings of semi-predicates in Polish

What we can learn from the pattern is that instrumental case never seems to be possible with semi-predicates. In more technical terms that means that DP predication is not licensed. Recall, DP predication assumes an empty noun in the structure, in general człowiek ‘man’. However, the combination of semi-predicate plus człowiek ‘man’ does not make sense in the first place, as it is not clear how to interpret samym człowiekiem ‘an alone man’. The grammar cannot construct such a pair and therefore DP predication will not be found with semi-predicates. In turn, no instrumental case should be available with these – which is true, as shown in Table 1.

Landau’s (2008) approach to semi-predicates in Russian control could explain the distribution of the dative when it comes to the subject control data. There, dative is fine with PC, but is infelicitous with EC. That goes in line with Landau’s (2008) findings for Russian. However, Landau’s investigation rests on the observation that these semi-predicates always agree and dative on these is therefore banned in finite contexts. Yet, in Polish, dative is fine on the semi-predicates in finite contexts.

I will tentatively follow Bondaruk and Szymanek (2007) and Witkoś (2008, 2010a, 2010b) and assume that dative is somewhat of a default case for semi-predicates. This is not a desirable conclusion, but the pattern shown in Table 1 is not compatible with Landau’s (2008) analysis nor can be couched within the analysis presented here. We can explain why instrumental is out, however, why suddenly dative appears as an option, cannot be conclusory deduced in this work and remains subject to future research. In the next section, we will take a closer look on semi-predicates in Czech.

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4 Please note that example (8b) does not involve the copula być ‘to be’ but a full verb. This is a case of an embedded secondary predicate, whereas in (8a), and all constructions with the copula, we embed primary predication. In section 10.2, I will show that the two constructions behave differently, and therefore one should be careful not mixing them up when discussing control data.
10.1.3 Czech

As a last empirical challenge, Czech data will be looked at more closely. Czech seems to represent a third possibility among the Slavic languages when it comes to case markings of semi-predicates, because dative marking is virtually non-existent in Czech, see (9).

(9) a. Matyáš hrál samému ve svém pokojí celou noc.
   Matyáš.NOM played alone-DAT in his-LOC room-LOC all night
   ‘Matyáš played alone in his room all night.’ 1.60/52

   b. Michal potřeboval být samému ve škol-e.
   Michal.NOM needed be.INF alone-DAT in school-LOC
   ‘Michal needed to be alone in the school.’ 1.52/52

   c. Pavel plánoval být samému v zahradě.
   Pavel.NOM planned be.INF alone-DAT in garden-LOC
   ‘Pavel planned to be alone in the garden.’ 1.42/53

   d. Václav přesvědčil Viktor-a být samému v domě.
   Václav.NOM persuaded Viktor-ACC be.INF alone-DAT in house-LOC
   ‘Václav persuaded Viktor to be alone in the house.’ 1.83/53

We have conducted a formal study on Czech, including the behavior of semi-predicates. The numbers next to the data are to be read as follows: mean rating/number of participants. Rating was possible from 1-7, where 1 equals a completely ungrammatical and 7 a perfectly grammatical sentence. As can be seen, dative marking is rated bad in all given contexts. In finite contexts (46a), it got a mean rating of 1.6. In both types of subject control it received an even worse rating (1.42/1.52), and in object control, it also failed to pass, but interestingly, there it scored best (46d), whereas in Polish it scored worst. NOC contexts were not tested with semi-predicates, so I refrain from speculating.

10.1.4 Conclusion

The topic of case markings of semi-predicates in Slavic is intriguing and merits future research. Therefore, I have limited myself in clarifying the empirical picture with some food for thought.
10.2 Secondary Predication

While this work has put a lot of emphasis on predication in order to understand the case phenomena in control, very little has been said about secondary predication. However, as a theory for predication as well as control has been presented in this work, we have to see how secondary predication may fit into the proposed analysis. I will first present the data of secondary predication and discuss what is possible and what is not. Then, I will briefly show, using Pylkkänen’s (2002) system, how we can derive the structures and embed them in control without making wrong predications.

10.2.1 The Data

First, we need to make clear what is understood as secondary predication in this thesis. The literature usually distinguishes two types of secondary predicates, resultatives and depictives. English examples for these are presented in (10) and (11).

(10) John painted the wall; red
     Resultative

(11) John saw Peter; drunk
     Depictive

The data in (10) show a resultative construction in that the event of painting the wall results in the wall being red at the end of the event. Resultatives therefore modify the object, here the wall, of the event, and not the subject. In (11), the depictive drunk may modify the object, i.e. in the event Peter is the one who is drunk, or it may modify the subject, i.e. in this reading it is Peter who is drunk. Resultatives can only modify the object. Resultatives and depictives also exist in Polish, though their syntactic properties differ from their English counterparts.

(12) a. Maria po-malowala drzwi na czerwono.
     Mary PERF-painted door on red
     ‘Mary painted the door red.’  (Gulgowski 2013: 4)

b. Janek wy-tarł talerz do sucha.
     John PERF-rubbed plate to dry
     ‘John wiped the plate dry’  (Gulgowski 2013: 4)

The data in (12) show resultatives in Polish. As Gulgowski (2013) notes, Polish is more restricted when it comes to the realization of resultatives, namely that the resultative must be realized as a PP (na czerweno ‘on red’ in (12a) and do sucha ‘to dry’ in (12b)), whereas in

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5 See Rothstein (2006) for an overview and discussion of data and proposed analyses of secondary predication.
English the resultative may be realized as an AP, PP, or NP. In addition, the element inside the PP is not a regular adjective but shows morphology which is no longer productive in Polish. As this thesis is mostly concerned with case phenomena in predication and control, resultatives will not be illuminating for this investigation. Let us now turn to depictives, which show interesting case phenomena, see (13).

(13) a. Pamiętam go mił-y-m / mił-ego.  
I.remember him.ACC nice-INST / nice-ACC  
‘I remember him as nice.’  
(Przepiórkowski 1999: 202)

I.found him.ACC drunk-ACC / drunk-INST  
‘I found him drunk.’  
(Przepiórkowski 1999: 203)

In (13a), we see the depictive miły ‘nice’; this element may either appear in accusative case, thus matching the case of the modified element, or it may appear in instrumental case. No matter which case, it is only the object that can be modified by the depictive. That is, the subject is not understood to be nice one in this event. In (13b), we see the same case possibilities with a different verb. However, it is not the case that the two options – agreeing case and instrumental – are always available or are always rated the same. Once the verb is changed, the instrumental case gets different ratings, see (14).

(14) a. Lubiłem Jank-a trzeźw-ego / ?trzeźw-ym  
I.liked John-ACC sober-ACC / sober-INST  
‘I liked John (when he was) sober.’  
(Przepiórkowski 1999: 203)

he.ate chicken-ACC salted-ACC / salted-INST  
‘He ate the chicken salted.’  
(Przepiórkowski 1999: 203)

I.feared REFL him.GEN mad-GEN / mad-INST  
‘I was afraid of him (when we was mad)’  
(Przepiórkowski 1999: 203)

6 The origin for the morphological markings are to be found in the history of Polish: ‘Polish adjectives used to have two sets of inflectional forms: complex and non-complex. Adjectives used attributively followed the complex inflection in definite NPs or the non-complex inflection in indefinite NPs. Adjectives used predicatively used to be limited to non-complex forms only. Apparently, adjectives found in […] resultatives preserved the old non-complex (predicative) endings: -a for genitive neuter singular (such-a ‘dry’) and -o for accusative neuter singular (czerwon-o ‘red’).’ (Gulgowski 2008: 40f.)
The data in (14a) show that marking the depictive trzeźwy ‘sober’ in instrumental is already slightly degraded when compared to the agreeing (accusative) version. In (14b), the depictive strongly prefers case agreement, the same is true in (14c), where we have a genitive DP that is modified. In (14d), with a dative DP, the instrumental version on the depictive is impossible. In addition, the depictive may modify the subject as well, see (15).

In (15), we see that it seems to be possible for a depictive to modify the subject as well. However, as with the cases in (14), an instrumental depictive is ungrammatical. Przepiórkowski (1999) mentions that in the light of the data in (14) and (15) we cannot maintain the idea that it is the verb that (optionally) selects for an instrumental argument, as suggested by Neidle (1982) for Russian. If that were the case, we would expect clearer results when it comes to the judgments, i.e. either the instrumental depictive should be good or it should be bad, variations are not to be expected.

In the next section, I will briefly outline how the theory of predication might derive the data in (13)-(15).

### 10.2.2 An Approach

Let us briefly review the data, where both options, agreeing and instrumental, are available, see (16).

In (16), we first examine the agreeing version, namely the accusative depictive. Does this structure follow the lines of AP predication, presented in chapter five of this thesis? I will not argue for this. In fact, I argue that the accusative-marked element in (16) is not a depictive in the first place, but rather an attributive adjective in disguise.
The idea is the following: The adjective *miły* ‘nice’ is merged as the attributive modifier of *Piotr* ‘Peter’ which is then merged into the complement of the verb *pamiętać* ‘to remember’. Then, the noun moves inside the DP into a higher position deriving the syntactic order in an instance of N-t-D movement (Longobardi 1994). The derivation is sketched in (17).

The data in (16) then underlie the structure in (17), i.e. the structure of a simple transitive clause with an attributive modifier.

(18)  
\[\text{I remember nice-ACC Peter-ACC} \]
\[\text{‘I remember the nice Peter.’} \]

b. Pamiętam Piotr-a mil-ego.  
\[\text{I remember Peter-ACC nice-ACC} \]
\[\text{‘I remember the nice Peter.’} \]

The process in (17) seems to be productive in Polish as this can be applied to basically all DPs in, at least, object position. That is, it seems to be possible to move the head noun to a higher position inside the nominal domain, presumably D.\(^7\) It can also be observed that when the D-head is overtly filled, for example with a demonstrative, the movement of the object seems to be blocked, see (19).

\(^7\) I have no satisfying answer at this point as to the trigger of the proposed movement of the DP. I suppose it has something to do with register. I have asked three native speakers about the structure in (18b) and while they accept it, they mentioned it does sound a bit more literary compared to (18a) which is the neutral sentence structure.
(19)  
\text{a. Pamiętam tego miłego Adam-a.}  
I remember this.NACC nice-NACC Adam-NACC  
‘I remember this nice Adam.’  
6.71/31

\text{b. ??Pamiętam tego Tomka miłego.}  
I remember this.NACC Tom-NACC nice-NACC  
‘I remember the nice Tom.’  
3.52/31

It is no problem to inserted the demonstrative ten ‘this’ in (19a). Presumably, because the D-head is empty. However, once we insert the demonstrative, the movement of Peter seems to be blocked (19b). This might indicate that the structure in (18a) really involves a DP with an attributive modifier and head movement, and not a true depictive.  

Let us now look more closely at the version with the instrumental-marked element. There, I argue, that we are dealing with a true depictive, i.e. it is not an adjective, but truly a secondary (depictive) predicate. There, it might be interesting to see whether the data can be derived by assuming DP predication, i.e. whether the instrumental in (16) has the same source as the instrumental in (20), a DP predication structure.

(20)  
\text{a. Jan jest dobrym lekarzem.}  
Jan.NOM is good-INST doctor-INST  
‘Jan is a good doctor.’

\text{b. [TP Jan [CopP Jan jest [FP F [DP good\textsubscript{Inst} doctor\textsubscript{Inst}]]]}}

Recall, I have argued for a functional projection in predication (FP) that assigns case to the complement and turns the DP into a predicate. The question now is whether we can assume the structure in (20b) also for the data in (16) for the instrumental-marked depictive. Two problems arise if we assumed this. The first is that the FP is usually present in copula constructions, as argued in this thesis, and we do not have a copula in (16). We would have to stipulate that the copula is not projected in structures with depictives, or that we have an elided copula in the structure. While the first version could be persuaded, the second option can be discarded, because overtly realizing a copula leads to ungrammaticality, see (21).

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8 These ratings were obtained in a questionnaire about semi-predicates (discussed in chapter 10.1.2) where these structures were inserted as fillers.

9 Only under the assumption that the demonstrative occupies the head, and not the specifier of D. Both options have been discussed in the literature. The worse rating of (19b) might indicate that it is a head and therefore blocks the movement of the noun to D. Whether (19b) is accepted might also depend on other factors, like intonation.
(21) *Pamiętam Piotr-a być mił-yym (człowieki-em).
I.remember Peter-ACC be.INF nice-INST person-INST
‘I remember Peter being a nice person.’

If we assumed that the copula might be elided in structures like (16) and (21), then it would be very surprising to see that the sentence becomes ungrammatical once the copula is realized. This line of reasoning will not be persuaded further.

The second problem we run into is that if we assume that FP is still projected in depictive structures, even though there is no copula, we have to assume that the complement of FP is a DP. Remember, the FP turns the DP into a predicate. In this scenario, the instrumental-marked element would then be the modifier of an elided (generic) noun. However, we face the same problem as in (21), namely that if we attempt to overtly realize the generic noun, the sentence becomes ungrammatical, see (22).

(22) *Pamiętam Piotr-a mił-yym człowiek-em.
I.remember Peter-ACC nice-INST person-INST
Intended: ‘I remember Peter as a nice person.’

As can be seen, overtly realizing a (supposed) elided noun would result in ungrammaticality. 10 This is a stark contrast to control, where the overt realization of the noun is possible. We have to conclude then that there is no silent noun in the structure, and therefore there should also not be an FP in structures with depictives.

For the depictive structure, we may follow Pylkkänen (2002) in assuming that depictives are introduced by a separate head into the syntax, namely by the Dep(ictive)-head. This depictive head is equipped with (at least) a case feature. Pylkkänen (2002) shows that depictives in Finnish productively appear in essive case, while adjective appear in agreeing case. In her system, Dep assigns essive case to the depictive. Applying this logic to Polish results in Dep assigning instrumental case to the depictive. The idea is sketched in (23).

(23) a. Pamiętam Piotr-a mily-m.
I.remember Peter-ACC nice-INST
‘I remember Peter as nice.’

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10 The intended interpretation of (22) may be conveyed in Polish, but only with the structure in (i)

(i) Pamiętam Piotr-a jako mił-ego człowieka.
I.remember Peter-ACC as nice-ACC person-ACC
‘I remember Peter as a nice person.’
In (23b) the depictive is introduced by Dep and also assigns instrumental case to the element it introduces. DepP is then attached to VP (Pylkkänen 2002). Once little $v$ is projected accusative case is assigned to $Peter$.

To recapitulate: In Polish it seems to be possible to project a depictive secondary predicate either with agreeing case or in instrumental case (the latter with various degrees of acceptability). I have argued that the agreeing version is not an actual depictive but rather an attributive modifier which looks like a depictive as the head noun has moved higher up in the structure. Furthermore, I have argued that only the instrumental-marked element is a true depictive being introduced into the syntax by a Dep(ictive)-Head (Pylkkänen 2002).

Before we turn to the consequences for control embedding secondary predicates, we should address the question of why the depictive is subject to varying degrees of acceptability among native speakers. That is, why is the instrumental-marked depictive not possible with all verbs. Przepiórkowski (1999) proposes tentatively that syntactically the depictive is always fine, it is then extra-syntactic factors, usually factors of a semantic or pragmatic nature, that render the instrumental case worse or unacceptable.

Since I have argued that only the instrumental-marked element is a true depictive, i.e. true secondary predication, I would propose that not all verbs allow the combination with secondary predicates, i.e. there seems to be good and bad predication. The factors which render a structure as good or bad predication seems to vary across languages and cannot be fully investigated in this chapter. I leave the matter to further research.

For control, it means that when we embed secondary predicates, as in (24), we actually embed the structure with depictives and not the structure which has been proposed in this thesis (AP/DP predication) for control involving copulas.

$$ (24) \quad \text{Peter.NOM wants come.INF on meeting drunk-INST} \quad \text{‘Peter wants to come drunk to the meeting.’} \quad \text{(Witkoś 2010a: 193)} $$
As the emphasis of this thesis is on control involving copulas, we have not dealt with control constructions involving secondary predicates, that is, infinitival verbs that do not serve as a copula. The data in (24) show control embedding a full, non-finite verb instead of the copula być ‘to be’. The conclusion is therefore that the structure in (24) embed secondary predication (with a Dep-head) and not primary predication (AP/DP predication).

10.3 Summary

In this section, we have looked at two phenomena, namely case markings of the semi-predicate sam ‘alone’ and the structure of secondary predicates.

We have seen that in Polish the semi-predicate sam ‘alone’ does not admit instrumental case marking (so, no DP predication) but allows agreeing (nominative) case very productively (AP predication). In addition, it allows dative case in many (though not all) environments. I have tentatively concluded that dative is a default case for semi-predicates.

In addition, I have discussed the two patterns which seem to be available when it comes to secondary (depictive) predicates in Polish, namely that these elements agree in case with the noun they modify or they appear in instrumental, with the latter possibility being rather restricted. I have argued that the agreeing elements are actually not true depictives, but rather attributive adjectives which look like secondary predicates as their head noun has moved higher up inside the DP. Therefore, only instrumental-marked adjectives form true depictives. Following Pylkkänen (2002), I assume that these depictives are introduced by DepP and are also case-marked there, in the case of Polish with instrumental. Embedding then secondary predication under control, yields the same result as with simple secondary predication due to the same mechanism being available.

The ideas presented in this section are to be understood as a starting point in the investigation of semi-predicates and secondary predicates (in control). The bulk of this thesis is devoted to primary predication structures embedded under control. The nature of the dative case on semi-predicates must be carefully studied. It is also subject to further research how exactly secondary predicates are introduced, why not all verbs allow depictives and whether I am on the right track here in proposing that there is a difference in structure depending on whether we have primary predicates in control versus secondary predicates.
11. Conclusion

This study has focused on case markings on adjectives embedded in control. Its aim was to give a syntactic account that may derive the attested variations, see (1):

(1) a. Jan próbuje być mił-y / mił-ym.
   Jan.NOM tries be.INF nice-NOM / nice-INST
   ‘Jan tries to be nice.’

   b. Piotr kazał Tom-kowi być *mił-em / mił-ym.
   Peter.NOM ordered Tom-DAT be.INF nice-DAT / nice-INST
   ‘Peter ordered Tom to be nice.’

The data in (1a) show a subject control sentence, where the adjective *miły ‘nice’* may appear in nominative case, thus matching the case of the controller *Jan*, or it can appear in instrumental case. The data in (1b) show object control data where the adjective *miły ‘nice’* must appear in instrumental and cannot show case agreement with the controller, here dative.

It has been argued in this study that the two variations in case (case agreement and instrumental) underlie two different syntactic configurations; that is, case agreeing adjective are the result of projecting AP predication in the embedded clause, whereas when we have instrumental adjectives, we actually embed DP predication, see (2) for an illustration for the subject control data.

(2) a. Jan próbuje być mił-y.
   Jan.NOM tries be.INF nice-NOM
   ‘Jan tries to be nice.’

   b. Jan próbuje być mił-ym człowiekiem.
   Jan.NOM tries be.INF nice-INST man-INST
   ‘Jan tries to be a nice one.’

For (2a) the idea is the following: PRO is projected in Spec,CopP and the adjective *miły ‘nice’* is base-generated in the complement position of CopP as an AP. The Cop-head establishes predication (den Dikken 2006) and the two elements match their features (Frampton and Gutmann 2000). PRO moves up to Spec,TP and further to Spec,FnP (Landau 2015). Once the matrix controller is merged, syntactic predication is established between the controller and PRO and the latter inherits the controller’s phi-features as well as case. Due to initial feature
sharing between PRO and the adjective, all features percolate down to the adjective as well thus deriving case agreement.

For (2b) the idea is that no predicative adjective is merged but rather a full DP with the adjective modifying the projected noun. Therefore, the adjective and the noun, which I assume is of a generic nature like *człowiek* ‘man’, enter feature sharing. Once instrumental case is assigned to the DP (by a functional projection on top of DP), the noun as well as the adjective bear instrumental case. PRO is then merged in Spec,Cop and the DP-complex in the complement position of CopP. Predication is established, but PRO does not match or share any features with the adjective, as the latter’s features are already valued. Once PRO moves up to Spec,FinP and predication is established between PRO and the controller via the v-head (Landau 2015), PRO inherits the latter’s features but crucially, these features are not transmitted to the adjective. Additionally, at PF, the generic noun is optionally elided in a process of NPE. That way, we can not only derive the two different interpretations that come with case agreeing and instrumental adjectives, we can also derive instrumental adjectives without resorting to a default case mechanism (*pace* Witkoś 2010a).

For object control, the picture was more challenging, as apparently DP predication can be projected in the non-finite clause, however, AP predication is banned in these constructions. It has been proposed that the impossibility of case agreeing adjectives in object control, that is, AP predication, is reduced to an underlying principle that governs the feature make-up of PRO, see (3).

(3) **PRO AND CASE**

At PF, when PRO’s case needs to be morphologically realized, this must not signal conflicts with independent requirements of the language.

As PRO is a subject (Landau 2015), the principle in (3) makes sure that when PRO’s features are overtly realized (via associated elements like adjectives), this should not signal a contradiction. Polish lacks dative-marked subjects (Bondaruk and Szymanek 2007) and thus, in the scenario of object control, we would transmit a non-subject case to PRO and overtly realize it on the adjective. In order not to spell-out this contradiction, the case feature of the adjective remains unvalued, and the derivation crashes.

In the first part of this thesis, I presented the phenomenon of control in general as well as Landau’s (2015) theory of control, which was applied to derive the Polish control data. I also introduced some characteristics of Polish as well as the various Polish control constructions.
involving adjectives and their behavior in chapter three. In addition to the structures in (1), I discussed structures with embedded adjectives in arbitrary control, subject control with overt complementizers and complex subject and object control involving numeral phrases as controllers. The first part was rounded off with a discussion of the previous analyses for these structures.

As case is an important factor for the presented analysis, the aspects of case theory which proved to be of vital significance for the study were presented in chapter five. I showed that the occurrences of the instrumental case form a unified class in that this case always behaves like a lexical case. In addition, I offered proof that the instrumental case is not a default case in the Polish language. Since it is not default, its appearance in control was argued to be the result of syntactic case assignment. Furthermore, the analysis rested on the assumption that predicational structures are projected in the non-finite clause; therefore, I devoted chapter six to an investigation of predicational structures in Polish. There, I argued that we have two (relevant) predicational structures for control, namely AP predication and DP predication. The former results in case agreement, whereas the latter results in the predicate appearing in instrumental case. Finally, in chapter seven, I laid out an analysis of NPE by Alexiadou and Gengel (2012) which regulates how and when the embedded noun in DP predication may be elided. These three chapters formed the second part of this thesis.

In chapter eight, I presented the underlying syntactic derivations for the data discussed in the first part of this thesis. I showed that many observed phenomena can be reduced to the principles of predication coupled with certain specific principles from the control module. In chapter nine, I discussed numeral DPs as controllers which have proven to be a good testing ground for the proposed analysis. As these DPs have been argued to be subjects as well as marked accusative, certain predictions arose for the presented proposal: For subject control with numeral DPs as controllers, the embedded adjective should allow accusative case marking, as the case is transmitted from a subject. The predication was borne out. In addition, for object control it has been shown that numeral DPs that are assigned lexical dative in the syntactic derivation cannot transmit the case to the adjective, thereby patterning like the data in (1b). When the numeral DP in object control carries accusative case assigned DP-internally and is not overridden by a more complex case (like dative), accusative on the adjective becomes an option, albeit a marginal one. These structures and variations are expected within the presented analysis.
In chapter ten, I presented some data which have not been the primary focus of this study, but are certainly relevant for the discussion. One aspect was the behavior of semi-predicates, like *sam* ‘alone’, when it comes to case markings. Here, I presented the empirical picture showing that this element never appears in instrumental case, but may appear in agreeing case and/or dative. It has been argued that the impossibility of instrumental case can be derived if one assumes the ideas presented in this study: Instrumental case signals DP predication with an optionally elided noun phrase. However, if we project DP predication with the semi-predicate *sam* ‘alone’, we create a structure which corresponds to *samym człowiekiem* ‘an alone man’ – a structure which does not make sense. The presence of dative case was tentatively concluded to be a default case. The matter was left to future research.

Another aspect was secondary prediction in general, as well as in control. For secondary predicates, it was observed that these elements always allow case agreement, and sometimes instrumental case. I argued that the case agreeing predicates are actually attributive modifiers whose head noun has moved up inside the nominal domain, presumably to the D-head. The structure with the instrumental case predicate was argued to be a real secondary (depictive) predicate whose case comes from a Dep(ictive)-head (Pylkkänen 2002). It is then this structure with the Dep-head that may be embedded in control as well.

In conclusion, the investigation of case markings on embedded adjectives in Polish control showed important consequences for the topic of control. In this study, I analyzed and presented a large array of control structures with different types of control (OC/NOC) as well different types of controllers (subject and object) with different internal make-ups (numeral vs. non-numeral controllers) deriving the respective case possibilities on the embedded adjectives. The presented analysis could successfully deal with all of the attested variations. In addition, not only have the findings of this study certain implications for the theory of control, but also for theories on predication and case.
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Eidesstattliche Erklärung


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