Generative Investigations

Generative Investigations: Syntax, Morphology, and Phonology

Edited by

Piotr Bański, Beata Łukaszewicz,
Monika Opalińska and Joanna Zaleska

CAMBRIDGE SCHOLARS
PUBLISHING

Generative Investigations:
Syntax, Morphology, and Phonology,
Edited by Piotr Bański, Beata Łukaszewicz, Monika Opalińska and Joanna Zaleska

This book first published 2011

Cambridge Scholars Publishing

12 Back Chapman Street, Newcastle upon Tyne, NE6 2XX, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN (10): 1-4438-2989-7, ISBN (13): 978-1-4438-2989-2

TABLE OF CONTENTS

INTRODUCTION

PIOTR BAŃSKI, BEATA ŁUKASZEWICZ,
MONIKA OPALIŃSKA AND JOANNA ZALESKA

The book is a product of a 2008 meeting of enthusiasts of the enterprise known as GLiP (Generative Linguistics in Poland), a conference chain devoted to various aspects and flavours of generative linguistics. This time, we were happy to be joined by several first-comers to GLiP, some of whom are distinguished scholars of world renown. Below, we briefly look at the contents of each contribution and conclude with acknowledgements.

The themes addressed by the articles in this collection range from pure generative syntax via morphosyntax to phonology. What links them overall is the Authors' commitment to explicit reasoning, precise argumentation and formal methods of investigation. What does *not* link the contributions to the present volume, very explicitly and by design, is commitment to a single theory or even a single area of study. GLiP meetings have always emphasised the collective nature of "doing science" and have attempted to be as multidisciplinary as possible within the overall confinement to generative (read: formal and explicit) linguistics, with a minor stress on Polish and Slavic in general. Whenever feasible, the organisers of GLiP meetings have attempted to offer hard-core syntacticians—a view from the morphological or phonological interface, devoted OT-phonologists—a view from the perspective of parametric approaches, and enthusiasts of Minimalism in syntactic theorizing—alternative accounts offered by non-transformational frameworks. We believe that we have repeatedly succeeded in this endeavour and managed to split the individual "single-best-theory" circles and then merge them into a larger community of people sharing common goals and willing to communicate on the advantages and disadvantages of the methods that they have adopted in their work.

With regard to the collection at hand, the phonological articles constitute a clearly separate bundle and therefore we decided to keep them separated in the table of contents, hoping to make it easier for the phonologically-oriented Readers to locate whatever they are looking for.

The rest is a mixture of syntactic, morphosyntactic and morphological contributions, which we decided to keep together given that only some of them represent clearly definable cases, and many cross the hazy boundary between morphology and syntax.

The morphosyntactic collection is spanned by the purely syntactic chapters by Bondaruk and Witkoś, both of them addressing the issue of the distribution and licensing of the big PRO. Bondaruk takes a more local perspective and investigates the suitability of the Agree Theory of Control (ATC) to the description of the distribution of PRO in Polish and the contrast in the patterns of case transmission between Polish and Russian. Witkoś takes a step back and presents a broad view of the current theoretical struggle, weighing the pros and cons of the ATC vs. the Movement Theory of Control (MTC). By looking at cases of Parasitic Partial Control and examining alternative formulations of the MTC, viewed from the perspective of Spell-out Economy, he is able to demonstrate that the PRO-licensing debate is far from concluded.

Fehrmann and Junghanns also concentrate on subject positions and begin by looking at the distribution of PRO's little cousin, *pro*, presenting further evidence for the claim that, despite surface appearances, Russian should not be analysed as involving *pro*-drop, in contrast to e.g. Polish and Czech. From there, the Authors move on to construct a typology of subject pronominals as seen from the perspective of their structural build-up and discourse-conditioning, and proceed to investigate the link between the nature of the subject gap and the apparent misplacement of the subject that obtains in Polish and Russian, in contrast to Czech.

Frąckowiak and Rivero look at logical rather than surface subjects and investigate what they call Involuntary State Constructions and Dative Anticausative Constructions, bringing the reflexive *się* into the picture, either as a resumptive pronoun (thematic Agent or Causer) or an expletive, depending on the syntactic context. The article motivates a distinction between Unintentional Agents and Unintentional Causers that makes it possible to analyse Dative subjects in greater detail.

Nakamura takes up the operation of Agree that Bondaruk and Witkoś investigated with relation to PRO, and confronts its working with the claim of successive cyclicity of *wh*-movement and the alleged arguments for *wh*-marking in Tagalog. The Author provides arguments for the claim that, contrary to the standard view, *wh*-agreement need not constitute evidence for successive cyclicity and proposes an alternative account, in terms of what he calls Anti-Intervention, whereby a Goal of an Agree relation nullifies an Intervention effect by moving to a position reachable

by a Probe. The analysis challenges the Late Insertion model of grammar, by claiming that syntactic computation must be sensitive to the presence or absence of phonological features.

After Nakamura's investigation of the crown of arboreal structures, Migdalski takes one step down and looks mostly at the functional domain built over VPs, tying the distribution of auxiliaries in Polish (and Slavic in general) to two independent factors: affixation on an *l*-participle (taken to be unique to Polish), and a general second position effects that obtain across Slavic. This results in a greater coherence of the account for compound tense structures cross-linguistically.

Rozwadowska in turn looks at the foundations of syntactic structures, i.e., the inventory of lexical categories, and presents further arguments for the claim that adjectives and adverbs should be considered allo-members of a single, lexical category that does not satisfy the conditions for verbhood or nounhood. A careful survey of Polish data confirms the nominal character of adverbs as opposed to adjectives, and their complementary distribution.

Cetnarowska, Pysz and Trugman zoom into the adjective-adverb category and look at the syntactic and morphological behaviour of classificatory adjectives in Polish, demonstrating the inadequacies of previous approaches and presenting a representational account of the distribution of classificatory adjectives and the A+N merger strategies that are both reflected in the data and conformant to cross-linguistic generalizations.

The investigation of lexicalization parameters for classificatory adjectives provides a clear bridge to two other lexicalization papers, by Olejarnik, on Swahili complex predicates, and by Di Sciullo and Tomioka, who venture even further into the morphology-syntax interface and look at the derivation, and the conditions for the interpretation, of attributive noun-verb compounds.

Olejarnik concentrates primarily on Swahili constructions involving the light verb *piga* and provides a Lexical-Functional Grammar analysis of its composition with nominal complements, locating this process in the context of general lexical expansion strategies of the language and providing a typology of surface V+N constructions, accounting for a range of readings and valency patterns.

Di Sciullo and Tomioka present an experimental study of two classes of compounds, N(argument)-V and N(modifier)-V, providing yet another argument for the morphology-syntax interface as being, rather than merely a derivational step, a positively defined level of representation that

minimally includes information on configurational (argument-adjunct) asymmetry.

Słodowicz concludes the lexical strain of contributions by presenting an intriguing range of Polish data which cast doubt on the standard lexemic-morphological expectation that derivation proceeds step by step: the author presents an open-ended class of defective denominal verbs with attested nominalizations but unattested finite forms (and often infinitives as well). These verbs are compared to items traditionally referred to as defective and some speculations are offered concerning the possible analysis and the future research.

Finally, Rappaport takes a broad view of the morphological module of grammar and seeks to define its position and role with respect to the current syntactic theory, thus bringing the overview of the morpho-syntactic part of this book close to where it started. The Author postulates a lexeme-based system in Agree-based syntax and investigates the inventory of formal features that Polish lexemes must have in order to license the masculine personal (virile) gender, and sketches a spell-out mechanism to handle their phonological realization.

A handful of papers in this study addresses phonological issues from various perspectives, formal, functional and experimental. Some reappraise the long-standing issues in Generative Phonology discussing them in the light of new data or experiments. Others use the well-established mechanisms to account for the facts from individual languages.

The paper by Mołczanow is an attempt to analyse the phonological structure of vowel-zero alternations in the Russian imperative, the problem hitherto ignored in the generative literature on Slavic. The author develops an original OT analysis of the Russian facts, acknowledging that the described phenomena are not fully analogous to those found in other Slavic languages. Chada discusses the distribution of back vocoids in Frisian conducting the analysis within the OT framework. The author shows that the data cannot be analysed adequately without resorting to representational theories, in particular, the Halle-Sagey model of feature geometry. Czaplicki is concerned with the problem of phonological dissimilation illustrated with the Polish dialectal data. Although dissimilation processes have been typically treated as unified phenomena in functional and formal approaches, the author argues that they in fact derive from diverse factors. Ćavar and Hamman report on an experiment on non-native perception of L2 distinctive and non-distinctive phonological categories, conducted among the native speakers of Polish, Croatian,

Slovene and German. The authors conclude that that L2 listeners are able to extrapolate their L1 featural knowledge to target phonemes.

The process of publishing the present collection took extremely long and we wish to apologize to the Authors and the Publisher, and thank them for their incredible patience. We also thank the Abstract Committee who did a wonderful job of reviewing and preselecting the contributions for presentation at the meeting, as well as the anonymous reviewers who provided gentle and useful guidance to some of our less experienced Authors. Beata, Monika and Piotr additionally wish to extend heartfelt thanks to Joanna, without whose energy and time this book would have taken much, much longer to produce.

SYNTAX AND MORPHOSYNTAX

CHAPTER ONE

THE CASE MARKING OF PRO IN POLISH REVISITED

ANNA BONDARUK

1. Introduction

The aim of the chapter is to examine what case PRO can be marked for in Polish and how this case marking proceeds. Since PRO is a non-overt category, its case marking becomes visible only if one considers primary or secondary predicates placed in non-finite clauses. The case borne by these predicates testifies to the case of the elements they are predicated of. Therefore both types of predicates serve as a tool for detecting the case associated with PRO. Actually three options are considered: 1) obligatory case transmission, when PRO bears nominative case in the same way as its controller, 2) optional case transmission, when the case of PRO corresponds either to the nominative of its controller or to the default case and finally, 3) lack of case transmission, when PRO is marked for the default case only. The data examined in section 2 show that PRO in Polish can bear only nominative or default case and never can it be marked for accusative or dative even if its controller is associated with either of these two cases. The analytical part of the chapter focuses on how the case marking of PRO just described can be handled within Landau's (2004, 2007) model. In section 3, the basics of Landau's (2004, 2007) approach to control are mentioned together with its repercussions for the case borne by PRO. Landau's (2007) analysis deals with the case marking of PRO in Russian, which clearly contrasts with Polish. Therefore, in section 4, the applicability of the account offered by Landau is tested for the Polish data. It is argued that Landau's model can successfully be applied to Polish with only a few minor modifications.

2. Data overview

It is commonly recognized (cf., for instance, Przepiórkowski (1999), Bondaruk (2004), Witkoś (2009)) that primary predicates in Polish agree with the item they are predicated of in φ-features and case. Compare the following:

(1) Marek jest zadowolony z życia.[1]
Mark-NOM 3sg. masc. is content-NOM 3sg. masc. with life
"Mark is content with life."

(2) Widziałem Marka zadowolonego z życia.
I-saw Mark-ACC 3sg. masc. content- ACC 3sg. masc. with life
"I saw Mark content with life."

(3) Przyglądałem się Markowi zadowolonemu.
I-looked-at REFL Mark-DAT 3sg. masc. content-DAT 3sg. masc.
z życia.
with life
"I was looking at Mark content with life."

Likewise, secondary predicates, such as the adjunct *sam* "alone", must agree with their antecedent not only in φ-features by also in case (cf. Kardela (1985), Franks (1995), Witkoś (2009)), as can be seen in the following examples:

(4) Marek poszedł do szkoły sam.
Mark-NOM 3sg. masc. went to school alone-NOM 3sg. masc.
"Mark went to school alone."

(5) Widziałem Marka samego w ogrodzie.
I-saw Mark-ACC 3sg. masc. alone- ACC 3sg. masc. in garden
"I saw Mark alone in the garden."

(6) Przyglądałem się Markowi samemu
I-looked-at REFL Mark-DAT 3sg. masc. alone-DAT 3sg. masc.
w ogrodzie.
in garden
"I was looking at Mark alone in the garden."

Since they agree with the item they are predicated of in φ-features and case, predicative adjectives and secondary predicates found in control

[1] The following abbreviations have been used: ACC—accusative, DAT—dative, INSTR—instrumental, masc.—masculine, NOM—nominative, REFL—reflexive.

clauses testify to the case borne by PRO. In fact the case marking of PRO in Polish can be captured in terms of three classes, each of which will be illustrated with relevant examples. The first class, frequently noted in the literature (cf. Przepiórkowski (1999), Bondaruk (2004, 2006), Przepiórkowski & Rosen (2005), Witkoś (2009)), is represented by the so-called case transmission (cf. Comrie (1974)), i.e. the situation when the case of PRO is identical with the case of its controller. Case transmission occurs in Polish only when PRO is controlled by a nominative DP, as shown in (7) below:

(7) Marek chce [PRO być zadowolony z życia/sam].
Mark-NOM wants to-be content-NOM with life/alone-NOM
"Mark wants to be content with life/alone."

If a non-nominative element controls PRO, no case transmission takes place and the primary and secondary predicate are marked for instrumental and dative case, respectively, cf.:

(8) Jest mu smutno [PRO być chorym/samemu w domu].
is him-DAT sad to-be ill-INSTR/alone-DAT at home
"He is sad to be ill/alone at home."

Another option, attested in Polish control clauses, corresponds to the non-obligatory case transmission. This situation, rarely mentioned in the literature (Witkoś (2009) seems to be the only one to note it), arises 1) when PRO is controlled by a nominative controller across an overt C *żeby* "so that", as in (9) below, and 2) when the nominative DP controls PRO across a dative DP, as in (10) below:[2]

(9) Marek marzy [żeby PRO być zadowolony /zadowolonym
Mark-NOM dreams so-that to-be content-NOM /content-INSTR
z życia].
with life
"Mark dreams of being content with life."

(10) Marek obiecał Marii [PRO być zadowolony
Mark-NOM promised Mary-DAT to-be content-NOM
/zadowolonym z życia].
/content-INSTR with life
"Mark promised Mary to be content with life."

[2] Other instances of optional case transmission (cf. Witkoś (2009)) are not analysed here.

The above data containing primary predicates demonstrate that PRO can be either marked for nominative, the case of its controller, or can realize the default instrumental case. Similar observations can be made in relation to secondary predicates found in sentences like (11) and (12) below.

(11) Marek marzy [żeby PRO sam /samemu polecieć
Mark-NOM dreams so-that alone-NOM /alone-DAT fly
w kosmos].
in cosmos
"Mark dreams of going alone in cosmos."

(12) Marek obiecał Marii [PRO zrobić wszystko sam
Mark-NOM promised Mary-DAT to-do all alone-NOM
/samemu].
/alone-DAT
"Mark promised Mary to do everything alone."

The PRO subject in (11) and (12) bears either the nominative of its controller or the default dative case. At this point it is worth noting that the default case for the secondary predicate *sam* "alone" is dative, while for the primary ones, it is instrumental, the question to which we will return in section 4.

The third and final class to be analysed in the chapter consists of sentences in which no case transmission applies. Only two instances of this phenomenon are examined here, namely 1) control by a dative object, illustrated in (13) below, and 2) control by an accusative object, shown in (14) below.

(13) Marek kazał Marii [PRO być zadowoloną z życia]
Mark-NOM told Mary-DAT to-be content-INSTR with life
/[PRO przyjść samej].
/to-come alone-DAT
"Mark told Mary to be content with life/to come alone."

(14) Marek uczył Marię [PRO być zadowoloną z życia]
Mark-NOM taught Mary-ACC to-be content-INSTR with life
/[PRO samej naprawiać komputer].
/ alone-DAT to-repair computer
"Mark taught Mary to be content with life/to repair a computer alone."

In these sentences PRO is always marked for the default case; instrumental for primary predicates and dative for secondary ones. Sentences (13) and (14) are the only possible types of object control in Polish and they show that the case of the object is never transmitted onto PRO, the issue of

outmost importance in the further part of this chapter (in particular section 4).

To sum up, any analysis of the case marking of PRO must be capable of accounting for the three classes just mentioned in a principled way. In the next section the basics of Landau's (2004, 2007) approach to control are presented with the purpose of testing how well the analysis fares with respect to the data just described.

3. Landau's (2004, 2007) calculus of control

Landau (2004), following his earlier work, i.e. Landau (2000), derives control via successive applications of Agree, understood in the sense of Chomsky (2000, 2001). However, in contradistinction to his previous analysis, he does not advocate the null Case approach to PRO (cf. Chomsky & Lasnik (1993)), but rather argues that PRO bears standard case like any other DP. Since case does not have much to offer as regards the way PRO is licensed, Landau concludes that the distribution of PRO must be totally divorced from case (Landau (2006) reinforces this point). Instead, he argues that the licensing of PRO is performed by means of an algorithm, or, what he calls, "calculus of control". The elements participating in the calculus are I and C, each of which may be associated with the features [+/− T] and [+/− Agr]. The association of the [T] feature is based on the following directive:

(15) Specifying [T] on embedded I/C[3]
   a. Anaphoric tense => [−T] on I/C
   b. Dependent tense => [+T] on I/C
   c. Independent tense => [+T] on I, ø on C. (Landau (2004: 839))

Generally, (15) makes it clear that I and C must match in their Tense specification. The distinction is posited in (15) between dependent and independent tense, where the former is found in complement clauses with selected tense (e.g. irrealis clauses), whereas the latter is typical of the clauses whose tense is free. In addition to these two categories, there exists also anaphoric tense, characteristic of complement clauses lacking independent tense specification and having their tense determined by the matrix clause. Selection takes place between the matrix predicate and its complement. It is local and therefore cannot affect I directly but must be

[3] Landau (2004) uses the symbol I, not T, in order to avoid the confusion which might arise between T and the feature [+/− T]. Landau (2007) makes use of T, not of I.

mediated by the intervening C head. Consequently, selected clauses must have a [T] feature in C (unlike unselected ones for which C may be unspecified for tense altogether, cf. (15c)). Since the feature [T] is interpretable on I, but uninterpretable on C, the two must undergo feature checking (or Agree). The resulting system is illustrated by the following schema:

(16) The syntax of selected tense

$$V \ldots [_{CP}\ C_{[+/-\ T]}\ [_{IP}\ I_{[+/-\ T]}\ \ VP]]$$

selection checking

Landau (2004, 2006) emphasises that [T] refers to *semantic* tense and therefore uses terms like *tensed* vs. *untensed* instead of morphosyntactic concepts *tensed* vs. *tenseless*. Under this concept of tense, a clause may be tensed even if it does not carry any tense morphology or untensed even if it has tense morphology (this point will be illustrated later).

Another feature that may be associated with I and C is [Agr], understood as a bundle of φ-features. The [+/− Agr] specification on I and C is determined in the following way:

(17) Specifying [Agr] on embedded I/C

a. On I: i) overt agreement => [+Agr]
ii) abstract agreement => [−Agr]
iii) no agreement => ø

b. On C: i) [+Agr] => [+T]
ii) otherwise => ø. (Landau (2004: 840))

For the head I three kinds of agreement are distinguished in (17): 1) overt agreement, signaled by agreement morphology, 2) abstract agreement, lacking any morphological realization, and 3) no agreement, obtaining when I is defective, i.e. lacking [Agr] altogether. As far as C is concerned, it normally does not bear any morphological agreement marking. Nonetheless, Landau assumes that C is [+Agr] whenever it is [+T]; if C is either [−T] or unspecified for [T] (i.e. ø), then it bears [−Agr]. Unlike the feature [T], agreement is not a semantic entity, but purely morphological.

The last component of Landau's calculus of control concerns the way I and C "communicate" with nominal expressions they license. To achieve this, Landau argues that DPs, including PRO, as well as their licensers I and C are equipped with the feature [+/− R]. He assumes, following Reinhart & Reuland (1993), that referentially independent DPs are [+R],

while anaphoric DPs and PRO, are [−R].[4] Both values of [R] are interpretable on nominal expressions. To establish the link between nominals and functional heads like I and C, Landau claims that also the latter can be associated with the [R] feature, whose assignment is regulated in the way stated below:

(18) R-assignment Rule
For $X^0_{[\alpha T, \beta Agr]} \in \{I, C \ldots\}$
$ø \rightarrow [+R]/X^0_{[\_\_]}$, if $\alpha = \beta = +$
$ø \rightarrow [-R]$/elsewhere (Landau (2004: 842))

The above rule states that both I and C are positively specified for [R] only if they bear features [+T, +Agr]. Any other feature combination (i.e. [−T, +Agr], [+T, −Agr], or [−T, −Agr]) results in the negative specification of [R] on both I and C. The lack of either [T] or [Agr] on I or C makes the rule in (18) inapplicable and thus determines that no [R] value is assigned. The feature [R] on I and on C is uninterpretable.

The licensing of the subject in Landau's system involves checking uninterpretable features of I and C. DPs with the feature [+R] can check the feature [+R] on I/C, whereas PRO with the feature [−R] can only check [−R] on I/C. Since only [+T, +Agr] I/C can bear also [+R] (cf. (18) above), the system predicts that lexical DPs will only be found with so specified I and C. PRO, on the other hand, will be licensed elsewhere, i.e. with I/C equipped with [−T, +Agr], [+T, −Agr] or [−T, −Agr]. As a result, Landau's analysis leads to surprising results, i.e. it predicts that control environments do not form a natural class. This consequence, Landau argues, is desirable as it explains why the distribution of PRO cannot be captured in terms of any direct statement.

In Landau's (2004, 2007) model, OC is viewed as a result of an Agree relation between the matrix functional head (T in the case of subject control or v in the case of object control) and an element equipped with φ-features, i.e. PRO or the [+Agr] C.[5] The matrix T/v also undergoes Agree with the controller of PRO, which guarantees the feature match between PRO and its controller. Since both PRO and C with φ-features can be potential goals for Agree, there arise two control routes, schematised in (19) below:

[4] PRO is specified as [−R] because it lacks any inherent φ-features.
[5] Although the embedded T(I) can also bear φ-features (cf. (17) above), it always counts as a more distant goal than the [+Agr] C.

(19) … T/v … DP … [$_{CP}$C [$_{TP}$ PRO$_{[\varphi]}$ T]] PRO-control

… T/v … DP … [$_{CP}$C$_{[\varphi]}$ [$_{TP}$ PRO$_{[\varphi]}$ T]] C-control

(Landau (2007: 3))

What follows from the above representation is that C may be specified for φ-features, but does not have to (cf. (17)). If C has φ-features, it always functions as a closer goal than PRO. If C lacks φ-features, then PRO is targeted by Agree from the matrix clause. In order for Agree across a CP boundary to be possible, an assumption has to be made that an infinitival CP is not a phase. In (19), T/v undergoes two Agree operations and the DP controller of PRO does not trigger defective intervention effects because the Principle of Minimal Compliance of Richards (1998) allows the Minimal Link Condition (hence MLC) to be violated by the second operation once the first one has satisfied it. In (19) T/v first undergoes Agree with the closest goal, i.e. DP, thus satisfying the MLC, and hence is free to look for a more distant goal across a potential intervener.

Bearing in mind what has just been said about Landau's treatment of control, a subtype of OC, exhaustive control (hence, EC), where the reference of PRO and the reference of its controller are co-extensive, can be schematically derived in a way shown in (20a). Another subtype of OC, partial control (hence PC), where the reference of PRO contains the reference of its controller but is not identical with it, is derived in the way schematised in (20b).

(20) a. [$_{CP}$ DP…F .. [$_{CP}$ C$_{[-T]}$ [$_{IP}$ PRO$_{[-R]}$ [$_{I'}$ I$_{[-T, -Agr, -R]}$ [$_{VP}$ t $_{PRO[-R]}$ …]]]]]

Agree Agree$_{[+Agr]}$ Agree$_{[-T]}$ Agree$_{[-Agr, -R]}$

(Landau (2004: 847))

b. [$_{CP}$ DP…F .. [$_{CP}$ C$_{[+T, +Agr, +R]}$ [$_{IP}$ PRO$_{[-R]}$ [$_{I'}$ I$_{[+T, -Agr, -R]}$ [$_{VP}$ t $_{PRO[-R]}$ …]]]]]

Agree Agree$_{[+Agr, +R]}$ Agree$_{[-Agr, -R]}$ Agree$_{[+T, +/- Agr]}$

(Landau (2004: 848))

Landau (2007) argues that the case marking of PRO is closely related to which control route, either PRO-control or C-control, is taken. He

hypothesises that case transmission takes place if PRO is targeted by Agree, whereas if C serves as a target for Agree, no case transmission can occur. The details of his analysis applied to Russian are presented in section 3.1.

3.1. Landau's (2007) account of the case marking of PRO in Russian

Landau analyses secondary predicates in Russian and notes that they bear the case of the clausemate DP they are predicated of. He uses secondary predicates as a testing tool for the case marking of PRO in Russian. He notes that in Russian control clauses three options exist as regards the case marking of PRO. They are gathered in the table below:

(21) Case transmission in Russian infinitives (Landau (2007:24))

Obligatory Case Transmission	Optional Case Transmission	Case Independence
1. Simple subject control 2. Subject controlled rationale clauses with a null C.	3. Subject control across an object. 4. Direct object control. 5. Passive of object control. 6. Control across a lexical C. 7. Subject control into N-complements.	8. Control into *wh*-complements. 9. Control by non-accusative objects. 10. Implicit control into N-complements. 11. Non-obligatory control.

The instances of control that will be of particular importance for our analysis of the Case marking of PRO in Polish correspond to 1, 3, 4, 6, and 9. Therefore only these cases will be discussed here.

The main assumptions that Landau (2007: 29) makes are as follows:

(22) a. For T in Russian: [−Fin] → no case
b. For C in Russian: [−Fin] → ([DAT])

(23) Control route and case in Russian
a. Case transmission ↔ PRO-control
b. Case independence (DAT) ↔ C-control.

Since C is equipped with an optional [DAT] feature (cf. (22b)), whenever it is targeted by Agree (i.e. whenever C has φ-features), it values the case of PRO as dative (cf. (23b)), otherwise the case of PRO is assigned the

same value as the case of its controller (cf. (23a)). Furthermore, Landau (2007:31) makes a distinction between the overt C found in non-finite clauses and the non-overt one, which is captured in (24):

(24) In Russian, a null C is a clitic, a lexical C is not.

If C is a clitic, then it attaches onto the matrix verb and consequently, C-control is blocked, opening the way for PRO-control and the resulting case transmission. Landau (2007: 32) assumes that:

(25) When dominated by light v, C is an inaccessible goal for Agree.

Since the statement in (24) is stipulative, Landau tries to derive it from an independent principle such as Featural A-over-A, reproduced in (26):

(26) Given [X …[$_{Y}$ Y_{α} … Z_{β}] $_{\alpha}$], where X, Y, Z are heads and α, β are feature sets: Y is an intervener for Agree (X, Z) iff $\beta \leq \alpha$.
(Landau (2007: 45))

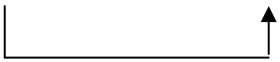
The principle above states that a goal contained within a closer potential goal can count as the actual goal only if its feature set is sufficiently distinct from the feature set of the closer goal.

Having discussed the main components of Landau's (2007) analysis, let us now check how it accounts for case transmission facts (cf. point 1 in (21) above), illustrated in (27):

(27) On želaet ženit'sja na nej sam/* samomu v cerkvi.
(Landau (2007: 14))
he-NOM wants to-marry her himself-NOM/*DAT in church
"He wants to marry her himself in a church."

The schematic representation of (27) is as follows:

(28) T_{φ} …. [C-V-v] $_{\varphi}$ ….. t_{C}….. PRO $_{\varphi}$



(Landau (2007:43))

In (28) the null C, being a clitic (cf. (24)), attaches onto V, which moves to v. Even if C in (28) has φ-features, it cannot be treated as a goal for Agree since it cliticises onto v also equipped with φ-features, hence if C is targeted by Agree from the matrix clause, then the Featural A-over-A Principle in (26) is violated. Consequently, the only element that can be accessed by the matrix T is PRO, which, in accordance with (23), leads to case transmission and PRO being marked nominative.

As for optional case transmission, i.e. points 3 and 4 from table (21), they can be instantiated by sentences (29) and (30), respectively:

(29) Ona poprosila ego ne ezdit' tuda odnogo
she-NOM asked him-ACC not to-go there alone-ACC
/odnomu zavtra.
/alone-DAT tomorrow
"She asked him not to go there alone tomorrow."
(Landau (2007: 15))

(30) Ivan pokljalsja druzjam sdelat' eto sam
Ivan-NOM vowed friends to-do it himself-NOM
/samomu zavtra.
/himself-DAT tomorrow
"Ivan vowed to his friends to do it alone himself."
(Landau (2007: 17))

The schematic representations of sentence (29) are given in (31) and (32):

(31) v_{φ} …….. [$_{v}$ C-Appl^{0}] …… t_{C}…….. PRO $_{\varphi}$
(Landau (2007: 43))

(32) v_{φ} …….. [$_{v}$ C_{φ}-Appl^{0}] …… t_{C}…….. PRO $_{\varphi}$
(Landau (2007: 44))

(31) and (32) show two possible control routes that can be taken in (29), PRO-control, which results in accusative case transmission and C-control, leading to the dative case on PRO. The choice of the route is dependent of the φ-feature specification of C; if C lacks φ-features, then PRO is targeted by Agree, whereas if C is specified for φ-features, then it is targeted by Agree, being a closer goal than PRO. This time no violation of Featural A-over-A Principle arises in (32), as Appl head is never associated with φ-features and hence does not count as an intervener for the Agree between the matrix v and the C equipped with φ-features. The representations for (30) are similar to the ones given in (31) and (32), except that the matrix probe corresponds not to v, but to T_{φ}.

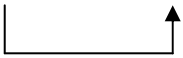
Optional case transmission occurs in Russian also in cases like (33) below, where control takes place across an overt C (cf. point 6 in table (21)).

(33) Ivan vstal čtoby pogovorit' sam
Ivan-NOM stood-up in-order to-speak himself-NOM
/samomu s tolpoj.
/himself-DAT to crowd
"Ivan stood up in order to speak himself to the crowd."
(Landau (2007: 18))

Since the overt C is not a clitic (cf. (24)), it does not attach to V (and subsequently to v), hence the schematic representations of (33) are as follows:

(34) T_{φ} …. $[_{CP}C_{\varphi}$ ….. .. PRO]

(35) T_{φ} …. $[_{CP}C$ …..... PRO $_{\varphi}]$



If C has φ-features, then it serves as a goal, which gives rise to C-control and hence the dative case marking of PRO. If C lacks φ-features, then PRO is directly targeted by Agree and hence its case is valued as nominative. A similar situation arises if instead of subject control, as in (33), we have object control across an overt C. The only difference, then, lies in that it is accusative that can optionally be transmitted and the matrix probe corresponds to v_{φ}, not to T_{φ}.

The final case to be mentioned concerns point 9 in table (21), namely control by a non-accusative object. This is illustrated by (36):

(36) Ona potrebovala ot nego pojti samomu
she demanded him-GEN to-walk himself-DAT
/?? samogo v magazin.
/?? himself-GEN to store
"She demanded of him to walk to the store by himself."
(Landau (2007: 22))

Landau (2007) observes that the lack of case transmission seems to be the most prevalent situation in (36), although a small number of native speakers accept the genitive secondary predicate in such sentences. He explains the lack of case transmission in examples like (36) by saying that the genitive (as well as dative), which is a lexical case assigned by a lexical verb, is distinct from nominative and accusative, which are

structural cases and are assigned by functional heads T and v.[6] He argues that the structural case, unlike the lexical case, belongs to the φ-set of T/v and therefore it can be transmitted in the course of Agree affecting T/v. Hence, a lexical case can never be transmitted.

Summing up, Landau's analysis, which crucially relies on the presence of two routes to control, is capable of accounting for the notoriously problematic facts concerning the case marking of PRO in Russian. The analysis is entirely based on mechanisms and principles independently necessary in the theory, which certainly constitutes its major advantage. The question which is worth positing is whether this model is universal. An attempt to address this question is made in the next section, where the validity of Landau's account is tested against Polish data.

4. Landau's analysis applied to Polish

In order to account for the Case marking of PRO in Polish described in section 2, Landau's assumptions given in (24)-(26) will be adopted. It will also be assumed that control in Polish can proceed in two routes, via C or via PRO, but in contradistinction to Russian, C in Polish will be taken to have no case feature at all. Consequently, whenever the C-route is taken, PRO is assigned a default case, which may be realized as either dative or instrumental. Hence, Landau's assumptions (22) and (23) will be modified along the following lines:

(37) a. For T in Polish: [−Fin] → no case
b. For C in Polish: [−Fin] → no case

(38) Control route and case in Polish
a. Case transmission ↔ PRO-control
b. Case independence (default case) ↔ C-control.

Let us now take a closer look at the three options listed in section 2.

4.1. Case transmission in Polish

Let us first discuss obligatory case transmission, which, as has already been noted, takes place only if PRO is controlled by a nominative DP. Following Landau (2007), we assume that in such cases only one route is

[6] The presence or absence of case transmission in sentences in which a dative object controls PRO is hard to test, because the secondary predicate is marked dative, even if no case transmission takes place.

available for control, i.e. via PRO, as C equipped with φ-features, having cliticised onto v also specified for φ-features, cannot be accessed by Agree from the matrix clause without violating the Featural A-over-A Principle (cf. (26)). The resulting schematic representation is shown in (39) below:

(39) $[_{TP}$ T $[_{vP}$ DP $[_{v}$ $[C_{\varphi}$-V$]$-$v_{\varphi}]$ $[_{VP}$ t_V $[_{CP}$ t_C $[_{TP}$ PRO $T_{[-fin]}$ vP$]]]$

Since C with a set of φ-features in (39) is located inside v with an identical feature set, it is unavailable for Agree from the matrix T and the only goal left for Agree is PRO. Since PRO is directly targeted by Agree, in accordance with (38), we obtain case transmission, i.e. the nominative case-marked PRO.

Let us now return to the two instances of optional case transmission analysed here, mentioned in section 2, and repeated below for convenience:

(40) Marek marzy [żeby PRO być zadowolony /zadowolonym
Mark-NOM dreams so-that to-be content-NOM /content-INSTR
z życia].
with life
"Mark dreams of being content with life."

(41) Marek obiecał Marii [PRO być zadowolony
Mark-NOM promised Mary-DAT to-be content-NOM
/zadowolonym z życia].
/content-INSTR with life
"Mark promised Mary to be content with life."

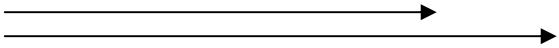
Sentence (40) contains an overt C *żeby* "so that", which, in contradistinction to a null C, does not function as a clitic either in Russian or in Polish (cf. (24)). Consequently, both C, when specified for φ-features, and PRO can be targeted by the matrix T, as schematically demonstrated in (42):

(42) $[_{TP}$ T $[_{vP}$ DP $[_{v}$ $[V]$-v$]$ $[_{VP}$ t_V $[_{CP}$ $[_{C}$ żeby $[_{TP}$ PRO $T_{[-fin]}$ vP$]]]]$

If C is targeted by Agree, then PRO is assigned default case (cf. (38)). If the PRO route is taken, which happens if C has no φ-features, then the case of PRO is valued as nominative, the same as the case of its controller. This line of analysis allows us to derive the optional case transmission without any additional stipulations.

In instances of control across a dative complement, as in (41), just like in cases of control across an overt C (see (40)), both control routes must be available to guarantee that case transmission applies optionally. The schematic representation of (41) is given in (43):

(43) $[_{TP}$ T $[_{vP}$ DP_{SU} $[_{v}$ [V]-v] $[_{VP}$ t_V $[_{ApplP}$ DP_{OB} $[_{Appl}$ C-Appl] $[_{CP}$ t_C $[_{TP}$ PRO $T_{[-fin]}$ vP]]]]



The C route is taken if C has φ-features, otherwise the PRO route is followed. In (43) the null C cliticises onto the closest head, which this time corresponds to Appl, not to v. Since Appl lacks φ-features, C specified for φ-features can be targeted by Agree from the matrix T and no violation of the Featural A-over-A Principle ensues.[7] No matter whether control operates via C or via PRO in (43), it has to be assumed that the object DP as well as v, both of which carry φ-features, do not count as interveners. This is taken care of in Landau's (2000, 2004, 2007) system by appealing to the Principle of Minimal Compliance. The matrix T in (43) first undergoes Agree with the subject DP, which satisfies the MLC and hence, in accordance with the Principle of Minimal Compliance, is free to look for a more distant goal skipping over two closer potential goals.

To conclude, Landau's model seems to be adequate to handle not only the obligatory and optional case transmission in Russian, but also in Polish. The only modification that has been introduced relates to the fact that C does not value any case in Polish and whenever it is targeted by Agree from the matrix clause, the case of PRO is valued by default.

4.2. The lack of case transmission in Polish

So far it has been shown that Polish behaves very much like Russian as regards the case marking of PRO. However, a clear contrast between these two languages arises in instances of object control. As has already been noted, the accusative of the object controller can be optionally transmitted in Russian (cf. (29)), whereas no case transmission from the object is ever allowed in Polish, as in (13) and (14), repeated for convenience as (44) and (45):

[7] Appl only expands the valency of the root by one argument (cf. Landau (2007:42-3)).

(44) Marek kazał Marii [PRO być zadowoloną z życia]
Mark-NOM told Mary-DAT to-be content-INSTR with life
/[PRO przyjść samej].
/to-come alone-DAT
"Mark told Mary to be content with life/to come alone."

(45) Marek uczył Marię [PRO być zadowoloną z życia]
Mark-NOM taught Mary-ACC to-be content-INSTR with life
/[PRO samej naprawiać komputer].
/ alone-DAT to-repair computer
"Mark taught Mary to be content with life/to repair a computer alone."

Working within Landau's (2007) model, in order to block case transmission in the above sentences one has to inactivate one control route, namely PRO-control, since whenever PRO is targeted by Agree, case transmission takes place (cf. (38)).

Let us now consider two ideas of how to block control via PRO in object control cases in Polish. Firstly, a restriction can be placed on the probe, i.e. the matrix v, in object control so that it would not be able to target PRO. This can be done as follows: PRO, which is always [−R] by virtue of its anaphoric character (see section 3), can undergo Agree only with the [−R] probe. Therefore, an assumption can be made that the v found in object control in Polish is always associated with the feature [+R] and therefore can only target a [+R] goal, which can never correspond to PRO. The question is whether there is any justification for postulating a [+R] v in object control structures in Polish. Landau (2004: 845) specifies that light v bears no [R] value and hence can target the [−R] PRO and the [+R] C.[8] This assumption, however, cannot be maintained for Polish, as it would incorrectly predict PRO-control to be possible in cases of object control as well as the ensuing case transmission. Alternatively, one can follow Reinhard & Reuland's (1993: 697) definition, stating that an entity carrying a full set of φ-features and structural case is always [+R]. Since v is specified for φ-features and since at least in (45) it assigns structural accusative, it seems to be justified to treat it as [+R]. If the [+R] v targets the [−R] PRO, a mismatch arises and the derivation crashes, which successfully blocks case transmission in sentences like (45). As for (44), the lack of case transmission in such clauses can be accounted for along the lines suggested by Landau (2007), namely by assuming that lexical case does not transmit. Although the analysis of the lack of case transmission just offered works well for Polish, it runs into problems when

[8] Recall that C carries the feature [+R] only if it is positively specified for tense and agreement, cf. (18).

confronted with Russian data. The problematic issue concerns the feature specification of v, i.e. if v is [+R] both in Polish and in Russian, then PRO-control will be blocked in both these languages, making case transmission in object control in Russian unavailable, contrary to fact. Alternatively, we can follow Landau in claiming that v in Russian in unspecified for the [R] feature, whereas in Polish it bears [+R]. This, however, leaves unanswered the question of why this contrast in feature make up of v should exist between these two languages. Therefore it seems necessary to look for a different explanation of the lack of case transmission in instances of object control in Polish.

Another account that will be offered places restrictions not on the probe, i.e. v, but on the goal. In other words, our account must ensure that out of two potential goals, such as C and PRO, only the former is always selected in the case of object control in Polish. As has already been said, C functions as a target for Agree only if it has φ-features. Therefore, in order to block PRO-control, C in object control clauses must always be specified for φ-features and hence always serve as a closer potential goal for the v probe from the matrix clause than PRO. This analysis predicts that in object control in Polish only C can be targeted by Agree as PRO is always a more distant goal. This prediction, however, is not problematic, since control via C in Landau's (2004: 848) model is typical of PC (cf. (20b) above) and actually all object control complements in Polish represent PC (cf. Bondaruk (2004: 228)). The analysis just sketched raises the question of why C in object control in Polish is always specified for φ-features. Before addressing this problem, let us point out that, in addition to *uczyć* "teach", there exists a small number of predicates in Polish which can co-occur with an accusative complement controlling PRO. These include verbs such as *korcić* "tempt", *kusić* "tempt", *zachęcić* "encourage", *nakłonić* "persuade", *namówić* "persuade", *przekonać* "convince", *zmusić* "force". All of them can be followed by a non-finite clause with an overt C, as shown in (46) below:

(46) a. Diabeł kusił go, [żeby PRO skoczyć z wieży].
devil tempted him-ACC so-that to-jump from tower
"The devil tempted him to jump out of the tower."

b. Marek nakłonił /przekonał /zmusił ją [żeby PRO ubiegać
Mark persuaded /convinced /forced her so-that to-apply
się o grant].
REFL for grant
"Mark persuaded/convinced/forced her to apply for a grant."