Chapter 3: Nonagreement in Slavic Participial Predicates: The Case of Polish and Ukrainian -no/-to Constructions

3.0 Introduction

The present chapter discusses nonagreeing participial constructions in Polish and Ukrainian that occur with ACC direct objects. The forms /-n-/, /-en/, and /-t-/ are allomorphs of the past passive morpheme; the status of /-o/ in the modern languages will be discussed shortly. Unchanging -no/-to predicates will simply be glossed as -no or -to; the precise morphological status of this ending is the subject of this chapter. Examples from Polish and Ukrainian are given in (1-2):

(1) Polish
   a. Pszenicę siano zawsze jesienią
      wheat:ACC sowed:-NO always in-fall
      ‘They always sowed wheat in the fall.’[Dziwirek 1994:178]
   b. Zupa przygotowano w ciągu godziny.
      soup:ACC prepared:-NO in course of-hour
      ‘They prepared the soup in the course of an hour.’ [Pisarkowa 1984:41]

(2) Ukrainian
   a. Remont školy zrobleno pohano.
      repair:ACC of-school done:-NO poorly
      ‘The repair of the school was done poorly.’[adapted from Shevelov 1963:141]
   b. Narešti cju mohyelu vzjato pid oxoronu deržavy.
      finally this grave:ACC taken:-TO under protection of-state
      ‘Finally this grave has come under the protection of the state.’
      [Wieczorek 1994:16]

The Ukrainian -no/-to construction appears to have been borrowed from its Polish counterpart (see 3.1 for details) and, at first glance, they indeed appear to exhibit the same structure. Upon a finer-grained morphosyntactic analysis, however, we will find that Polish and Ukrainian differ with respect to two basic properties (from which all other differences follow): (i) the syntactic categorial status of the /-no/-to/ morpheme itself, and
(ii) the status of the verb-stem’s external theta role.\textsuperscript{1} With regards to (i), it will be shown that the Polish \textit{-no/to} morpheme has been reanalyzed as an auxiliary-like element that heads Infl (or T).\textsuperscript{2} In contrast, Ukrainian \textit{-n/} and \textit{-t/} still maintain their status as passive-participial morphemes, while \textit{-ol/}, an erstwhile inflectional marker of NEUT.SG agreement in both languages, is now interpreted in Ukrainian as a derivational marker of nonagreement, along the lines of the nonagreeing finite predicates discussed in chapter 2. As for the status of the verb-stem’s external theta role (or derived external argument in the case of unaccusative predicates in Polish, which also undergo \textit{-no/to} formation), it will be shown upon examination of “implicit argument” tests that Polish patterns with active rather than passive predicates. The external theta role is assigned to an argument that takes scope over the VP with respect to processes such as binding and control. The external theta role in Ukrainian \textit{-no/to} will be shown to pattern with dethematized arguments of passive predicates and, in such a way (and in sharp contrast to Polish), is predicted to fail tests which are taken to indicate a syntactically-active external argument. It will follow that only Ukrainian \textit{-no/to} cooccurs with a passive by-phrase. A full, comparative treatment of \textit{-no/to} in Polish and Ukrainian is presented in section 3.2.

The discussion of Polish and Ukrainian \textit{-no/to} is of both empirical and theoretical interest. The empirical interest lies in a proper description of the actual facts. Due to the typologically-rare Case-Theoretic and distributional properties\textsuperscript{3} of this Polish and

\textsuperscript{1} It will be shown that (ii) is further reducible and, in fact, follows from (i). That is, we will begin by assuming the strongest hypothesis, which is that all morphosyntactic differences between Polish and Ukrainian \textit{-no/to} follow from the categorial status of the actual \textit{-no/to} morpheme.

\textsuperscript{2} I am grateful to Maggie Browning for discussion of this point. The AUX HYPOTHESIS for Polish \textit{-no/to}, taken up in section 3.2, is the direct descendant of one of Maggie Browning’s observations.

\textsuperscript{3} By “distributional properties” I refer to the cooccurrence of Polish \textit{-no/to} with semantically unaccusative predicates (in the sense of Perlmutter 1978) and the resulting violations of the 1-Advancement Exclusiveness Law (1-AEX) (Perlmutter and Postal 1984a). As for Case Theory, both Polish and Ukrainian
Ukrainian construction, -no/-to in Slavic has received considerable attention in the general linguistics literature on passivization (see, e.g., Baker 1988, Baker, Johnson & Roberts 1989, Goodall 1993, Maling 1993, and Boeckx 1998). This work is impressive in its broad crosslinguistic coverage, but, as we will see in section 3.3, crucial details in both Polish and Ukrainian are overlooked or misrepresented in such a way that the overall goal of identifying a formal universal unity in the passive and passive-like constructions of the world’s languages is undermined. For this reason, it is believed that a rigorous description of Polish and Ukrainian -no/-to in theoretically-relevant terms will fill a sorely missed gap in this literature.

In a minimalist-style analysis there can be no Passive as a primitive in the theory. Under such an analysis, we would expect the properties that generally cluster together in passives to be potentially independent and, thus, de-coupled and related to specific morphosyntactic features which themselves are the primitives in our theory. This is exactly what we find in Polish and Ukrainian -no/-to. Assuming (following Chomsky 1993) that the source of crosslinguistic syntactic variation is restricted to properties of morphosyntactic features stored in the lexicon, the main theoretical question that is addressed in this chapter is how the featural specification of lexical items, in this case the passive morpheme /-(e)n-, -t/ plus the erstwhile inflectional /-o/, changes to reflect new feature-checking requirements imposed by diachronic change. The hypothesis then is that -no/-to, if treated as passive (erroneously in the case of Polish), violate Burzio’s Generalization (Burzio 1986:178)) by assigning ACC in the presence of a dethematized external theta role.

4 Polish -no/-to, in fact, has indeed been well-described in recent literature, for example in Dyla 1983, Siewierska 1988, Rozwadowska 1992, and Dziwirek 1994. For recent work on Ukrainian -no/-to see Sobin 1985, Babby 1989, Wieczorek 1994 and Adams 1998. The present study contributes to this literature by making use of systematic crosslinguistic comparison of -no/-to in both languages (see Billings & Maling 1995). The methodological idea is that rigorous comparison of closely related languages that differ with respect to a particular cluster of properties leads to a better understanding of the relevant parametric choices.
morphological change should coincide with syntactic change in predictable ways, since
the reanalysis of a morpheme entails the reanalysis of its features, and it is
morphosyntactic features that drive syntactic derivations.\textsuperscript{5}

Before proceeding, let us review the anomalous properties of the Polish and Ukrainian
\textit{-no/-to} constructions that our analysis must account for. Each of the following properties
is illustrated with an example:

(i) The \textsc{acc} case on the underlying direct object is not “absorbed” by the apparent
passive-participial morphology (exemplified in (1-2)).

It will be shown that Burzio’s Generalization in reference to the Polish example in (1) is
largely irrelevant. As suggested above, it will be argued that the Polish /-no/-to/
morpheme is no longer passive in the contemporary language. Ukrainian /-no/-to/, on the
other hand, is still involved in passivization and, thus, poses a serious challenge to
Burzio’s Generalization that will be taken up in section 3.3.

(ii) \textit{-no/-to} is in complementary distribution with overt auxiliary tense markers in
Polish while \textit{-no/-to} and tense-marking auxiliaries cooccur in Ukrainian:\textsuperscript{6}

Much will be made of this fact in the analysis to follow since /-no/-to/ itself will be
analyzed as an overt tense-marking auxiliary in Polish (hence the complementary
distribution). Diachronic evidence in support of this hypothesis will be introduced in
section 3.1.

(3) a. Polish

\begin{verbatim}
Stefana (* bylo / *jest / *bedzie) wzięto do wój ska.
Stefan:ACC AUX:PAST AUX:PRES AUX:FUT taken:-TO to army
\end{verbatim}

‘They drafted Stefan into the army.’

\textsuperscript{5} See Bailyn 1998 for a similar approach to syntactic change in Slavic.

\textsuperscript{6} The overt auxiliary in Ukrainian \textit{-no/-to} (along with the syntactic realization of an agentive by-phrase) is a
recent phenomenon, perhaps as recent as the early 20\textsuperscript{th} century. See Shevelov 1943, 1969, and Synjavs’kyj
1967.
(iii) Polish -no/-to does not license a passive by-phrase while the corresponding Ukrainian construction does.  

(4) a. Polish
Dziecko kochano (* przez matkę).
child:ACC loved:-NO by mother:ACC
‘The child was loved by the mother.’ [Dziwirek 1994:185]

b. Ukrainian
Velyku robotu provedeno urjadnykom po zbyraniu tekstiv zabutyx.
great work:ACC carried-out:-NO clerk:INST on gathering of-texts of-forgotten
‘An important job was carried out by the clerk charged with gathering texts of forgotten ones.’ [Wieczorek 1987:553]

(iv) The underlying (or derived) external argument in Polish -no/-to is a “syntactically active” element showing strong “implicit argument” effects, whereas in Ukrainian -no/-to the external argument, if initially present, appears to be dethematized (in the usual passive way) and “implicit argument” effects are correspondingly absent.

The embedded adverbial (gerundive) clause (glossed as GER) in (5) is obligatorily anaphoric on the (understood) subject of the matrix (-no/-to) predicate. The grammaticality contrast in this example previews a more robust distinction between Polish and Ukrainian which involves a wider range of structures.

(5) a. Polish
Gwizdano nie zgadzając się z decyzją sędziego.
whistled:-NO NEG agreeing:GERREFL with decision of-referee
‘People whistled disagreeing with the referee’s decision.’ [Dyła 1983:127]

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7 The by-phrase in Polish canonical (agreeing) passives is expressed by the prepositional phrase przez ‘by’ + ACC; the by-phrase in Ukrainian appears in a bare INST NP.

8 The notion of “implicit argument” refers to the syntactically-active unexpressed agent of passive and passive-like sentences. Such implicit arguments have been shown to license binding relations and control the PRO subject of infinitives and adverbial secondary predicates (under wide crosslinguistic variation). See Roberts 1987 and Baker 1988:315-320.
b. Ukrainian

*Povernuťs’ dodomu, hroši bulo znajdeno.

‘Having returned home, the money was found.’

Note that (5a) may be taken as evidence for a thematic (pro-arb) subject in Polish -no/-to, which Ukrainian lacks. A difference in the featural specification of the /-no/-to/ morpheme can thus be expected to lead to disparate sets of checking requirements and, it follows, different syntactic structures. In particular, the presence of a thematic subject in Polish predicts that T’s EPP-feature may be checked by a non-dethematized external argument, i.e., without recourse to movement of an internal argument to this position. In the case of Ukrainian, which lacks a thematic argument in the preverbal field, EPP-movement of an internal argument would be obligatory.

(v) Polish -no/-to cooccurs with the REFL morpheme się; Ukrainian -no/-to and REFL -sja are in complementary distribution.

The sentences in (6-7) below are Subject Experiencer predicates derived by means of REFL affixation. In the -no/-to examples, the understood subject is taken to be the non-realized Experiencer. Descriptively speaking, the significance of such examples for -no/-to is to tease apart the effect of this morpheme on the verb-stem from other affixation processes that appear to refer to the same argument (such as REFL affixation). If -no/-to and REFL się/-sja are both taken to affect the subject argument in a voice-changing capacity, their cooccurrence would introduce a redundancy into the system that would apparently be ruled out by some notion of economy which penalizes such redundancy. This intuition is captured in Marantz (1984:128) by the principle of “vacuous dethematization”. Thus, the licit cooccurrence of -no/-to and REFL in Polish will be taken as evidence that these morphemes are fundamentally different in some way to be made
explicit in the course of this chapter. The non-cooccurrence of \textit{-no/-to} and \texttt{REFL} in Ukrainian will be taken to indicate a redundancy not found in Polish.

(6) Polish
   a. Agreeing Finite SubjExp Predicate
   Profesorzy zdużeli się wybrykami studentów.
   professors:NOM.PL amazed:PL \texttt{REFL} actions:INST of-students
   ‘The professors were amazed at the students’ actions.’

   b. \textit{-no/-to}
   Zdumiano się wybrykami studentów.
   amazed:-NO \texttt{REFL} actions:INST of-students
   ‘People were amazed at the students’ actions.’ [Rozwadowska 1992:64]

(7) Ukrainian\footnote{Note that Ukrainian exhibits a general PF restriction on the cooccurrence of \textit{l-t-a-t} and \texttt{REFL} \textit{-sja}, which is unrelated to the \textit{-no/-to} construction. It follows that if \textit{-no/-to} and \textit{-sja} were to cooccur, \textit{-sja} would not be pronounced (cf. nominalizations in Ukrainian of reflexive verbs in which the reflexive morpheme is “PF-suppressed”). For this reason, \texttt{REFL} is not represented overtly in (7b), though this is certainly a “\textit{-sja-verb}”, as indicated by (7a).}
   a. Agreeing Finite SubjExp Predicate
   Profesory zdyvuvaly- \textit{sja} ciy knyzî.
   professors:NOM.PL surprised:PL \texttt{REFL} this book:DAT
   ‘The professors were surprised at this book.’

   b. \textit{-no/-to}
   *Cïj knyzî ciuly zdyvovano.
   this book:DAT AUX:PAST surprised:-NO
   ‘At this book was surprised.’

(vi) Polish \textit{-no/-to} formation targets unaccusative verbs and Object Experiencer verbs, neither of which undergoes canonical passivization.\footnote{The formation of \textit{-no/-to} predicates in Polish from semantically unaccusative verbs is limited to atelic, imperfectives with an iterative interpretation. This constraint seems to hold more generally of unergatives and psych verbs as well, and is most likely related to the generic interpretation of the pro-arb subject.} Examples of Ukrainian \textit{-no/-to} of such predicate types are licit only for those verb-stems that are underlyingly transitive (as in the case of certain Object Experiencer verbs).

The examples in (8) concern only semantically unaccusative verbs. (Psych (Experiencer) verbs are treated in detail in section 3.2.) The question of the 1-Advancement Exclusiveness Law of Relational Grammar (Perlmutter and Postal 1984a), which should rule out unaccusative \textit{-no/-to} formation, is taken up in sections 3.2 and 3.3.
(8) Polish
a. Umierano z głodu i z wycieńczenia.
   died: NO from hunger and from exhaustion
   ‘People died from hunger and exhaustion.’ [Cetnarowska 1999]

b. Toniało w morzu, a nie w wannie.
   drowned: TO in sea and NEG in bathtub
   ‘People drowned in the sea, not in a bathtub.’ [Rozwadowska 1992:62]

Ukrainian
   died: NO drowned: NO gone-blind: NO

This chapter is organized in the following way. Having already reviewed the basic
lexico-semantic and distributional facts of Polish and Ukrainian -no/-to, section 3.1 takes
up the historical development of this construction, focusing on the loss of the auxiliary in
the canonical passive construction in Old Polish and the morphological isolation of the
erstwhile inflectional morpheme /-o/ in Old Polish and (early) Middle Ukrainian. The
diachronic facts in section 3.1 will set the stage for a proper treatment of the reanalysis of
Polish -no/-to as an inflectional head, presented in section 3.2. Ukrainian -no/-to also
underwent reanalysis, but in a way that diverges significantly from its Polish source and
accounts for many of the differences introduced above. These facts are also discussed in
section 3.2. Section 3.3 reviews the “crosslinguistic variation” literature on passivization
and suggests the proper place in this literature for Polish and Ukrainian. Finally, section
3.4 deals with the basic syntax and feature-checking requirements that -no/-to in each of
the languages imposes on the syntactic derivation. The focus here will be on EPP-
checking, word-order differences, and the question of expletives.
3.1 On the History of Polish and Ukrainian \(-no/-to\)

Reanalysis denotes a type of historical change which affects underlying syntactic relations without directly affecting the surface form. In more specific terms, change in a syntactic pattern will be taken to crucially involve change in the featural composition of the item undergoing reanalysis, with a concomitant change in the syntactic (namely, functional) structure that the lexical category projects.

3.1.1 On \(-o/\) and the Nominal Declension of Adjectives and Participles

When adjectives developed in Common Slavic as a discrete category, there developed two distinct adjectival/participial declensions: a short form (SF) nominal declension and a long form (LF) pronominal declension. The latter was formed by adding the Common Slavic demonstrative pronoun \(\text{j} \, 11\) to the nominal form. The initial distinction between the two declensions involved definiteness: the demonstrative pronoun in the pronominal declension functioned like a postposed definite article. Later, adjectives and participles of the nominal (SF) declension were restricted to predicative use, that is, the distinction between the LF and SF came to be defined positionally rather than semantically (see Sprinčak 1960:112-117 and Klemensiewicz et al. 1965:323-326).

It will be claimed that the sharply diminished productivity of the nominal declension of adjectives and participles in Polish and Ukrainian contributed to the reanalysis of the nominal NEUT.SG inflectional morpheme \(-o/\) as part of the complex derivational morpheme \(-no/-to/\). The nominal declension of adjectives was particularly susceptible to reduction in those languages whose pronominal declension of adjectives underwent some form of contraction or truncation, resulting in monosyllabic nominative LF endings.
which no longer contrasted as neatly with the SF endings of the initial nominal
declension. Note that the contracted participles based on the initial pronominal
declension now came to be used in the predicative position, further isolating the older
nominal forms. The table in (9) gives the relevant adjectival/participial forms.

(Belarusian will be discussed briefly and is therefore included in (9). Common Slavic and
(Contemporary Standard) Russian are also included for comparison. The missing Polish
and Ukrainian forms of the nominal declension were essentially those of Common Slavic
before they were replaced by the contracted pronominal forms.\(^\text{13}\)\(^\text{13}\)

(9) NOM SG Adjectival/Participial Declensions

<table>
<thead>
<tr>
<th></th>
<th>Nominal (SF)</th>
<th>Pronominal (LF)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>N</td>
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<tr>
<td>a. Common Slavic</td>
<td>-</td>
<td>-o</td>
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<td>b. Polish</td>
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<td>c. Ukrainian</td>
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<tr>
<td>d. Belarusian</td>
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<td>-o(^\text{14})</td>
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<tr>
<td>e. Russian</td>
<td>-̄</td>
<td>-o</td>
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Note in (9b-c) that Polish and Ukrainian (in contrast to Russian and Belarusian) did
not retain intervocalic \(j(ot)\) in the NEUT and FEM of the LF adjectival declension. The
Common Slavic pronominal NEUT.SG form /-oje/ contracted in Polish and Ukrainian to
/-e/ (with various irrelevant intermediate stages). While the MASC nominal forms were
replaced by the pronominal LF, and the FEM forms were now indistinguishable after

\(^{11}\) The cyrillic “front jer” \(\`\) represented a reduced front vowel in Common Slavic. The “back jer” \(\`\) below in (9a) represented the corresponding reduced back vowel.

\(^{12}\) See, for example, Brajerski 1979 for Polish and Shevelov 1979 for Ukrainian.

\(^{13}\) In present-day Polish and Ukrainian, use of SF adjectives is restricted to a small number of lexical items.

Note that in contrast to Polish and Ukrainian, predicative participles in Russian retain the forms of the
initial nominal declension. Belarusian exhibits variation in the usage of predicative participles that will be
discussed in the text. Note that Russian and Belarusian LF endings show a continuation of the Common
Slavic demonstrative element \(j\).

\(^{14}\) Due to Belarusian \(akan'ë\) (and its orthographic representation), NEUT /-o/ is pronounced (and spelled) [a]
in all unstressed positions (see Mayo 1993:891 for details).
contraction, the initial nominal form for the NEUT.SG became isolated in its paradigm as the sole remaining member. This strictly phonological development is generally believed to have been completed by the beginning of the 17th century (Oesterreicher 1926:57, Bevzenko 1960:194, Brajerski 1979:85, Shevelov 1979:114-115). Shevelov 1969 and Brajerski 1979 argue that the -no/-to + ACC construction did not exist prior to the 14th century; it was known neither in Old Church Slavonic nor in the earliest Polish and East Slavic documents.¹⁵

To review, we have seen that NEUT.SG -o/ of the nominal declension in Polish and Ukrainian acquired the special property of projecting nonagreeing predicates precisely where the following two developments converged: (i) the initial pronominal forms were contracted resulting in the distinct NEUT.SG form -e/; and (ii) the SF endings were not continued in productive predicative use.

The focus up until now has been on the development of erstwhile NEUT.SG -o/, its morphological isolation, and its “availability” for reanalysis. Nothing has been mentioned, however, that forces its reanalysis. The mere availability of this old inflectional morpheme cannot explain its new syntactic role in Polish and Ukrainian. In the discussion that follows I will focus on Polish, which is believed to be the actual source for productive -no/-to; Ukrainian is believed to have “borrowed” -no/-to from Polish, a fact that is supported by intense linguistic contact precisely during the period that -no/-to developed (see Shevelov 1968, 1969).¹⁶ The analysis that I propose confirms

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¹⁵ The possible existence of -no/-to + ACC in Old East Slavic is particularly dubious. The same two or three examples that are believed to exist are simply repeated by the various researchers. Cf., for example, Šprinčak 1960:23 and Filin 1972:493. For a critical appraisal of an Old East Slavic -no/-to + ACC construction, see Shevelov 1969.

¹⁶ Both Ukraine and Belarusia were under Lithuanian and Polish domination since the latter part of the 14th century, first under the Grand Duchy (Principality) of Lithuania and, then, after the Union of Lublin in
the loan character of Ukrainian -no/-to and provides an explicit characterization of what exactly was borrowed.

3.1.2 The Development of -no/-to in Polish and the Loss of Overt Tense-Marking Auxiliaries

Since Oesterreicher 1926 (and in many subsequent studies, such as Klemensiewicz et al. 1965, Lewicki 1966, Shevelov 1968, Brajerski 1979, Pisarkowa 1984, and Siewierska 1988) the following seemingly unrelated factors have all been argued to play a role in the development of -no/-to: (i) the loss of the nominal declension and the new status of /-o/ as a non-paradigmatic suffix; (ii) the use of the LF (pronominal) participle in predicative position; and (iii) the loss of tense-marking auxiliaries in old NEUT.SG passive-participial predicates. Thus, a rather peculiar situation obtains in Polish: a member of the old nominal (SF) declension of adjectives and participles survives and occupies a predicative position otherwise marked by LF participles only. Furthermore, only this anomalous SF participle in /-o/ can occur without a tense-marking auxiliary, and, in fact, is required to do so.

The goal of this section is to show how these developments lead to ACC case marking on the underlying direct object of -no/-to predicates. We will begin with the observation dating back to Oesterreicher 1926 that the ACC direct object came to be used productively only after the auxiliary’s disappearance. Since all other passive-participial predicates in Old Polish occurred obligatorily with a tense marker (that is, było:PAST, jest:PRES, and będzie:FUT, as in the modern language), the appearance of predicative -no/-to with no overt auxiliary is indeed surprising. In a feature-checking system of syntax, for example,

1569, under the Polish-Lithuanian Commonwealth, where Ukrainian and Belarusian lands were now exclusively under Polish domination. It wasn’t until the partitions of Poland in the late 18th century by
it is not immediately obvious how the tense feature of \(-no/-to\) predicates is licensed/checked in the absence of such an auxiliary. One option would be to stipulate that T(ense)’s V-features need not be checked (which means, must not be checked) only in the case of \(-no/-to\), or that \(-no/-to\) involves some inherent tense feature, as is often assumed given the obligatory [+past] interpretation, and thus by analogy with inherent Case enters the derivation [+interpretable]. However, in a system which seeks to reduce computational complexity by not admitting construction-specific optionality, these solutions are clearly sub-optimal. Furthermore, as we will see in section 3.2, such solutions fail to account for the cluster of properties introduced in 3.1.

Instead, as suggested earlier, we will pursue a finer-grained analysis of the \(-no/-to/\) morpheme and the syntactic structure that it projects. The analysis that will be elaborated in section 3.2 is that the \(-no/-to/\) morpheme was reanalyzed in Polish as an inflectional head, that is, as the tense-marking auxiliary itself. The first piece of evidence towards this analysis is the complementarity of \(-no/-to\) with other auxiliary elements as a defining property of its development. The problem for checking tense features is now potentially resolved: T’s features are checked in \(-no/-to\) in the same way that they are checked in canonical agreeing passives with overt auxiliaries. The connection between auxiliary facts and the ACC object follows straightforwardly. There is no reason why \(-no/-to/\) as an auxiliary would interfere with (or “absorb”) the case on the verb-stem’s internal argument. Auxiliaries are “functors” (in the sense of Williams 1994) with respect to the verb’s theta- and case-assigning properties. They have no argument structure of their own.

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Austria and Russia that most of Ukraine and all of Belarusia came fully under Russian influence.
and, as a result, they simply inherit the argument structure (and case-assigning) properties of the predicate with which they compose (either syntactically or morphologically).

In the Polish of the 15th-17th centuries, while the SF participial endings were still used predicatively, the NEUT.SG was morphologically ambiguous between a raised nominative subject in an agreeing structure and an ACC object in a non-agreeing one (see, e.g., (10)). By the latter part of the 17th century, as we will see, the two are disambiguated both morphologically and syntactically. The ACC object came to pattern exclusively with SF -o/ and the lack of an overt auxiliary. We begin in (10-12) with early examples of -no/-to from the period in which -o/ and an overt auxiliary cooccurred.17

(10) Old Polish
Nie obleciesz się w ruchu, jeżto z
NEG will-dress:2.SG REFL in garment:NEUT.SG which:NOM/ACC.NEUT.SG from
wolę a ze lnus tkano jest.
wool and from linen woven:NEUT.SG /-NOAUX:PRES
‘You shall not wear a garment that is woven of wool or of linen.’ [Deut 22,11
from Biblia Królowej Zofii, 15th Cent., cited in Oesterreicher 1926:55]

(11) Old Polish
... bo też w ten dzień Scypiona Afrykańskiego było barzo porażono.
for also on that day Scipio Africanus:ACC AUX:PAST greatly stricken:-NO
‘...for also on that day Scipio Africanus was dealt a great blow.’ [16th Cent.]
[Klemensiewicz et al. 1965:433]

(12) Old Polish
Lata Pańskiego był wielki mor w Polsce... a przyniesiono go
of-year of-lord was great famine in Poland and brought:-NO him:ACC
było z Wegier.
AUX:PAST from Hungary
‘During the rule of the gentry there was a great famine in Poland...and he was
brought from Hungary.’ [15th Cent.] [Oesterreicher 1926:56]

The Old Polish examples in (13-15) show the more stable pattern that developed after the complete reanalysis of -no/-to. Here the auxiliary is obligatorily missing and the direct
object is unambiguously ACC. Even in the case of the NEUT.SG, which remains
morphologically ambiguous between the NOM and ACC, the missing auxiliary indicates a
new syntactic structure in the language that patterns with the structural ACC.\textsuperscript{18}

(13) Old Polish
... a popędzono sierce ludskie k działaniu.
and driven::NO heart:ACC people’s toward work
‘... for the people’s hearts were driven to work.’ [Nehem 4.6 from Biblja Królowej Zofji, 15\textsuperscript{th} Cent., cited in Oesterreicher 1926:55]

(14) Old Polish
I smiotano nań wielką grumadę kamienia.
and raised::NOon-him great bunch:ACC of-stone
‘And they raised over him a great heap of stones.’ [Jos 7,26 from Biblja Królowej Zofji, 15\textsuperscript{th} Cent., cited in Oesterreicher 1926:55]

(15) Old Polish
Przykazał, aby łódkę uczyniono z rokiciny.
he-ordered COMP boat:ACC made::NO from wicker
‘He ordered that a boat be made of wicker.’ [1510] [Brajerski 1979:91]

That the loss of tense-marking auxiliaries was a crucial part of -no/-to’s reanalysis is
confirmed by examples from Ukrainian and Belarusian of the 17\textsuperscript{th} century, which follow
the Old Polish pattern in (13-15). It will be recalled that at that time Ukrainian and
Belarusian were in intense contact with Polish as part of the Polish-Lithuanian
Commonwealth. Thus it should be borne in mind that while Ukrainian now uses
auxiliaries freely in -no/-to constructions (as illustrated in (3b)), in the earlier stage of the
language when -no/-to first appeared, Ukrainian borrowed the exact surface syntax from
Polish. We will have reason to claim, however, that Ukrainian was “unfaithful” to the
underlying syntactic structure of Polish -no/-to that projected this surface syntax. The

\textsuperscript{17} Note that (10-12) are ungrammatical in modern Polish. We may take their grammaticality in Old Polish
to indicate a transitional stage in the reanalysis of -no/-to.

\textsuperscript{18} The examples in (13-15) do not follow those in (10-12) chronologically. They are merely intended to
show that the transitional period in -no/-to formation (15\textsuperscript{th} - 17\textsuperscript{th} centuries) contained examples of both the
earlier and the later structures.
apparent prohibition on the use of an auxiliary, as well as a passive by-phrase, proved to be ultimately unmotivated by the way in which -no/-to came to be construed in Ukrainian (and Belarusian dialects). Let us begin with examples of early -no/-to in these languages. The examples in (16-17) and (18) are from Old Ukrainian and Old Belarusian, respectively.\(^{19}\)

(16) Old Ukrainian

\[
\text{Pavlusja u Varšavi stjato.}
\]

\[
\text{Pavlus' ACC in Warsaw beheaded: -TO}
\]

‘Pavlus’ was beheaded in Warsaw.’ [17\(^{\text{th}}\) Cent.] [Bevzenko 1960:348]

(17) Old Ukrainian

\[
\text{… so that he were not met with misfortune like Stefan the priest who was drowned in the Luts’k river.’ [1605-1606] [Borkovskij 1968:178]}
\]

(18) Old Belarusian

... and besides that I was placed in captivity.' [16\(^{\text{th}}\) Cent.] [Bulaxaũ 1957:378]

3.1.2.1 Excursus on -no/-to + aux in Ukrainian

It has been pointed out in a series of corpus studies that Ukrainian -no/-to continued to appear throughout the 19\(^{\text{th}}\) century without an overt auxiliary. Here we may note, for example, Veselovs’ ka’s (1927) study on the language of the early-19\(^{\text{th}}\) century Eastern Ukrainian writer Hryhoryj Kvitka-Osnov’janenko. A slightly different pattern emerges in Petlyčnyj’s (1960) study on the language of the late-19\(^{\text{th}}\) century Western Ukrainian writer Ivan Franko. Here, Petlyčnyj finds numerous examples of auxiliaries used with

\(^{19}\)The language of the 16\(^{\text{th}}\) - 17\(^{\text{th}}\) centuries is generally referred to as “Middle” Ukrainian and Belarusian. The term “Old” Ukrainian and Belarusian used in the text is meant to distinguish all older forms of the language that follow the period of Common East Slavic (sometimes referred to as “Old Russian”).
-no/-to, but it is interesting that these auxiliaries are used exclusively in the NEUT.SG. The use of -no/-to in Franko’s time can be illustrated with the following examples:

(19) Ukrainian
a. NEUT + AUX
Čy spravdi bulo dlja nac pryznačeno ščos’
PRT really AUX:PAST for us assigned:-NO(?) something:NOM/ACC.NEUT
inše, niž te, ščo majemo?
else than that which we-have
‘Has something, apart from what we have, really been apportioned to us?’

b. MASC + (*AUX)
Š’ohodni uv’jazenno tut jakohos’ Davyda Šternberga.
today imprisoned:-NO here some David Sternberg:ACC.MASC
‘Today a certain David Sternberg was imprisoned here.’

c. FEM + (*AUX)
Ja duže rad, ščo taku dražlyvui važnu temu obhovorenbo
I very glad that such sensitive and serious theme:ACC.FEM discussed:-NO
tut tak spokijno.
here so calmly
‘I am very glad that such a delicate and serious matter was discussed here so calmly.’

d. PL + (*AUX)
Vsi prykazy budivnyčoho spovneno švydko.
all orders:ACC.PL of-architect fulfilled:-NO quickly
‘All the orders of the architect were carried out quickly.’

One way of interpreting these data is to assume that the Polish pattern of -no/-to without tense-marking auxiliaries began to break down in Ukrainian in the NEUT.SG first.

Shevelov (1969:179-182), however, claims that the peculiar distribution of -no/-to + AUX in Ukrainian is due to the fact that Ukrainian -no/-to competed with the LF ending /-n-e/-t-e/ as an agreeing (NEUT.SG) structure until the 20th century. If -no/-to indeed continued to function as an agreeing participial form in 19th century Ukrainian, its appearance with the AUX would be expected and thus, so far, does not constitute a

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20 All examples in (19) are from the prose works of Ivan Franko as cited in Petlyčnyj 1960.
divergence from the Polish pattern. Support for Shevelov’s analysis comes from his own
corpus study (contained in Shevelov 1969) of the early-20th century Eastern Ukrainian
poet Oleksandr Oles’. Here Shevelov notes (1969:183-184) that -no/-to was used by
Oles’ almost exclusively with NEUT nouns, while MASC, FEM, and PL nouns generally
patterned with agreeing past-participial /-n/-/t-/. Furthermore, the two constructions
often appeared in contiguous clauses with virtually no difference in meaning. An
example from Oles’ is provided in (20):

(20) Ukrainian\textsuperscript{23,24}
… Zamknuti v mene dveri, Začyneno vikno.
locked:PL at me door:PL closed:NEUT window:NEUT
‘… my door is locked, the window is closed.’

As Shevelov notes, the fact that Ukrainian -no/-to continued to function for some time
as an agreeing NEUT.SG participle explains a poorly understood apparent expletive
construction with the pronoun vono ‘it:NEUT.SG’. Sulyma (1929) notes four instances of
vono appearing with -no/-to in the works of Lesia Ukrainka (see also Synjavs’kyj
1967:200). Such instances of -no/-to patterning with vono, rather than its ACC form joho,
are taken as evidence of the former’s expletive status (cf. Billings 1993). The idea is that
vono appears in an anomalous caseless form due to its non-thematic, non-referential
status. If it were a NEUT.SG referential pronoun, it would obligatorily appear in the
expected ACC. Under Shevelov’s analysis, vono is a standard referential NEUT.SG pronoun
appearing in the NOM and agreeing with the passive-participial predicate. It is thus no
coincidence that the four instances of vono + -no/-to discussed by Sulyma all have

\textsuperscript{21} Matvijenko (1936:71) came to the same conclusion on the basis of agreeing, NEUT -no/-to examples in
the (early-20th century) poetry of Lesia Ukrainka.

\textsuperscript{22} That is, according to Shevelov (1969), Oles’ did not use the -no/-to + ACC structure at all.

\textsuperscript{23} Following Shevelov’s (1969) hypothesis, the participle in the second clause of (20) is glossed as an
agreeing form.
This observation will have important consequences for the analysis of the syntax of Ukrainian -no/-to in section 3.4, where it will be argued that Ukrainian lacks overt (or covert) expletives of any kind, and that the EPP-feature of T is correspondingly satisfied by syntactic raising of an internal non-NOM constituent.

Examples of Lesia Ukrainka’s use of *vono + -no/-to* (discussed in Sulyma 1929) are given in (21):

(21) Ukrainian

a. *V c’omu biblijnomu opovidanni, xoč vono zapysano bahato in this biblical story:NEUT although it:NOM.NEUT written:NEUT much píznisë..., my bačymo takyj samyj svitohljad... later we see same viewpoint* 

   ‘In this biblical story, although it was written much later, we see the same point of view.’ [Sulyma 1929:58]

b. *Ce pojasnennja vdalosja jomu dosyt’ dobre; može tomu, ščo this explanation:NEUT succeededhim:DAT quite well perhaps because vono pryloženo do narodu z pevnym temperamentom. it:NOM.NEUT applied:-NO to a-peoplewith certain temperament* 

   ‘He was quite successful with this explanation perhaps because it was applied to a people with a specific temperament.’ [Sulyma 1929:58]

It was mentioned earlier that auxiliary facts would play a prominent role in the analysis to follow on the differences between Polish and Ukrainian -no/-to. The crucial fact here is the cooccurrence of -no/-to and overt auxiliaries in Ukrainian versus their non-cooccurrence in Polish. This subsection has been concerned with the problem of identifying precisely when this fundamental difference began to manifest itself. We can conclude that Ukrainian -no/-to began to diverge here from its Polish counterpart only recently (that is, in the 20th century), though, to be sure, there is no doubt that the cooccurrence of -no/-to and auxiliaries in present-day Ukrainian (cf. (3)) only provides

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24 The present-tense auxiliary in Ukrainian (like Russian) is a null form.
overt syntactic evidence of a difference between the -no/-to constructions in the two languages that was already present at a much earlier stage. In fact, there is no reason to assume that the two constructions ever shared the same underlying syntax. What we are getting at here is the single primitive property that distinguishes Polish and Ukrainian -no/-to. It is not that one is “active” and the other “passive”, as is often (correctly) pointed out (see, e.g., the position taken in Billings & Maling 1995 and Franks 1995). Instead, as has been mentioned numerous times, the claim here (to be made explicit in section 3.2) is that the fundamental difference from which all other well-known properties of Polish and Ukrainian -no/-to follow is the status of the /-no/-to/ morpheme in the two languages. By hypothesis, Polish /-no/-to/ is itself an auxiliary element. Evidence for this analysis so far comes from the historical fact, discussed in 3.1.2, that the Polish erstwhile NEUT.SG nominal declension marker came to pattern with ACC objects productively only after it ceased to cooccur with the auxiliaries było:PAST, będzie:FUT, and jest:PRES. For Ukrainian, the cooccurrence of -no/-to and auxiliaries (albeit, a recent development) rules out the analysis suggested for Polish.26

25 It is interesting to note that the two instances of vono + -no/-to discussed in Shevelov 1963:145 also have NEUT.SG antecedents (a third example has no discernable reference). Shevelov’s (1963) analysis of these instances of vono as pleonastic is revised in Shevelov 1969.
26 There is no evidence that in contemporary Ukrainian -no/-to continues to take part in personal, agreeing predicates, though the /-no/-to/ morpheme has the additional function of marking default agreement in those instances when the subject of a personal participial predicate lacks agreement features, as in the case of quantified NPs and predicates that take clausal or PP complements (See Billings 1995 for discussion). In the case of quantified NPs, the morphological marking is homophonous for NOM and ACC, and, as a result, it is difficult to tease apart default agreement on a NOM subject from -no/-to + ACC. In contrast, Polish does not select -no/-to for similar instances of default agreement. This issue will be taken up in section 3.2.2
3.1.2.2 Excursus on -no/-to in Belarusian

Before proceeding, let us briefly consider -no/-to in Belarusian. It will be recalled that from an areal-linguistic perspective, Belarusian must also be considered a candidate for some version of -no/-to as borrowed from Polish. Recall from (18) that -no/-to + ACC was indeed attested in Old Belarusian. In the modern language -no/-to is found strictly in dialects. It was noted earlier that Old Belarusian, like Old Ukrainian, borrowed the surface syntax of the Polish -no/-to from the 15th - 17th centuries. Use of tense-marking auxiliaries in Old Belarusian is reported as rare (Karskij 1956:317 and Bulaxaũ 1957:378). In modern dialects, Belarusian -no/-to does occur with auxiliaries, a fact which distinguishes Belarusian from Polish, and links the former with present-day Ukrainian. Examples of Belarusian dialectal -no/-to are given in (22).

(22) Belarusian dialects

   a. Tjabe stračeno bylo
      you:ACC lost:-NO AUX:PAST
      ‘You were lost.’ [Karskij 1956:318]

   b. I prybeh až do Lavana, tut bylo jaho spatkana.
      and he-ran PRT to Lebanonhere AUX:PAST him:ACC met:-NO
      ‘He got as far as Lebanon and there he was met.’ [Bulaxaũ 1957:379]

   c. Xatu šče dzadam pastaũlaena.
      house:ACC still grandfather:INST built:-NO
      ‘The house was built back then by my grandfather.’ [Matveenko 1960:352]

In the standard language, the /-no/-to/ morpheme appears only in instances of default agreement, patterning with the rest of East Slavic (Russian and Ukrainian), and in

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27 Note in (22a) that Karskij (1956) diverges from present-day orthographic practice in Belarusian by spelling the unstressed word-final reduced (akan’ê) form on the participles as -o, rather than the pronounced form [-a]. Karskij 1956 was originally published in 1911, before Belarusian orthography was standardized (see Mayo 1993:888-889). Note that there were no examples of end-stressed dialectal -no/-to forms in the sources consulted.
contrast to Polish. The example from standard Belarusian in (23) contains default agreement on the underlying object by virtue of its partitive GEN marking:

(23) Belarusian

U valasy jae naŭtykana kvetak ne dzelja xarastva, in hair her pinned:-NO flowers:GEN NEG for-the-sake of-beauty
a dzelja svavol'stva. but for-the-sake of-fun
‘Flowers are pinned in her hair not for the sake of beauty, but just for fun.’

[Atraxovič et al. 1966:437-438]

Given the use of -no/-to in Old Belarusian and its continued appearance in dialects, it is reasonable to ask why -no/-to + ACC did not become part of the standard language, along the lines of Ukrainian. It will be recalled from section 3.1.1 that in the case of Ukrainian two crucial developments converged: (i) the initial LF (pronominal) forms were contracted resulting in a new set of monosyllabic predicative adjectival and participial endings; and (ii) the SF endings were not continued in productive predicative use. A characteristic feature of Belarusian is the use of LF (pronominal) adjectives and participles in the predicative position. But unlike the case in Ukrainian, these LF participles have not contracted (see (9d)) and their wider use to include both attributive and predicative functions has not led to a substantially diminished use of the SF declension. So Belarusian diverges from Ukrainian in the following two ways: (i) the initial (Common Slavic) set of LF endings is retained (i.e., Belarusian does not have a new set of monosyllabic predicative participles); and (ii) SF participles continue to appear productively in agreeing structures.28 Thus Belarusian minimally differs from Ukrainian in maintaining the canonical inflectional status of SF NEUT.SG /-o/, while

28 The distribution of SF vs. LF participles in predicative position in Belarusian lacks the strict uniformity found in Ukrainian and Polish. The LF for MASC.SG is obligatory (SF /-ø/ is thus indeed isolated, but unlikely to be reanalyzed due to its zero phonetic status); the LF of FEM.SG and PL is in apparent free
Ukrainian SF NEUT.SG /-o/ was morphologically isolated in a non-productive inflectional paradigm and reanalyzed as a derivational morpheme stripped of its agreement features.\textsuperscript{29}

3.1.3 The Basis for Reanalysis

The point of reanalysis of the erstwhile NEUT.SG /-o/ can be isolated in the following hypothetical examples from Polish in (24). Note that the surface form of the participle is unchanged, though the gloss indicates that the word-final morphology is analyzed differently in the two forms. Under the hypothesis being constructed, the difference in the way in which the word-final morphology is analyzed follows from the auxiliary facts, also indicated in the examples. That is, in (24a) the AUX:PAST appears obligatorily, while in (24b) it is obligatorily absent.

(24) /-o/:\textsc{I}({\textsc{NEFLECTIONAL}}) > /-o/:\textsc{D}({\textsc{ERIVATIONAL}})

a. Old Polish (pre-14\textsuperscript{th} Cent.): Canonical Passive
   
   \begin{align*}
   \text{Okno} & \quad \text{* (bylo)} \quad \text{zamknię - t- o} \\
   \text{window:} & \quad \text{NOM.NEUT.SG AUX:PAST closed:} \quad \text{D I:NEUT.SG}
   \end{align*}

b. Modern Polish (post-17\textsuperscript{th} Cent.): -\textsc{no/-to}
   
   \begin{align*}
   \text{Okno} & \quad \text{* (bylo)} \quad \text{zamknię - to} \\
   \text{window:} & \quad \text{ACC AUX:PAST closed:} \quad \text{D (= -TO)}
   \end{align*}

   ‘The window was closed.’

Wieczorek (1994:53) notes that in contrast to the implied human-agency reading in Polish (24b), the interpretation in Ukrainian (25) is ambiguous between that of an implied

\textsuperscript{29}Note that the claim that Ukrainian -\textsc{no/-to} is stripped of its agreement features is significant for the feature-checking analysis that will be pursued in section 3.4. If -\textsc{no/-to} were assumed to project agreement features in the syntax, an analysis would be forced in which an expletive subject (overt or null) would have to be available in the syntax to check these features. Argumentation presented throughout the chapter against expletive subjects for Ukrainian -\textsc{no/-to} suggests the /-o/:\textsc{I}({\textsc{NEFLECTIONAL}}) > /-o/:\textsc{D}({\textsc{ERIVATIONAL}}) reanalysis.

\footnote{Note that the claim that Ukrainian -\textsc{no/-to} is stripped of its agreement features is significant for the feature-checking analysis that will be pursued in section 3.4. If -\textsc{no/-to} were assumed to project agreement features in the syntax, an analysis would be forced in which an expletive subject (overt or null) would have to be available in the syntax to check these features. Argumentation presented throughout the chapter against expletive subjects for Ukrainian -\textsc{no/-to} suggests the /-o/:\textsc{I}({\textsc{NEFLECTIONAL}}) > /-o/:\textsc{D}({\textsc{ERIVATIONAL}}) reanalysis.}
human agent (= passive) and a spontaneous, uncontrolled “inchoative” or “anticausative” (= middle).

(25) Ukrainian
Vikno začyneno.
window:ACC closed:-NO
‘The window has been closed’ (passive)
‘The window closed’ (middle)  [adapted from Wieczorek 1994:53]

In a truly explanatory analysis of Polish and Ukrainian -no/-to this optional difference in interpretation between (24a) and (25) would be linked to the differences we have seen in this section regarding the distribution of the auxiliary. To anticipate the discussion in section 4.2, the analysis of Polish /-no/-to/ as an auxiliary holds that the Polish construction lacks any “voice-altering” morphology. In contrast, (25) shows that Ukrainian still has a “voice-altering” morpheme. Thus, while /-ol/ ceases to function in its initial inflectional capacity to mark agreement in both Polish and Ukrainian, the reanalysis process in the two languages diverges in other, more significant ways. The difference is schematized in (26), where Polish /-no/-to/ is now a single, unanalyzable morpheme, while /-no/-to/ in Ukrainian consists of two distinct derivational suffixes (recall that D = derivational and I = inflectional morphology).


What /-no/-to/ shares in both Polish and Ukrainian is the property of nonagreement. The basis for the reanalysis that we have seen in this section is the change in /-ol/’s featural composition. This change was shown to be motivated (or at least made possible)…

30 Recall that AUX:PRES in Ukrainian is phonologically null. For reasons that are unknown to me, use of an overt (PAST) auxiliary in (25) implies human agency. The passive / anticausative ambiguity is thus sharpest in the case of the PRES auxiliary.

31 This predicts that the subject position in Polish -no/-to not “dethematized” in the traditional GB voice-altering sense.
by strictly phonological developments that conspired to admit Polish and Ukrainian, while excluding Belarusian. The fact that the development of -no/-to + ACC in Old Polish coincided with the loss of tense-marking auxiliaries (in contrast to the canonical passive in which they were obligatory) raises the question of whether these two developments are related. The distributional facts of Polish -no/-to discussed in section 3.2 provide positive evidence that the reanalysis of /-o/ and the loss of the auxiliary in -no/-to are both part of a single, unified phenomenon. Ukrainian -no/-to will be shown to minimally differ in this respect and to involve, as a result, a much less “radical” reanalysis.

3.2 Polish -no/-to as an Inflectional Head

It has now been established that the erstwhile NEUT.SG inflectional ending /-o/ from the old nominal declension of adjectives and participles has been reanalyzed in Polish and Ukrainian as (part of) the marker of a new nonagreeing predicate type, with properties radically different from the canonical passives with which they are related diachronically. The proposal that will be pursued in this section is that /-no/-to/ in Polish is no longer passive-participial, but has taken over the function of a tense-marking auxiliary. This proposal will be referred to as the AUX HYPOTHESIS. Under the AUX HYPOTHESIS an impressive array of seemingly unrelated, anomalous facts of Polish -no/-to will be accounted for in a unified manner. The wide empirical coverage of this hypothesis will be taken as positive evidence supporting it. Along the way we will see that the AUX HYPOTHESIS consistently distinguishes Polish -no/-to from its Ukrainian counterpart. This will be taken to indicate that the status of the /-no/-to/ morpheme is precisely the point on

32 In (26) -N- represents both /-n-/ and /-t-/.
which Polish and Ukrainian -no/-to differ. This is a welcome result in a theory that claims that all crosslinguistic variation is reducible to the morphological features of lexical items.

Given the AUX HYPOTHESIS for Polish -no/-to, the ACC case assigning property of this predicate will not present a problem for crosslinguistic characterizations of passivization. The verb-stem assigns ACC in the regular way; the /-no/-to/ auxiliary is “indifferent” to this case assigning property. The question for Ukrainian is more complex. It will be recalled that /-n/-t-/ in Ukrainian is still passive-participial and by Burzio’s Generalization is expected to “block” ACC case assignment as a result of the dethematization of the external theta role. The focus of this section is to argue the AUX HYPOTHESIS for Polish and, in the process, to demonstrate that such an analysis fails for Ukrainian. The question of -no/-to + ACC in Ukrainian will be taken up in section 4.3 in the context of a discussion of the broader crosslinguistic passivization literature.

The AUX HYPOTHESIS for the reanalysis of Polish -no/-to is represented in the abbreviated structures in (27). Note that the AUX of pre-14th century Polish and the /-no/-to/ of post-17th century Polish occupy the same position in the tree “abstractly”. To be sure, /-nol/-to/ in (27b) does not literally occupy the same position as the auxiliary in (27a) since the former is merged as a bound morpheme (as an historical artifact) and thus enters the derivation under V. 33 As a result, there is no V to T movement in the syntax. The idea is that although the -no/-to predicate in (27b) enters the derivation fully-formed, the word final (/-nol/-to/) morphology is interpreted as heading T. 34

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33 The notion of occupying a position in the tree “abstractly” is borrowed from Baker 1988:311-312.
34 A full analysis of the syntactic structure of Polish and Ukrainian –no/-to is discussed in section 3.4.
The structure in (27a) is a derived unaccusative. The underlying object moves to Spec,TP where it immediately enters into a checking relationship with agreeing T headed by a tense-marking auxiliary. In (27b), external pro-arb is merged into a syntactic position as the Spec of the “light verb” v, the functional projection dedicated to hosting the external argument. T is headed by nonagreeing /-no/-to/. It will be proposed in section 4.4 that the pro-arb subject subsequently moves to Spec,TP to check T’s EPP-feature. Note in (27b) that ACC case on the object and the external theta role associated with the subject both fall out automatically from the AUX HYPOTHESIS, without having to stipulate case or theta-role “absorption” since there is no passive morpheme attached to the verb-stem. Note also that the lack of passive-participial morphology, under the AUX HYPOTHESIS, predicts that Polish -no/-to should pattern with unaccusatives, reflexives, and Experiencer-Theme (psych-) verbs, none of which form canonical passives.

3.2.1 The AUX HYPOTHESIS and Unaccusativity

We now turn to a discussion of the distributional facts of Polish -no/-to that bear on (and, indeed, support) the AUX HYPOTHESIS. Examples will be given for both Polish and Ukrainian in order to demonstrate that the AUX HYPOTHESIS holds for Polish only. The
evidence in this section comes from a variety of unaccusative verbs. In some instances, the Polish and Ukrainian facts will lead to a sharper analysis of certain unaccusative predicate-types, particularly in the case of psych verbs.

3.2.1.1 Semantic Unaccusatives

There are three types of unaccusative verbs that appear to permit -no/-to formation in Polish: (i) semantically-unaccusative verbs in the sense originally discussed in Perlmutter 1978 and Perlmutter & Postal 1984a within the framework of Relational Grammar (RG);\(^{36}\) (ii) Object-Experiencer psych verbs, putative “di-unaccusatives” under the analysis of Experiencer-Theme verbs in Belletti and Rizzi 1988; and (iii) derived Subject-Experiencer verbs (i.e., the Refl variant of (ii)). The first type will be discussed in the present section and the latter two in sections 3.2.1.2 and 3.2.1.3, respectively.

Semantically-unaccusative verbs are intransitives that select an underlying object (or internal argument) and no subject (or external argument) (\([V_P V NP]\)). They are usually contrasted with unergative verbs, which take an underlying subject and no object (NP \([V_P V]\)). Prototypical semantically-unaccusative verbs include burn, sink, boil, melt, freeze, wither, and die.\(^{37}\) Rozwadowska (1992) shows that the assumed (pro-arb) subject of Polish -no/-to predicates is obligatorily [+sentient] (in the sense of Dowty 1991) and,

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\(^{35}\) I am grateful to Bożena Cetnarowska for extensive discussion of the Polish data in this section. Examples not attributed to other sources are hers.

\(^{36}\) The term “semantic unaccusativity” is used to refer to those verbs whose status as unaccusatives was argued in Perlmutter 1978 to be fully predictable on the basis of the verbs’ meaning. This idea is formalized in the Universal Alignment Hypothesis (Perlmutter & Postal 1984a:97), which states: “There exist principles of universal grammar which predict the initial relation borne by each nominal in a given clause from the meaning of the clause”.

\(^{37}\) Rosen (1984) notes that verbs with similar meanings may vary with respect to whether or not they are classified as unaccusatives in a given language. We assume some sense of “canonical” semantic unaccusativity for the purposes of this section. See Cetnarowska 1999 for discussion of unaccusativity in Polish.
thus, obligatorily [+human].

This constraint, argued in Maling 1993 to be a typical property of nonagreeing predicates crosslinguistically, has the effect of ruling out -no/-to formation from unaccusatives such as burn, boil, melt, and wither. Indeed, Wolinśka (1978:67) shows that such verbs are indeed ungrammatical in -no/-to (*kipiano ‘boiled’, *zwiednięto ‘wilted’), but note that these unaccusatives in -no/-to are ungrammatical for the same reason that unergative ‘bark’ (*szczekano) and ‘chirp’ (*ówierkano) are: they violate the [+sentient] constraint and, as a result, are incompatible with the pro-arb reading.

For reasons that are not entirely clear, perfective unaccusatives also result in ungrammatical -no/-to predicates. We may assume that this restriction on perfectives is related to the unavailability of a generic subject: the derived subject of perfective unaccusatives is inherently referential (or at least more referential than the derived subject of imperfective unaccusatives). This type of explanation predicts that some sort of constraint on Polish -no/-to from perfective verbs should apply more generally to unergatives and other predicate types, which, as we will see, is exactly the case. It is noteworthy that impersonal passives in Dutch, which according to Maling 1993 have the same pro-arb interpretation that is being proposed for Polish, are also sensitive to the aspectual choice of the verb (or to the notion of [+/- telicity]) (see Zaenen 1993:137-142).

That is, the pro-arb interpretation of the impersonal passive in Dutch shows a strong

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38 In Dowty’s (1991) system of Proto-Role entailments, sentience is defined as conscious awareness with respect to the event or state denoted by the verb. Note that each entailment, in Dowty’s system, can occur in isolation of the others and, thus, is potentially independent. This is important for an analysis of Polish -no/-to since it teases apart the relevant entailment of pure sentience from the irrelevant entailments of volitionality, agentivity, and causation, without reference to a prototypical external theta role.

39 I thank Steven Franks and Bożena Cetnarowska for discussion of this point. The question of -no/-to formation from perfective unaccusatives is discussed in print in Cetnarowska 1999 and Śpiewak & Szymańska 1997.
preference for verbs that are [-telic] (=imperfective), regardless of how such verbs are classified with respect to unaccusativity.\(^{40}\)

The examples in (28) show that -no/-to formation in Polish is productive from imperfective semantic unaccusatives with an underlying [+sentient] derived subject.\(^{41}\)

(28) Polish Unaccusative -no/-to
a. Umierano tam tysiącami na tyfus.
   died:-NO there thousands:INST on typhus
   ‘People died there in thousands from typhus.’ [Spiewak & Szymańska 1997:150]

b. Tönęto / topiono się\(^{42}\) w morzu, a nie w wannie.
   drowned:-TO drowned:-NOREFL in sea and not in bathtub
   ‘People drowned in the sea, not in a bathtub.’ [Rozwadowska 1992:62]

c. Bywano w teatrze raz na miesiąc.
   been:-NO in theater once per month
   ‘People had been to the theater once a month.’

The corresponding imperfective unaccusatives in Ukrainian -no/-to are ruled out:

(29) Ukrainian Unaccusative -no/-to
   *umerano / *toneno / *buvano
   died:-NO drowned:-NO been:-NO

The (abbreviated) structure that is assumed for (28) is given in (30):

(30) Polish Unaccusative -no/-to

```
TP
  T   VP
     -no/-to V- pro-arb
```

The assumption made here regarding the understood subject is that it is forced to appear as pro-arb due to the lack of inflectional features on the verb-stem. A full-fledged

\(^{40}\) Cf. Perlmutter 1978, where it is argued that impersonal passive formation in Dutch is limited to unergative verbs only.

\(^{41}\) Note that Polish -no/-to has an obligatory past-tense reading. This specification for tense is further evidence for the AUX HYPOTHESIS.

\(^{42}\) The question of the cooccurrence of Polish -no/-to and REFL się will be taken up in section 3.2.1.3.
syntactic object with a set of phi-features cannot converge at the interfaces in the absence of a corresponding head in the functional layer of the tree against which these features can be checked.

As mentioned above, the perfective form of Polish \textit{-no/-to} is degraded for unergatives as well (and is thus not a constraint on unaccusatives per se):

(31) Polish Unergative
   a. Finite Perfectives
      \begin{tabular}{ll}
      Ktoś & biegł / płynął / skoczył. \tabularnewline
      someone:NOM & ran / swam / jumped \\
      \end{tabular}
   b. Polish \textit{-no/-to}: Perfective
      \begin{tabular}{ll}
      run:-TO & swum:-TO \tabularnewline
      \end{tabular}
   c. Polish \textit{-no/-to}: Imperfective
      \begin{tabular}{ll}
      run:-NO & swum:-NO \tabularnewline
      \end{tabular}

The contrast between Polish and Ukrainian \textit{-no/-to} formed from unaccusative verb-stems (that is, the contrast between (28) and (29)) is our first piece of distributional evidence in favor of the AUX HYPOTHESIS for Polish. If the Polish /-no/-to/ morpheme were involved in passivization, the examples in (28) would be ruled out (as they are in Ukrainian) by any of a series of generalizations, laws, and principles designed to block passivization of unaccusatives. The 1AEX-Law of RG (Perlmutter and Postal 1984a), for example, which states informally that there can be only one “advancement” to subject per clause, would rule out the examples in (28) on the basis of the fact that after the process of “unaccusative advancement”, a subsequent advancement would be necessary to “suppress” the derived external argument. This is related to RG’s Motivated Chômage Law which states that there can be no demotion without a corresponding promotion (Perlmutter and Postal 1984a). In this case the second advancement would be that of a
pleonastic “dummy” which is inserted into object position precisely for this purpose. Marantz’s (1984) principle of “vacuous dethematization” would rule out the examples in (28) on the basis of the fact that the passive morpheme redundantly targets an initial non-thematic subject position for dethematization. On the theory of Baker, Johnson & Roberts (1989), in which the passive morpheme is taken as an argument that is (normally) assigned the external theta role, the unaccusative examples of -no/-to in (28) would stand in violation of the Theta-Criterion. These structures have no external theta role to assign. Under the analysis in which Polish /-no/-to/ is no longer passive-participial (that is, under the AUX HYPOTHESIS), these filters on illicit passive structures cease to apply.

3.2.1.2 Object-Experiencer Verbs

Object Experiencer (ObjExp) verbs are described in Belletti and Rizzi 1988 as consisting of two internal arguments and a non-thematic subject position. For this reason they are referred to as “di-unaccusative”. Under Belletti and Rizzi’s analysis, the Experiencer is assigned inherent ACC or DAT, while the Theme argument cannot receive structural case VP-internally and is forced to raise to the NOM subject position in the same way that other unaccusative objects do. The actual details of case assignment here need not concern us. Our main concern is to establish whether canonical passivization of ObjExp verbs in Polish yields results that differ from -no/-to formation. Failure of ObjExp verbs to undergo passivization will be taken as evidence in support of an unaccusative analysis for such predicates, in which case ObjExp verbs will be considered an appropriate testing ground for the AUX HYPOTHESIS. It will be recalled that treating Polish /-no/-to/ as an auxiliary element predicts that -no/-to formation, unlike passivization, should hold of any predicate type, regardless of its underlying argument structure. It will be shown that the
licit formation of Polish -no/-to from ObjExp verbs bears out this prediction and provides a second instance of -no/-to formation from unaccusatives.

3.2.1.2.1 ACC ObjExp Verbs

Examples of ACC ObjExp verbs from Polish are given in (32):\(^{43}\)

(32) Polish ACC ObjExp Verbs

a. Dziennikarze zmartwili Jana wiadomościami z Polski.
   journalists:NOM.PL upset:PL Jan:ACC news:INST from Poland
   ‘The journalists upset Jan with news from Poland.’

b. Fizyka przerażała Jasia w szkole.
   physics:NOM frightened Jasi:ACC in school
   ‘Physics frightened Jasi in school.’

Let us note immediately that the NOM subject in (32a) is not agentive.\(^{44}\) Use of the ObjExp verbs as a diagnostic for the status of /-no/-to/ will require that a subtle distinction be made between a [+sentient] internal Theme and a full-fledged external Agent. The more straightforward examples of ObjExp predicates, such as (32b), will be ruled out for -no/-to formation on independent grounds: inanimates (‘physics’) are [-sentient] and, thus, are incompatible with the pro-arb interpretation (the exact source of which, to be sure, is a mystery). The ungrammatical -no/-to form of (32b) is given in (32c):

(32c) a. *Przerażono Jasia w szkole.
   frightened:−NO Jasi:ACC in school
   ‘Jasi was frightened in school.’ [Śpiewak & Szymańska 1997:148]

\(^{43}\) In the discussion to follow we will distinguish ObjExp verbs that take an ACC object from those that take a DAT object. We will see that only DAT ObjExp verbs are uncontroversially unaccusative crosslinguistically since they pattern with non-causative Themes. Note, however, that ACC ObjExp predicates will be shown to be unaccusative as well.

\(^{44}\) To be sure, at first blush, the surface subject does appear to be the Agent, especially with the INST adjunct. The failure of (32a) to undergo verbal passivization in (33b) will be taken to indicate that the surface subject is still a Theme of some sort or “Causer” (though not exactly in the sense of Pesetsky 1995, where it is claimed that the Causer is itself the external argument). That is, journalists caused Jan to be upset, but not necessarily in the controlled, volitional manner typical of Agents. The news reported by the journalists may have just as easily surprised, shocked, amused, or pleased Jan.
So for ObjExp verbs with animate underlying Themes (as in (32a)), -no/-to formation differs from verbal passivization in requiring a sentient participant, while crucially not requiring that this sentient participant be an external argument. In the spirit of Dowty 1991, where sentience is only one of several “proto-entailments” for the Agent “Proto-Role”, it follows that the [+sentience] requirement imposed by -no/-to formation may be instantiated in the absence of an external theta role. The facts in (33) based on the ObjExp verb in (32a) bear this out. The licit -no/-to form in (33a) is contrasted with the degraded passive in (33b). These facts are repeated in an additional example in (34).\footnote{The fact that ObjExp verbs in Polish do not form verbal passives is noted in Holvoet 1991:63.}

(33) Polish acc ObjExp Verb
a. -no/-to
   Zmartwiono Jana wiadomościami z Polski.
   upset:NO Jan:ACC news:INST from Poland
   ‘They upset Jan with news from Poland.’

   b. Verbal Passive
   ?? Jan został zmartwiony przez dziennikarzy.
   Jan:NOM.MASCAUX:PAST.MASC upset:MASC by journalists:ACC
   ‘Jan was upset / saddened by journalists.’

(34) Polish acc ObjExp Verb
a. Active
   Dzieci ucieszyły rodziców lepszymi stopniami.
   children:PL delighted:PL parents:ACC better grades:INST
   ‘The children delighted their parents with better grades.’

   b. -no/-to
   Ucieszono rodziców lepszymi stopniami.
   delighted:NO parents:ACC better grades:INST
   ‘Parents were delighted with the better grades.’

   c. Verbal Passive
   ?? Rodzice zostali ucięszeni przez dzieci.
   ‘The parents were delighted by the children.’
To review, the central idea here is that the status of the non-Experiencer argument with respect to [+/- sentience] and [+/- volitionality] is directly reflected in the -no/-to and passivization facts given in (33-34). The strong claim is that [+sentience] alone is capable of licensing -no/-to formation, or more precisely, licensing the pro-arb interpretation of -no/-to (Rozwadowska (1992:64) reaches a similar conclusion).

Let us note, before proceeding, that under Pesetsky’s (1995) analysis of ObjExp verbs, the non-Experiencer argument, his “Causer”, is made the predicate’s external argument by means of zero causative morphology. Thus, on Pesetsky’s theory, the differences we have found in the distribution of -no/-to versus passivization cannot be understood in terms of unaccusativity. If ObjExp verbs have a full-fledged external argument, as Pesetsky claims, the contrast in grammaticality that we saw in (33-34) would be mysterious and the argument that such contrasts make for the AUX HYPOTHESIS would be obscured. Pesetsky takes passivization facts such as those given in (35-36) from English as evidence for the external Causer role. Here the Experiencer is promoted to NOM subject and the Causer appears optionally in a by-phrase:

(35) Passivization of ObjExp Verb
   a. Active
      Strange noises frighten Bill.
   
   b. Passive
      Bill was frightened by strange noises.

(36) Passivization of ObjExp Verb
   a. Active
      My remarks worried John.
   
   b. Passive
      John was worried by my remarks.  [Pesetsky 1995:22]
The possibility of passivizing ACC ObjExp verbs has also been argued for Russian (King 1994, Legendre & Akimova 1994, and Billings to appear). Here, the Causer-Theme in (37a) appears in the INST in (37b), the case used in Russian for passive by-phrases:

(37) Russian: Passivization of ACC ObjExp Verb
   a. Active
   Ploxa ja otmetka ogor čila studenta.
   bad grade: NOM.FEM upset: FEM student: ACC
   ‘The bad grade upset the student.’

   b. Passive
   Student byl ogor čen ploxoj otmetkoj.
   student: NOM.MASC AUX: PAST.MASC upset: MASC bad grade: INST
   ‘The student was upset by the bad grade.’ [King 1994:120]

In the example in (38), however, the “by-phrase” posited in (37b) occurs VP-internally, suggesting that INST ploxoj otmetkoj need not be related to an initial external (Causer) argument, but instead may bear an internal theta role linked by means of an oblique case or preposition.

(38) Russian
   Student ogor čil -sia ploxoj otmetkoj.
   student: NOM.MASC became-upset: MASC REFL bad grade: INST
   ‘The student got upset with the bad grade.’

The INST argument in (37b) is thus ambiguous between a by-phrase and an internal-argument reading. Note that in the case of Polish these two readings are distinguished morphologically since the passive by-phrase, as we have seen, does not rely on oblique case marking used elsewhere in the language to identify internal arguments. As we see in (39), ACC ObjExp verbs (at least in Polish) do not passivize:

(39) Polish ACC ObjExp Verb
   a. Active
   Zła wiadomość zmartwiła Jana.
   bad news: NOM.FEM upset: FEM Jan: ACC

---

46 Recall that -no/-to from (39a) is blocked trivially by the inanimate subject.
‘The bad news upset Jan.’

b. Verbal Passive

* Jan został zmartwiony przez złą wiadomość.
  Jan:ACC MASC AUX:MASC upset:MASC by bad news:ACC
  ‘Jan was saddened by the bad news.’

Note that Polish forms the stative (adjectival) passive in (39c) (with the stative AUX:PAST 
był-), which patterns with the Russian predicate in (37b); the Causer-Theme bears 
inherent INST, which crucially is not a marker of the by-phrase in Polish verbal 
passives:67

c. Stative Passive

Jan był zmartwiony złą wiadomością.
  Jan:MASC AUX:MASC upset:MASC bad news:INST
  ‘Jan was upset by the bad news.’

The inability of (39b) to passivize, just as we saw with the ObjExp verbs in (33c) and 
(34c), suggests that the unaccusative hypothesis for such predicates is correct for Polish, 
providing crosslinguistic support for Belletti and Rizzi’s (1988) original analysis (see 
also Grimshaw 1990).68 Thus it appears that there is good reason to view the ACC ObjExp 
verb class as constituting another group of unaccusatives that bear out the prediction 
made regarding the /-no/-to/ morpheme in Polish, namely, that it is not restricted with 
respect to the argument structure of the verb-stem to which it attaches.69

67 In the framework of Babby 1994a and 1998a, ObjExp psych verbs such as Polish (39) are “demiactives”: 
their argument structure consists of two internal arguments; the “active” form in (39a) is actually derived 
by means of the externalization of the indirect internal argument. The indirect internal argument occupies 
its initial position only in the stative passive in (39c).

68 Grimshaw (1990:30-43) argues that the surface subject of ObjExp verbs is not an external argument. It is 
thematically internal, but linked to the subject position by virtue of its “aspectual prominence”. In 
Grimshaw’s system, when a predicate fails to select a full-fledged external theta role, the question of which 
argument gets realized as subject is determined by an aspectual hierarchy, on which causativity is most 
prominent. In contrast to an internal causative Theme (Pesetsky’s “Causer”), an “underived” external theta 
role is most prominent on both the aspectual and thematic dimensions. Grimshaw’s analysis states that 
certain morpholexical operations such as verbal passivization refer to such underived external arguments 
only. This correctly predicts the facts for passivization of ObjExp verbs in Polish.

69 Recall that under the AUX HYPOTHESIS Polish /-no/-to/ attaches morphologically as an historical artifact; 
in the syntax it heads the distinct functional category, T (abstractly).
It might be objected, however, that the fact that the verbal passives in (33c) and (34c) (with animate Themes) are degraded only marginally, while the verbal passive in (39b) (with an inanimate Theme) is fully degraded, points to an inconsistency in the argument presented. Note that the verbal passive in Polish ObjExp verbs is possible to the extent that a [+volitional] (agentive) reading is available on the non-Experiencer argument, rather than just the [+sentient] reading that is necessary for -no/-to. In (33-34) it is the [+volitional] reading that is marginal. It is interesting to note that in the case of other ObjExp, in which the agentive reading can be explicitly forced, the verbal passive is well-formed.\textsuperscript{50} This is illustrated in (40-41):

(40) Polish Agentive ObjExp Verb
a. Active
\begin{verbatim}
Przeciwnik zdenerwował Piotra przed wejściem na lodowisko.
 opponent:NOM,MASC irritated:MASC Piotr:ACC before entry on skating-rink
\end{verbatim}
‘The opponent irritated Piotr before his entry onto the rink.’

b. Verbal Passive
\begin{verbatim}
(?) Piotr został celowo zdenerwowany przez Piotr:NOM,MASC AUX PAST,MASC deliberately irritated:MASC by svojego przeciwnika przed wejściem na lodowisko.
REFL,POSS opponent:ACC before entry on skating-rink
\end{verbatim}
‘Piotr was deliberately irritated by his opponent before entering the rink.’

(41) Polish Agentive ObjExp Verb
a. Active
\begin{verbatim}
Anna mię rozśmieszyła i nie mógłem wygłosić referatu.
 Anna:NOM,FEM me:ACC amused:FEM and NEG could:1SG deliver lecture:GEN
\end{verbatim}
‘Anna made me laugh and I couldn’t give my talk.’

b. Verbal Passive
\begin{verbatim}
(?) Zostałem celowo rozśmieszony przez Annę i nie AUX,PAST,1SG,MASC deliberately amused:MASC by Anna:ACC and NEG could:1SG deliver lecture:GEN
\end{verbatim}
‘I was deliberately made to laugh by Anna and I couldn’t give my talk.’

\textsuperscript{50}The verbs \textit{zdenerwować} 'irritate' and \textit{rozśmieszyć} 'amuse' can be said to exhibit ‘variable behavior’ with respect to unaccusativity in the sense of Levin & Rappaport Hovav 1995:179-214.
Let us now turn briefly to the ACC ObjExp verbs in Ukrainian. Given our assumptions that the AUX HYPOTHESIS does not hold for Ukrainian and that the /-n/-t-/ passive affix has itself not been reanalyzed, the analysis of ObjExp verbs as unaccusative predicts that they will be ill-formed in Ukrainian -no/-to. This prediction will be borne out only in part; the problem is that passive-participial morphology is not always involved in passivization (see Babby 1993 for discussion). It follows that while -no/-to has been shown to appear in canonical passive structures, it is not its dedicated function. That is, there is no requirement that Ukrainian -no/-to pattern exclusively with predicates that are passivizable. The use of Ukrainian -no/-to with the “adversity impersonal” predicates in (42) illustrates this point.51

(42) Ukrainian -no/-to: Adversity Impersonals
   a. Nyzynu zalyto vodoju.
      lowland:ACC flooded:-TOwater:INST
      ‘The lowlands are flooded with water.’ [Boljux 1992:46]
   b. Raneno v hrudy tjážko, a [ volossja til'ky obsmaleno poroxom].
      injured:-NO in chest seriously but hair:ACC only singed:-NO powder:INST
      ‘He was seriously injured in the chest, but his hair was only singed with gunpowder.’ [Arvat 1975:265]

The examples in (42) suggest the correct analysis for the contrast in the acceptability of Ukrainian -no/-to of ObjExp verbs shown in (43-44). While -no/-to formation is indeed possible in (43b), passives in -no/-to are not, as indicated by the unacceptability of the agentive by-phrase in (44b):

(43) Ukrainian ACC ObjExp Verb
   a. Active
      Nespodivani zvistky zdnyvaly Ivana.
      unexpected news:NOM.PL surprised:PL Ivan:ACC

---

51 Here I refer to Babby’s (1994a) analysis of adversity impersonals in Russian which holds that these predicates have an argument structure consisting of two internal arguments and no external one. (Recall the discussion of word order in adversity impersonals in chapter 2). Given the lack of an external theta role, such predicates fail to undergo passivization as a criterial property (Babby 1994a:49-52).
‘Unexpected news surprised Ivan.’

b. -no/-to
Ivana bulo zdyvovano nespodivanymy zvistkamy.
Ivan:ACC AUX:PAST surprised:-NO unexpected news:INST
‘Ivan was surprised by unexpected news.’

(44) Ukrainian ACC ObjExp Verb
a. Active
Žurnalisty zdyvuvaly Ivana nespodivanymy zvistkamy.
journalists:NOM.PL surprised:PL Ivan:ACC unexpected news:INST
‘Journalists surprised Ivan will unexpected news.’

b. -no/-to
*Ivana bulo zdyvovano žurnalistamy.
Ivan:ACC AUX:PAST surprised:-NO journalists:INST
‘Ivan was surprised by the journalists.’

Thus, the example in (43b) must not be a true passive if it patterns only with non-agentive internal arguments. As we saw in (42), Ukrainian -no/-to + ACC applies regardless of whether the verb-stem selects an external argument. For this reason it should come as no surprise that Ukrainian forms licit -no/-to predicates from ObjExp verbs. Analyses that attempt to capture the properties of Ukrainian -no/-to in terms of a universal characterization of passivization will fail to account for (42) and (43b), which are quite productive in the language. Examples such as these also show that Ukrainian -no/-to formation is not subject to the [+sentient] constraint that we found in Polish. This is consistent with the lack of pro-arb interpretation in Ukrainian -no/-to and is therefore to be expected. Note also that the contrast in grammaticality between (43b) and (44b) -- between a non-agentive internal INST argument and an agentive INST by-phrase -- provides further evidence in favor of treating the ObjExp verb-class as unaccusative. Otherwise the unacceptability of (44b) (and the degraded status of Polish (33b) and (34c)) would be completely mysterious.
To summarize the results of this subsection, we have seen that Polish -no/-to relies on an understood pro-arb subject that can be described as [+sentient], though this argument need not be a volitional Agent. Passivization facts were introduced to show that Polish -no/-to and the canonical passive refer to two different sets of constraints on their formation. This was taken as direct support for the AUX HYPOTHESIS for Polish -no/-to, which predicts -no/-to to combine with a wider range of predicate types than its passive counterpart. As for Ukrainian -no/-to, ObjExp facts suggest the need for a finer-grained analysis that moves beyond the simple characterization of Ukrainian -no/-to as passive (see section 4.3 for discussion). ObjExp verbs show that a non-passive Ukrainian -no/-to is possible where a passive -no/-to is not. The proper characterization for Ukrainian, supported by the adversity impersonal facts in (42), is that -no/-to allows passivization, while not requiring it. Finally, ObjExp verbs were argued to be unaccusative in both Polish and Ukrainian, contra Pesetsky 1995.

3.2.1.2.2 DAT ObjExp Verbs

ObjExp verbs with a DAT Experiencer are generally considered to be uncontroversially unaccusative. This is due to the fact that the non-Experiencer argument is not causative. It is a canonical internal Theme. Under Pesetsky’s (1995) analysis, it is the “Subject Matter” of the Experiencer’s emotion, rather than the Causer of this emotion. Under Grimshaw’s (1990) analysis, this Theme is prominent neither on the thematic nor aspectual dimensions of argument structure. Pesetsky (1995:59-60) notes that this uncontroversially unaccusative subclass of ObjExp verbs are those that inherently case-mark the Experiencer, so the Theme is believed to raise for NOM case along the lines of
other unaccusative verbs. As genuine unaccusatives, these verbs are predicted to fail passivization. Pesetsky shows this on the basis of the following English facts:

(45)  DAT ObjExp Verb  
   a. Active  
       The play didn’t appeal to Mary.  
   b. Passive  
       *Mary wasn’t appealed to by the play. [Pesetsky 1995:59]

In the case of ACC ObjExp verbs, the AUX HYPOTHESIS for Polish predicted that -no/-to formation would be possible as long as the Causer-Theme was a [+sentient] participant. With DAT ObjExp verbs, it is generally the case that the only sentient participant is the Experiencer, rather than the Theme. The question then is whether Polish -no/-to can refer to this Experiencer, i.e., a “non-final” subject, as its understood pro-arb argument. Recall that under the view that auxiliaries are functors that have no case properties of their own, they are predicted to be “indifferent” to the case properties of the of the predicate with which they compose. The AUX HYPOTHESIS thus predicts that -no/-to formation on the basis of DAT ObjExp verbs should be possible. However, the possibility of -no/-to formation from DAT ObjExp verbs appears to undermine a strictly configurational approach to the way in which the understood subject is targeted. The view that will be pursued in section 3.4 holds that -no/-to targets “final” subjects only (a condition that is generally necessary for -no/-to of unaccusatives), but crucially in a system which admits non-NOM “subjects” as long as they enter into a checking relation with T. Presumably this non-NOM argument checks T’s EPP-feature, which DAT Experiencers of ObjExp verbs regularly do -- a fact which is usually attributed to the Experiencer’s greater thematic prominence with respect to Themes (see the theta-hierarchies in Grimshaw 1990 and Pesetsky 1995). In this way, the understood pro-arb
subject of Polish -no/-to is targeted in a unified, configurational way that makes use of feature-checking to identify a predicate’s “subject”.

The Polish equivalent to English ‘appeal to’ in (45) (or Italian piacere discussed in Belletti and Rizzi 1988) is given in (46). Note that marginal -no/-to formation of this predicate is possible, as in (46b), while passivization in (46c-c’) is completely unacceptable. The example in (46b) (along with the -no/-to examples of semantic unaccusatives and basic unergatives in section 3.2.1.1) is striking because Polish passive-participial morphology generally does not combine with intransitive verbs-stems (Bąk 1977:358-361), a fact which is true for Ukrainian as well (Bilodid 1969:399-405), with different results for -no/-to.

(46) Polish DAT ObjExp Verb

a. Active
Podobało się naszym przyjaciołom w Nowym Jorku, w Washington i na całym Zachodnim Wybrzeżu.
‘Our friends liked it in New York, Washington, and the whole West Coast.’

b. -no/-to
?Podobano się w Nowym Jorku, w Waszyngtonie i na całym Zachodnim Wybrzeżu.
‘It was enjoyed in New York, Washington, and the whole West Coast.’

c. Passive
*Nasi przyjaciele zostali podobani przez Nowy Jork.
‘Our friends were enjoyed by New York’

52 It appears that (46b) is slightly degraded due to independent factors which are not entirely clear. As we will see shortly, Polish -no/-to and REFL się regularly cooccur in fully grammatical structures. Polish -no/-to is also found with unergative intransitive verbs such as tańczyć ‘dance’ and śmiać się ‘laugh’. These facts will be discussed in section 4.2.1.3.

53 Note that the Theme argument in (46-48) is forced to appear in a PP since there is no mechanism available for structural NOM to be checked in -no/-to.

54 In the passives in (46-48) both a promoted NOM subject in (c) and the initial DAT subject in (c’) are given for the underlying Experiencer to show that both passive strategies yield ungrammatical results.
c’. Passive
* Naszym przyjaciółom zostało podobane przez Nowy Jork.
our friends:DAT AUX:PAST appealed:-[AGR]by New York

The licit -no/-to form in (46b) thus provides additional support for the AUX HYPOTHESIS; otherwise there could be no such participle in Polish as podobano się 'appealed'.

The facts in Ukrainian are as predicted: the /-no/-to/ morpheme remains passive-participial and the resulting -no/-to predicates from DAT ObjExp verbs are ill-formed. As we saw in (42), the type of transitivity that passive-participial morphology refers to in Ukrainian need not involve an external theta role, though the presence of an ACC object on the underlying verb-stem appears to be obligatory (similar to the facts of passive-participial morphology in Russian).\textsuperscript{55} Ukrainian -no/-to from DAT ObjExp verbs is thus ill-formed as a regular property of the language that does not make any special reference to the properties of the /-no/-to/ morpheme. The Ukrainian DAT ObjExp verbs in (47-48) are thus “vacuously” disqualified: no such passive-participial forms exist.

(47) Ukrainian DAT ObjExp Verb\textsuperscript{56}

a. Active
Usim duże podobalo- sja u vidpustci.
everyone:DAT very-much appealed:[-AGR]REFL on vacation
‘Everyone had a very good time on vacation.’

b. -no/-to
* U vidpustci bulo duże podobano.
on vacation AUX:PAST very-much appealed:-NO

\textsuperscript{55} The fact that passive-participial formation is allowed in the case of ACC ObjExp verbs but “blocked” in the case of DAT ObjExp verbs suggests that the ACC in the former (as in (43b)) is structural (and, thus, interpreted as transitive) rather than inherent, as suggested for the ACC object of “Experiencer-Theme” verbs in Italian by Belletti and Rizzi (1988). If this conjecture is correct, it suggests that ACC ObjExp verbs in Ukrainian are ACC-case assigning unaccusatives (as in (42)). In violation of Burzio’s Generalization, they assign structural ACC case in the absence of an external theta role, along the lines of Russian “absolute impersonal verbs” discussed in Babby 1989.

\textsuperscript{56} Recall that REFL -sja in Ukrainian is PF-suppressed when in combination with passive-participial morphology.
c. Canonical Passive
*Usi buly podobani vidpustkoju.
everyone:NOM.PL AUX:PAST.PL appealed:PL vacation:INST
‘Everyone was appealed to by the vacation.’

c’. Canonical Passive
*Usim bulo podobano (vidpustkoju)
everyone:DAT AUX:PAST appealed:[-AGR]

(48) Ukrainian DAT ObjExp Verb
a. Active
Včyteljam nabrydlo na zasidanni.
teachers:DAT annoyed:[-AGR] at conference
‘The teachers got annoyed at the conference.’

b. -no/-to
*Na zasidanni bulo nabrydnuto.
at conference AUX:PAST annoyed:-TO

c. Canonical Passive
*Včyteli buly nabrydnutzi zasidannjam.
teachers:NOM.PL AUX:PAST.PL annoyed:PL conference:INST
‘The teachers were annoyed by the conference.’

c’. Canonical Passive
*Včyteljam bulo nabrydnuto (zasidannjam).
teachers:DAT AUX:PAST annoyed:[-AGR]

The contrast between Polish (46b) on one hand, and Ukrainian (47b) and (48b) on the other, indicates that DAT ObjExp verbs constitute one more class of unaccusatives on which Polish and Ukrainian -no/-to differ. Though Ukrainian may be viewed as largely uninformative here due to an independent requirement that passive-participial morphology attach only to transitive verb-stems, it is interesting that Polish -no/-to appears to circumvent a similar restriction on Polish passive-participial morphology. This “circumvention” of an independent ban on passive-participle formation is explained by the AUX HYPOTHESIS for Polish: /-no/-to/ is synchronically an auxiliary-like element heading Tense; it is no longer interpreted as passive-participial.
3.2.1.3 Subject Experiencer Verbs

Next, note the Refl version of ObjExp predicates. These are Experiencer predicates in which the derived subject, externalized by the Refl morpheme (pre-syntactically), is the underlying direct object Experiencer of Acc ObjExp verbs. The Theme subject of ObjExp verbs now appears as an internal argument assigned oblique case by the verb or by a preposition selected by the verb. These are, thus, derived Subject Experiencer (SubjExp) verbs. Under the present analysis, these verbs are derived unaccusatives. Though the presence of a [+sentient] Experiencer indicates that -nel-to formation in Polish should be possible, the fact that this Experiencer subject is an underlying internal argument predicts that this type of SubjExp verb will not undergo passivization. After examining the basic facts of SubjExp verbs in Polish, we will turn to Ukrainian. It will be shown that Ukrainian derived SubjExp verbs are ruled out trivially for the following reasons (already discussed in the previous section): (i) derived SubjExp verbs are intransitive and, thus, incompatible with passive-participial morphology; and (ii) passive-participial morphology does not cooccur with Refl morpheme. Recall that both of these conditions hold for Polish as well, although we have seen that such conditions are irrelevant to Polish -no/-to as a result of the AUX HYPOTHESIS.

Alternatively, as suggested by Pesetsky (1995:97-102), SubExp verbs in Refl się/-sja may be basic, while the non-Refl ObjExp verbs zero-derived by causative affixation (with the effect of suppressing the Refl morpheme in the process). See also Rothstein (1967:308-309) for a similar analysis on the basis of Polish data. In the case of the direction of derivation proposed by Pesetsky and Rothstein, passivization of the SubjExp verb will be blocked by the presence of the Refl morpheme, rather than by the verb’s derived unaccusativity. The purpose of this subsection is to examine further distributional evidence in favor of the AUX HYPOTHESIS for Polish -no/-to. Nothing here will hinge on the exact analysis of SubjExp verbs.

To be sure, Refl się in Polish does, in principle, cooccur with [+N] categories, in contrast to Ukrainian -sję. Note, for example, the well-known case of Polish nominalizations in się, which are ruled out in Ukrainian (as well as in standard Russian):
The basic facts of derived SubjExp verbs in Polish with respect to -no/-to and passive formation are given in (49-50):

(49) Derived Polish SubjExp Verb
a. Active
    Profesorszy zdumieli się wybrykami studentów.
    professors:NOM.PL amazed:PL REFL actions:INST of-students
    ‘Professors were amazed at the students’ actions.’

b. -no/-to
    Zdumiano się wybrykami studentów.
    amazed:NO REFL actions:INST of-students
    ‘People were amazed at the students’ actions.’ [Rozwadowska 1992:64]

c. Passive
    *Wybryki studentów zostały się zdumiane przez profesorów.
    actions:NOM.PL of-students AUX:PAST.PL REFL amazed:PL by professors:ACC
    ‘The students’ actions were amazed at by the professors.’

(50) Derived Polish SubjExp Verb
a. Active
    Goście zdziwili się powszechną paniką.
    guests:NOM.PL surprised:PL REFL general panic:INST
    ‘The guests were surprised at the general panic.’

b. -no/-to
    Zdziwiono się powszechną paniką.
    surprised:NO REFL general panic:INST
    ‘People were surprised at the general panic.’ [Rozwadowska 1992:64]

(i) Polish Derived Nominal + REFL
    Fascynowanie się historią pomogło Marii w znalezieniu tematu
    being-fascinated:[NOMINAL] REFL history:INST helped Maria:DAT in finding of-theme
    dalszych badań.
    of-further research
    ‘Being fascinated with history helped Marie in finding a new research topic.’
    [adapted from Rozwadowska 1998:80]

(ii) Ukrainian Derived Nominal + REFL
    Jiji zdyvuvannja (* -sja) dopomohlo nam zibratsya z dumkamy.
    hersurprise REFL helped us be-collected with thoughts
    ‘Her surprise enabled us to collect our thoughts.’

As pointed out by Pesetsky (1995:71-73, 97-99), nominalizations of ObjExp verbs lack causative force and, as a result, are best treated as nominals of the corresponding SubjExp class. The nominal ‘surprise’, for example, does not refer to the causative process of surprising someone, but rather to the state of being surprised. The same holds for Ukrainian zdyvuvannja in (ii), in which the REFL morpheme is suppressed (presumably) by some late PF or morphological constraint, but no doubt lexically present, as it is overtly in the Polish example in (i). This case needs to be distinguished for Ukrainian from instances in which the appearance of the REFL morpheme is ruled out on more principled grounds, such as the ban on derivational morphology that redundantly affects the verb-stem to which it attaches ("vacuous dethematization").
c. Passive
*Powszechna panika została się zdziwiona przez gośći.
\[\text{general panic:\text{NOM,FEM} \text{ AUX:PAST,FEM REFL surprised:FEM} by \text{guests:ACC}}\]
\[\text{The general panic was surprised at by the guests.}\]

The asymmetry in \textit{-no/-to} versus passivization facts for Polish is by now quite familiar from previous subsections and requires little additional discussion. Whatever analysis is chosen to block passivization of Polish \textit{sie} verbs will fail to apply to \textit{-no/-to} on the theory that the /-no/-to/ morpheme is not passive-participial. The facts for Ukrainian by now are also familiar. Derived SubjExp verbs in Ukrainian \textit{-no/-to} are predicted \textbf{not} to form licit structures, in contrast to Polish, based on the more general well-formedness constraint on the non-cooccurrence of passive-participial morphology and the reflexive morpheme.

Ukrainian \textit{-no/-to} crucially differs from its Polish counterpart in terms of the categorial status of the /-no/-to/ morpheme itself. The ungrammatical (b) sentences in the Ukrainian (51-52) below are in sharp contrast to the (b) sentences in Polish (49-50) and indicate (along with evidence in the previous subsections) that /-no/-to/ in Ukrainian is still interpreted by native-speakers as part of the passive-participial paradigm.\textsuperscript{59,60}

(51) \textbf{Ukrainian Derived SubjExp Verb}
\textbf{a. Active}
\[\text{Vcheni zdvyvaly- sja cij kny\v{z}ci.}\]
\[\text{scholars:NOM,PL surprised:PL REFL this book:DAT}\]
\[\text{‘Scholars were surprised at this book.’}\]

\textbf{b. -no/-to}
\*\[\text{Cij kny\v{z}ci bulo zdvyvano (v\v{c}enymy).}\]
\[\text{this book:DAT AUX:PAST surprised:-NO scholars:INST}\]

\textsuperscript{59} SubjExp verbs with non-\textit{-INST} oblique or PP internal arguments were chosen in (51-52) to specify the \textit{-no/-to} forms in the (b) examples as deriving uniquely from \textit{REFL -sja-verbs}. These verbs also have a non-\textit{REFL} variant which allows an agentive reading coupled with an \textit{INST} internal argument.

\textsuperscript{60} Note that the \textit{-no/-to} forms in (51-52) are given without the \textit{REFL} morpheme. The idea is that if \textit{-no/-to} from a \textit{-sja-verb} were to occur, \textit{REFL -sja} would not be pronounced. Recall that derived nominals from \textit{-sja-verbs} occur licitly in Ukrainian only without the overt expression of the \textit{REFL} morpheme (in fn. 58, \textit{zdvyuvannja} ‘surprise’ was given from the verb \textit{zdvyvaty-sja} ‘be surprised’).
‘This book was surprised at by scholars.’

(52) Ukrainian Derived SubjExp Verb

a. Active
Vin zasmutyv-sja vid nepryjemnyx zvistok.
he:NOM.MASC saddened:MASC REFL from unpleasant news:GEN
‘He got upset from the bad news.’

b. -no/-to
*Vid nepryjemnyx zvistok bulo zasmučeno.
from unpleasant news:GEN AUX:PAST saddened:-NO
‘From the bad news was saddened.’

At this point it is reasonable to ask what it means for there to be a well-formedness constraint on the cooccurrence of two derivational affixes. Up to this point, this constraint has been merely stipulated to account for various facts in Ukrainian, though no attempt has been made to derive it. Furthermore, it remains unclear if such a constraint is best handled at a special morphological interface or whether a feature-checking system of syntax can do this work. The correct descriptive generalization for the well-formedness constraint blocking the cooccurrence of passive-participial morphology and REFL -sja refers to the redundancy entailed by the lexical entries of these two morphemes. This idea has been mentioned repeatedly in this chapter and goes back to a more general principle articulated by Marantz (1984:128):

(53) The No Vacuous Affixation Principle
For a certain class of features F, an [alpha F_i] affix may attach only to a [-alpha F_i] root.

That is, an affix that bears a certain alpha value for a given morpholexical property can attach only to roots (or, in our case, verb-stems) carrying the -alpha value for this property. Note that the principle of vacuous dethematization, mentioned in section 3.2.1.1, is a particular instance of vacuous affixation: an affix with the property of suppressing a verb-stem’s external theta role is attached to a verb-stem whose external
argument is already suppressed (or not selected). In such a case, both the passive affix
and the stem to which it attaches bear the same “alpha value” with respect to the external
argument. The key observation for Polish is that its /-no/-to/ morpheme does not induce
vacuous affixation violations because it is not specified to affect a particular
morpholexical property of the stem to which it attaches. In fact, as mentioned earlier, it
attaches to a verb-stem only as an artifact of its diachronic development. That is, at an
earlier stage in the language, /-no/-to/ was a productive complex word-final morpheme
marking the NEUT.SG past passive participle. According to the AUX HYPOTHESIS that I am
proposing, /-no/-to/ is now interpreted as an auxiliary-like element heading T.

As for Ukrainian, the facts are considerably more complex. We have seen that the
relevant morpholexical property that is redundantly affected cannot be the verb-stem’s
external theta role, since the /-no/-to/ morpheme does not require a thematic subject on
the verb-stem to which it attaches (which rules out a purely passive analysis for
Ukrainian -no/-to). Instead, while the Ukrainian /-no/-to/ morpheme dethematizes an
external argument if there is one, we have seen that it can also pattern with a derived
external argument (as in the case of Acc ObjExp verbs) or with no external argument at
all (as in the case of adversity impersonals). The result is that there is no a priori reason
why -no/-to and refl -sja should not cooccur in Ukrainian: affixation of the refl
morpheme results in derived subjects, which, as we have seen, do not “block” -no/-to
formation. Assuming that the unaccusative analysis argued for Acc ObjExp verbs is
correct, the example in (43a), repeated below in (54a), contains a derived subject. Note
that -no/-to formation in (43b/54b) is still perfectly licit.
The affixation of REFLEXIVE -sja also results in derived subjects, as in the SubjExp version of (54a) given in (54c) below:\footnote{61}

\begin{verbatim}
(54c)  REFLEXIVE -sja
Ivan NOM. MASC surprised: MASC REFLEXIVE expected news: DAT
'Ivan was surprised at the unexpected news.'
\end{verbatim}

Given that Ukrainian -no/-to can be formed on the basis of verb-stems with non-thematic subjects, the dethematizing effect of REFLEXIVE -sja affixation on a genuine external theta role should not automatically induce a vacuous affixation violation. Therefore, it is not immediately obvious why the -no/-to version of (54c) is necessarily ungrammatical (cf. (51b) and (52b)). We have seen numerous examples of such -no/-to predicates in Polish, where the lack of redundancy between -no/-to and REFLEXIVE st is more firmly established.

Let us bear in mind that, unlike Polish, Ukrainian /-no/-to/ is still essentially passive-participial. Note also that passive participles are not formed from intransitive verb-stems (regardless of the intransitive’s underlying argument structure). It follows that the vacuous affixation violation follows from the passive-participle’s “alpha value” of [-TRANS], which is redundantly applied to identically [-TRANS] verb-stems in the case of -sja-verbs. As a result, a -no/-to version of (54c) is ruled out not because the Experiencer
verb is unaccusative (which would rule out passivization only), or due to a particular property of the /-no/-to/ morpheme itself, but on more general grounds that do not refer to /-no/-to specifically.

The results of this subsection predict that /-no/-to in Polish should pattern with intransitives and REFL się-verbs more generally; that is, not just with unaccusative intransitives and REFL Experiencer predicates, but also with unergative intransitives and inherently REFL verbs. The examples in (55-56) show that this is precisely the case.

(55) Polish /-no/-to: Unergative Intransitives
   a. Leżano na łóżku.
      were-lying:-NO on couch
      ‘They would lie on the couch.’ [Rozwadowska 1992:63]
   b. Tańczono wszędzie, na głównej sali i w korytarzu.
      danced:-NO everywhere in main hall and in corridor
      ‘There was dancing everywhere, in the main hall and in the corridor.’
      [Macjusovič 1969:123]

(56) Polish /-no/-to: Inherently Reflexive Verbs
   a. W przedziale krzątało się, wszyscy wstawali.
      in compartment stirred-about:-NO REFL everyone was-getting-up
      ‘In the sleeping compartment there was some stirring about; everyone was getting up.’
      [Macjusovič 1969:127]
   b. Śmiało się z rodziców.
      laughed:-NO REFL from parents
      ‘They ridiculed their parents.’

The incompatibility of /-no/-to with all types of intransitives in Ukrainian has already been discussed; the ungrammatical Ukrainian counterparts of (55-56) are therefore not given.

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61 It is not clear to me why the underlying Theme appears in the INST with /-no/-to and in the DAT with REFL /-sja/. The theory of Inherent Case (Chomsky 1981) (or Semantic Case in Babby 1994b) would predict that the indirect internal argument is associated with a different theta role in each predicate.

62 These are verbs that only occur with the REFL morpheme.
To summarize the results of this subsection, the distribution of Polish -no/-to was shown to follow from the general properties of auxiliaries, while Ukrainian -no/-to was shown to remain passive-participial (though not always passive) and, thus, follow from the distribution of agreeing passive-participial /-n/-t-.

More generally, the unaccusative facts that have been discussed point to the need to distinguish the categorial status of the /-no/-to/ morpheme in the two languages. Polish /-no/-to/ composes with all unaccusative types discussed, as long as the predicate contains a [+sentient] participant consistent with the pro-arb interpretation. This fact provides strong evidence for the AUX HYPOTHESIS for Polish. Ukrainian -no/-to, in contrast, combines only with “transitive” unaccusatives, that is, unaccusatives that assign accusative (but lack an external argument). This fact is actually uninformative from the point of view of establishing some special property of the Ukrainian /-no/-to/ morpheme that would distinguish it from the agreeing passive-participial construction in the language. The result is that while the erstwhile NEUT.SG inflectional morpheme /-o/ was indeed reanalyzed as a new morpheme in the language, the derivational stem to which /-o/ attaches remained indistinct from the agreeing participle’s derivational stem. As a result, Ukrainian -no/-to, in sharp contrast to its Polish counterpart, has no special (or anomalous) syntactic or lexico-semantic distributional properties (with the obvious exception of the ACC object, which will be taken up in sections 3.3 and 3.4).  

63 The question of the pragmatic distribution of Ukrainian -no/-to is a different matter altogether. See Adams 1998 for a discussion of the discourse and pragmatic factors that determine the distribution of -no/-to with respect to the agreeing passive-participial construction.
3.2.2 The AUX HYPOTHESIS and Quantified-NP Subjects

Quantified NPs are not fully specified for agreement (phi-) features. As a result, they usually pattern with some form of default agreement (= [-AGR]) on the predicate (for Polish, see Dziwirek 1994:210-221). This section examines (i) a Polish-internal asymmetry with respect to default agreement, and (ii) a crosslinguistic difference with Ukrainian on how [-AGR] is morphologically realized in passive-participial predicates. It will be argued that default agreement facts with quantified-NP subjects provide further evidence for the AUX HYPOTHESIS for Polish, and further distinguishes Polish -no/-to from its Ukrainian counterpart.

The basic facts are as follows. The expression of default agreement in Polish canonical passives differs from that of finite predicates by disallowing, in the former, use of the widely-encountered Slavic marker of default agreement, /-ol/. This is illustrated in (57):^65

(57) a. Polish Canonical Passive: [-AGR]
    Ile garniturów zostanie uszyty/*o przez tego krawca?
    how-many suits:GEN AUX:FUT sewn:[-AGR] by this tailor:ACC
    ‘How many suits will be sewn by this tailor?’

    b. Polish Finite Predicate: [-AGR]
    Siedem zeszytów leżało na stole.
    seven notebooks:GEN lay:[-AGR] on table
    ‘Seven notebooks were lying on the table.’ [Dziwirek 1994:212]

The expression of default agreement in Ukrainian canonical passives makes use of the standard marker /-ol/. The Polish example in (57a) is repeated below in (58a), where it is now compared to the corresponding Ukrainian canonical passive in (58b). Note that these

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^64 I am grateful to Loren Billings (personal communication) for pointing out the [-AGR] asymmetry in Polish and Ukrainian -no/to, and for supplying me with the example in (57a), originally from Stefan Dyla.

^65 The alternate form of the participle in (57a), uszytych:GEN, need not concern us. The point here is to show that /-ol/ is not a licit marker of default agreement in the passive-participial form.
passives minimally differ, non-trivially, in the selection of the word-final morphology on
the participle:

(58)  
a. Polish Canonical Passive: [-AGR]
Ile garniturów zostanie uszyte/o przez tego krawca?
how-many suits:GEN AUX:FUT sewn:[-AGR] by this tailor:ACC
‘How many suits will be sewn by this tailor?’

b. Ukrainian Canonical Passive: [-AGR]
Skil’ky kostjumiv bude poštyte/e tym kravcem.
how-many suits:GEN AUX:FUT sewn:[-AGR] this tailor:INST
‘How many suits will be sewn by this tailor.’

The example in (57a) shows that /-no/-to/ is not available in Polish for default agreement
along the usual pattern of other predicate types that occur with similarly underspecified
subject NPs. That is, while /-o/ is the general marker of default agreement in Polish,
Ukrainian, and other Slavic languages, Polish /-no/-to/, as we have seen, is a new,
unanalyzable morpheme with the dedicated function and distribution of an auxiliary.
Therefore, it should come as no surprise that /-no/-to/ is no longer available to play a
purely inflectional role, even one of default inflection. The result, which I believe is
unique in Slavic, is that the marker of default agreement in Polish passive-participial
constructions is the initial pronominal (Long Form) NEUT.SG ending (synchronically,
/-e/). This anomalous default agreement pattern follows without stipulation from the AUX
HYPOTHESIS, and, in fact, provides additional empirical support for it.67

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66 To be sure, the quantified NP skil’ky kostjumiv ‘how many suits’ in (58b) appears in a form that is
homophonous for both the NOM and ACC, so there is no certain way to establish whether this is an agreeing
passive with default agreement or a nonagreeing -no/-to form. For the sake of comparison with (58a), we
will focus on the canonical passive reading.

67 Note that Dziwirek’s (1994) study of Polish syntax contains a special, construction-specific statement
(her “Pseudo-Participial Morphology Rule” (1994:223)) to account for the fact that /-o/ does not participate
in default agreement in passive participles. Under the analysis developed in this chapter, the facts in (57)
fall out naturally from the independently-motivated claim that Polish /-no/-to/ is synchronically a functional
head, no longer involved in word-final morphology.
The case of the Ukrainian passive in (58b) indicates a radically different structure for the Ukrainian /-no/-to/ morpheme. Unlike its Polish counterpart, /-no/-to/ is indeed analyzable as /-n/-t/-/ + /-o/, as suggested much earlier in (26b). The main idea here is that Ukrainian /-no/-to remains a passive-participial construction, a fact for which we have seen a wide range of evidence. The reanalysis of the erstwhile inflectional /-o/ in Ukrainian involved the elimination of its agreement features only; the combination of nonagreeing /-o/ and the passive-participial stem did not lead to a new, categorially-distinct morpheme in the language.

The difference between Polish and Ukrainian /-no/-to that we are trying to get at here might be best explained in slightly more formal terms. In Polish, unanalyzable /-no/-to/ is generated under T; /-o/ is not available when the verb-stem (V-) is merged at the first step of the syntactic derivation, regardless of whether it merges with an ACC object or a subject lacking agreement features. In the case of merger with an ACC object, there is no passive-participial morphology involved: /-no/-to/ is merged (abstractly) in T as an auxiliary. In the case of merger with a [-AGR] subject, T is headed by another auxiliary (generally, zostać 'become' for perfectives and być 'be' for imperfectives), and the verb-stem is merged with passive-participial morphology and default /-e/. In this latter case, /-no/-to/ is not involved in the derivation at all: passive participles select only zostać or być. This is what forces the selection of default /-e/ rather than /-o/. The crucial difference is that in Ukrainian, /-o/, whatever its status, is never generated in T. This was concluded on the basis of the incompatibility of the AUX HYPOTHESIS for Ukrainian. All verb-stems that merge with passive-participial morphology select the same auxiliary, byty ‘be’. As a result, /-o/ is available in Ukrainian to the initial merge operation that builds VP.
The structure for Polish -no/-to in (27b) is repeated below in (59a) and compared to its Ukrainian counterpart in (59b):

(59)  a. Polish -no/-to  
\[
\begin{array}{c}
\text{TP} \\
\mid & \text{T'} \\
\mid & \text{T} \\
\mid & \text{vP} \\
\mid & \text{-no/-to} \\
\mid & \text{pro-arb} \\
\mid & \text{VP} \\
\mid & \text{V-} \\
\mid & \text{Obj:ACC}
\end{array}
\]

b. Ukrainian -no/-to  
\[
\begin{array}{c}
\text{TP} \\
\mid & \text{T'} \\
\mid & \text{T} \\
\mid & \text{VP} \\
\mid & \text{AUX} \\
\mid & \text{V-no/-to} \\
\mid & \text{Obj:ACC}
\end{array}
\]

These structures are meant to indicate the way in which the -no/-to predicates are merged. Subsequent EPP-movement will target the Spec,TP position. Note also that only the Polish structure in (59a) has a light-\text{v} projection. This is meant to indicate that after V-merges with its complement, forming a VP, this VP constituent now selects a full-fledged external argument with which it merges. That is, the external argument is not dethematized. Its syntactic projection will be demonstrated on the basis of “implicit subject” tests, which are reviewed in the next section. Note crucially that /-no/-to/ in Polish is not available within the VP. The structure for Ukrainian in (59b) presents a very different picture. T is headed by AUX (a form of buty ‘be’) while /-no/-to/ is merged as passive-participial morphology affixed to V, with the effect of dethematizing the external argument (and the corresponding lack of a \text{vP} projection). The structure in (59b), like any passive, is a derived unaccusative.

To summarize, it is the special status of unanalyzable Polish /-no/-to/ as an auxiliary (heading T) that prevents /-o/ from taking part in default agreement in the passive-
participial version of (59a). Ukrainian /-no/-to/ has no such special status and, as a result, is available as a [-AGR] marker, in addition to its function of projecting a distinct -no/-to predicate.

3.2.3 The AUX HYPOTHESIS and “Implicit Subject” Properties

The AUX HYPOTHESIS entails that Polish -no/-to lacks the derivational morphology that is associated with the “suppression” of a verb’s external argument. According to the structure in (59a), the external argument is projected to a full-fledged syntactic position in the tree. On the basis of word-order facts, it will be argued in section 3.4 that this pro-arb argument satisfies the EPP in the usual way. In this section we will consider other subject properties as a way of getting at the syntactic status of this external argument. The binding and control facts for Polish are well-known and are often referred to as evidence that Polish -no/-to is active rather than passive. The idea here is that Polish -no/-to contains no “voice-altering” morphology and, as a result, the active pattern of theta-role association with argument positions is maintained. The purpose of this section is to explain why this “active” analysis for Polish is correct, and to show why it does not hold for Ukrainian.

Given the lengthy argumentation in favor of the AUX HYPOTHESIS for Polish, it should come as no surprise that initial external arguments of Polish -no/-to predicates are

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68 To be sure, /-o/ could have developed in Polish to mark default agreement as well, as pointed out by Leonard Babby (personal communication). Indeed, we will see in chapter 5 that the same frozen inflectional morpheme is used in Lithuanian participial predicates for both default agreement and systematic nonagreement.

69 In earlier, more traditional approaches, such as Oesterreicher 1926 and Klemensiewicz et al. 1965, Polish -no/-to was treated as an active construction merely by virtue of its transitivity (i.e., its assignment of an ACC object) and the lack of a passive by-phrase. However, given the fact that an ACC object and passive by-phrase can cooccur in Ukrainian -no/-to, the finer-grained set of implicit-subject tests is employed to tease the subject properties apart in the two languages. On implicit-subject properties in Polish, note Dyła 1983, Dziwirek 1994, and Śpiewak & Szymańska 1997.
“syntactically active”. Indeed, they exhibit the full range of subject properties with respect to the binding of anaphors and the control of PRO subjects of adverbial secondary predicates and infinitives. It should be equally predictable from the preceding discussion that Ukrainian -nol/-to fails to yield grammatical results in such configurations: external arguments, when present, are dethematized in Ukrainian -nol/-to in the usual way associated with passive-participial morphology. The basic assumption, then, is that implicit arguments of passives in Slavic are not syntactically active. Where such arguments do appear to be syntactically active, their implicit status is called into question.

The facts are given below in (60-66):

(60) Polish -nol/-to: Binding of Reflexive swoj- ‘self’s’
   a. Sprzedano swoje samochody.
      sold: NO self’s automobiles:ACC
      ‘People sold their automobiles.’ [Kupšć & Marciniak 1997:203]

   b. ?Zniszczono swój dom.
      destroyed: NO self’s home:ACC
      ‘People destroyed their home.’ [Śpiewak & Szymańska 1997:151]

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70 Under Williams’ (1994, 1995) theory of “vertical binding”, further developed in Babby 1998b and Babby & Franks 1998, control takes place as a relation between theta roles rather than full NPs. Under such an analysis, there is no need for a PRO subject of gerunds and (subject-controlled) infinitives. I take this to be the correct analysis and use PRO for terminological convenience alone.

71 Cf. Babby & Franks (1998:508-510), where it is reported that adverbial gerunds (GER) embedded in passives in standard Russian are generally construed by native speakers as infelicitous under the reading in which the understood subject of the gerund is controlled by the implicit external argument of the passive. The understood subject of the embedded gerund is normally controlled instead by the passive’s derived external argument, as in (i):
   (i) Russian
      Podnijvši na 5 etaž, my byli vpuščeni v polutemmnuj perednjaj
      having-risen:GER to fifth floor we were admitted to dark hall
      ‘Having walked up to the fifth floor, we were admitted into a dark hall.’ [Babby & Franks 1998:509]

72 It is argued in Franks (1995:352), on the basis of -nol/-to patterning with purpose clauses, that “the syntactic accessibility of the active external argument is unaffected in Ukrainian [-nol/-to]”. It should be noted that the presence of purpose clauses shows only that the external argument has not been eliminated; it says nothing about its argument status or the extent of its syntactic accessibility. It will be shown that Franks’ claim regarding Ukrainian is not only empirically incorrect, but obscures the basic difference between Ukrainian -nol/-to and its Polish counterpart, which allows for the only principled explanation of the robust differences in implicit-subject properties that are reviewed in this section.

73 The slightly degraded reading in (60b) will be taken to indicate a problem with the pro-arb interpretation rather than with the actual binding relation. This problem will not be pursued here.
(61) Ukrainian -no/-to: Binding of Reflexive svoj- ‘self’s’
      self’s wife:ACC AUX:PAST deceived:-NO
   b. *Svij dim bulo znyščeno.
      self’s home:ACCAUX:PAST destroyed:-NO

(62) Polish -no/-to: Control of Adverbial Gerund (GER)
   a. Tę książkę czytano siedząc przy kominku.
      this book:ACC read:-NO sitting:GER by fireplace
      ‘People read this book sitting by the fireplace.’ [Dziwirek 1994:191]
   b. Wracając do domu, śpiewano piosenki.
      returning:GER home sung:-NO songs:ACC
      ‘They sang songs returning home.’ [Maling 1993]
   c. Gwizdano nie zgadzając się z decyzją sędziego.
      whistled:-NO NEG agreeing:GERREFL with decision of-referee
      ‘People whistled disagreeing with the referee’s decision.’ [Dyła 1983:127]

(63) Ukrainian -no/-to: Control of Adverbial Gerund
   a. *Ciltuj porcję bulo vidrazu z'jídeno ne opam’jatavšys’.
      whole portion:ACCAUX:PAST immediately eaten:-NO NEG coming-to:GER
      ‘A whole portion was eaten right away before coming to one’s senses.’
   b. *Povernuvšys’ domomu, hroši bulo znajdeno.
      having-returned:GER home money:ACC AUX:PAST found:-NO
      ‘Having returned home, the money was found.’

It is interesting to note that Ukrainian -no/-to patterns with the Polish canonical passive in this respect, rather than with Polish -no/-to. The examples of control with the Ukrainian -no/-to in (63) are ruled out for the same reason that the Polish canonical passives in (64) below are: the verb’s external theta role is affected in some way in both instances by voice-altering morphology that prevents its syntactic projection to a full-fledged argument position. The Polish canonical passives in (64a-b) correspond to the -no/-to forms in (62a-b):

(64) Polish Canonical Passive: Control of Adverbial Gerund
   a. *Ta książka była czytana (przez Janka)
      this book:NOM.FEM AUX:PAST.FEM read:FEM by Janek:ACC
siedząc przy kominku.

sitting:GER by fireplace

‘This book was read (by Janek) sitting at the fireplace.’ [Dziwirek 1994:192]


‘Songs were sung returning home.’ [Maling 1993]

As for control of the PRO subject of infinitivals, Polish and Ukrainian -no/-to pattern in the expected way: an interpretation for the embedded PRO is available in Polish only.

(65) Polish –no/-to: Control of Infinitival PRO

Na wzgórzu zaczęto [PRObudować dom].
on hill began:-TO to-build house:ACC

‘They began to build a house on the hill.’ [Spiewak & Szymańska 1997:151]

(66) Ukrainian –no/-to: Control of Infinitival PRO

* U misti počato [PRObudovaty novu cerkvu].
in city begun:-TO to-build new church:ACC

‘They began to build a new church in the city.’

On the basis of the facts in (60-66) we see that the AUX HYPOTHESIS yields straightforward results for Polish. The claim made in earlier sections that /-no/-to/ in Polish was not a voice-altering morpheme is now supported by subject tests, which (in Slavic, at least) indicate the presence of a syntactically-projected full-fledged external argument. These same facts, however, point to the need for a different analysis for Ukrainian. It is clear from the Ukrainian binding and control facts that the external argument is indeed suppressed and that Ukrainian /-no/-to/ does function in a voice-altering capacity. Proposals for the exact structure of Ukrainian -no/-to will be discussed shortly, in section 3.3.

3.2.4 Summary of Section 3.2

The results of section 3.2 are given in (67):
Summary of Section 3.2

<table>
<thead>
<tr>
<th>-no/-to formation:</th>
<th>Polish</th>
<th>Ukrainian</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Semantic Unaccusatives (4.2.1.1)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>b. ACC ObjExp Verbs (4.2.1.2.1)</td>
<td>+</td>
<td>- (for passive)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>+ (for non-passive)</td>
</tr>
<tr>
<td>c. DAT ObjExp Verbs (4.2.1.2.2)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>d. SubjExp Verbs (4.2.1.3)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>e. Unergative Intransitives (4.2.1.3)</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>f. Implicit Subject Properties (4.2.3)</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

As (67) indicates, the AUX HYPOTHESIS for Polish -no/-to has been established on the basis of a wide range of predicate types. The leading idea of this section has been that the /-no/-to/ morpheme in Polish is no longer part of the passive-participial paradigm.

Building on the conclusions of section 3.1, I have claimed that Polish /-no/-to/ is an auxiliary-like element heading T. The stipulation that /-no/-to/ is base-generated in T abstractly was forced by the distributional evidence of this construction, which raises serious doubts concerning the word-final status of this morpheme as a voice-altering affix. Generating /-no/-to/ under T, rather than as part of the verb-stem, predicts the external argument in Polish -no/-to to be fully thematic, a fact that was indicated by binding and control phenomena.

Note that the focus of this chapter has been on the properties of the /-no/-to/ morpheme itself, and its effect on the verb’s external argument, with limited discussion of the ACC object. The idea here is that the ability of the verb to take (or, Merge with) an ACC complement follows straightforwardly from the analysis proposed for the /-no/-to/ morpheme. If Polish /-no/-to/ is base-generated in T as an auxiliary, V is free to merge with an ACC object in the same way that it does in the case of finite agreeing predicates. There is no need to burden the analysis with a special mechanism to “override” “case-
absorption” or stipulate its optionality. Note further that the AUX HYPOTHESIS for Polish -no/-to correctly predicts the absence of a passive by-phrase in this construction, in contrast to Ukrainian -no/-to, where the AUX HYPOTHESIS does not hold, and the passive by-phrase is indeed attested (cf. (4a-b)). That is, the by-phrase is possible only where we have genuine passive-participial morphology. In such a way, the by-phrase facts follow naturally from a difference in the categorial status of the /-no/-to/ morpheme, with no need to posit a special “clitic-doubling” parameter (in the sense of Baker, Johnson & Roberts 1989) just for the purposes of distinguishing Polish and Ukrainian in this respect.

I have noted repeatedly that the case of Ukrainian -no/-to is generally more complex. We have seen numerous instances of Ukrainian -no/-to diverging from its Polish counterpart, both in terms of its distribution and the status of its external argument. The AUX HYPOTHESIS was shown to make all the wrong predictions for Ukrainian and, as a result, has been adopted for Polish only. Note that unlike Polish, Ukrainian -no/-to constitutes a true challenge to Burzio’s Generalization: its external argument is truly dethematized with no corresponding effect on the ability of the underlying object to receive structural ACC. Furthermore, we have seen that the application of Ukrainian -no/-to is not restricted to predicates that select an external argument. As a result, a proper analysis of this construction must move beyond a strict characterization of passivization. The goal of section 3.3, to follow immediately, is to examine the analytical tools that have been proposed in the passivization literature on crosslinguistic variation, and to establish what, if anything, contributes to our understanding of the -no/-to construction in Ukrainian.
3.3 -no/-to and the Crosslinguistic Passivization Literature

Passives that assign structural ACC to an underlying object are generally considered to be in violation of Burzio’s Generalization, which states that “all and only the verbs that assign a theta role to the subject can assign (ACC) case to an object” (Burzio 1986:178) (see Babby 1989 for discussion). Under the standard view that dethematization of the external argument is always involved in passivization, all passives are derived unaccusatives. Burzio’s Generalization thus predicts that the underlying object of a passive will never receive ACC case. As we have seen, Polish -no/-to, which does not involve dethematization of the external argument, is not a problem here. This section, instead, focuses on -no/-to in Ukrainian.

It should be noted that Ukrainian is not unique among the world’s languages in allowing passive-participial morphology to cooccur with an overt ACC object. Similar constructions have been reported for Welsh (Comrie 1977, Perlmutter & Postal 1984b), Irish (Stenson 1989), Classical Greek (Maling 1993), Quechua (Maling 1993), Japanese (Harley 1995), and Mandarin Chinese (Goodall 1999), to name just a few. The main concern of recent passivization literature has been to derive Burzio’s Generalization (as it applies to passives) by means of developing a single mechanism responsible for both halves of the correlation, that is, the “suppression” of the external theta role and the “absorption” of the verb’s ACC case.74 This mechanism, as we will see, is then typically “tinkered” with in order to account for the crosslinguistic variation noted above and to “explain away” any possible challenges to Burzio’s Generalization. This tinkering

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74 Here I refer to proposals in which the passive morpheme itself (or some null element) is assigned both the verb’s external theta role and its ACC case (for canonical passives), achieving theta-suppression and case-absorption with a single analytical move. The details of such proposals will be discussed in section 3.3.1.
inevitably leads to the positing of a wide range of parameters devised to account for every possible “wrinkle” in the passive constructions of the world’s languages. In many cases, these parameters incorrectly prove strong enough to account for structures that are patently non-passive (such as Polish -no/-to and nonagreeing passive-participial constructions in North Russian and Lithuanian, discussed in chapter 4). In other cases, such as Ukrainian -no/-to, the proposed parameters apply too coarse a grain with the result of falsely predicting a range of structures that do not occur, while at the same time failing to account for those structures that do occur in any explanatory way.

The proliferation of parameters (and the poor results that these parameters yield) raises the question of whether this is a desirable course of action for research under current theoretical assumptions. It was precisely “the parameter-for-everything approach” that led (in part) to the more highly restrained theory of minimalism (see Epstein et al. 1996). On the theory that syntactic derivations are driven by the checking requirements of morpholexical features, it is predicted that the properties which generally cluster together as the Passive may be potentially de-coupled and instantiated independently.

“Passivization,” then, is a cover term for the combinatorial and dislocational properties imposed on a derivation by a particular “passive” morpheme. It follows that the source of crosslinguistic variation should be limited to the featural specification of each morpheme involved. The idea is that the morpholexical features involved in Ukrainian -no/-to, for

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75 These proposals usually amount to parameterizing theta- and case-absorption.
76 In Chomsky 1993 the locus of parametric variation was reduced to the “strength” of such features, a stipulation that was designed to dictate at what point in the derivation a particular feature would be checked. This study does not make use of feature strength (following more recent work, including Epstein et al. 1998 and Chomsky 1998). The view that will be adopted in this section is that parametric variation between languages, or between similar constructions within a single language, is limited to differences in the featural specification (or inventory) of a particular morpheme, rather than a particular feature’s strength. On this view, Ukrainian -no/-to differs minimally from the corresponding canonical passive by
example, do not make specific reference to passivization (in the way that theta- and case-absorption parameters do). In fact, as we have seen, Ukrainian -no/-to may be instantiated in the absence of the hallmark property of passivization -- the dethematization of the external theta role (see, e.g., (42-43)). The goal, then, is to move beyond a reliance on parameters that present a mere restatement of the problem. Differences in case marking under -no/-to passivization, for example, are not primary, but follow from more fundamental properties of the /-no/-to/ morpheme, whose existence can be argued for independently.

In the subsections to follow, we begin with a discussion of the parametric solutions that have been proposed to account for crosslinguistic variation in passive structures, with an eye to examining whether the parametric approach explains any core properties of Ukrainian -no/-to (section 3.3.1). Next, an alternative approach will be formulated, in which the basic properties of Ukrainian -no/-to will be shown to follow from the featural specification of the /-no/-to/ morpheme, and the requirements that these features impose on the structure-building operation, Merge (section 3.3.2).

3.3.1 The Proliferation of Parameters

The purpose of this subsection is not to provide a complete review of the literature on passivization, which would undoubtedly lead us too far astray, but instead to focus on the well-known proposals of Baker 1988 and Baker, Johnson & Roberts (1989) (BJ&R), as well as the more recent proposals of Boeckx (1998). These have all sought to include virtue of lacking agreement (phi-) features. It will be argued that other, more obvious, differences follow from this single, independently-motivated specification.
Polish and Ukrainian in their empirical scope, often with special machinery engineered specifically to account for the properties of -no/-to.\textsuperscript{77}

3.3.1.1 Baker 1988 and Baker, Johnson & Roberts 1989

The modern preoccupation with passivization dates back to Jaeggli 1986, where it was first argued that the external argument under passivization was not somehow mysteriously “absorbed”, but rather assigned to the passive morpheme itself. Under Baker’s (1988) theory, and the theory elaborated in BJ&R, the passive affix must receive a theta role because it is a full-fledged nominal argument. For the same reason it must receive case. The key stipulation here is that the passive morpheme is base-generated under Infl and, as such, is external to the VP and therefore can only be assigned the verb’s external theta role. Furthermore, since Infl cannot assign case to its own head, the passive morpheme is assumed to receive case from V (i.e., \textit{ACC}), after the latter’s incorporation into Infl, which is also assumed. As a result, the two properties of passivization originally noted in Chomsky (1981:124), i.e., the suppression of the verb’s external theta role and the absorption of the verb’s \textit{ACC} case, now receive a unified analysis under the theory that the passive morpheme is an argument. Under Baker 1988 and BJ&R, there is no “suppression” or “absorption”, with the positive result of eliminating terms and concepts that are poorly defined and of dubious theoretical status as primitives. This analysis also provides an immediate explanation of Burzio’s Generalization. The mysterious correlation between the dethematization of the verb’s external argument and the verb’s inability to assign \textit{ACC} case now follows straightforwardly from the Theta-Criterion and some notion of the Case Filter or

\textsuperscript{77} These studies also provide an analysis for nonagreeing passive-participial structures in North Russian and
Visibility. That is, the passive morpheme requires a theta role and case just like any other argument, despite the fact that it is not a lexical NP. The stipulation that the passive morpheme is base-generated under Infl, and that Infl cannot assign case (NOM) to itself, achieves the desired result that this single argument is assigned the subject’s theta role and the object’s case.

The central idea of Baker 1988 and BJ&R is not only that the passive morpheme has the properties of an argument, but that it has the properties of an argument incorporated into a verb. Noun incorporation is a phenomenon of many polysynthetic languages in which a verb and its complement appear morphologically combined. The crucial point here, elaborated in Baker 1988, is that incorporated nouns differ with respect to how, or whether, they are assigned case. Passivization as a type of incorporation allows for the traditional “case-absorption” properties of passives crosslinguistically to be parameterized to mirror the disparate case phenomena of incorporated nouns. According to Baker (1988:340-349), noun-incorporation structures exhibit the possibilities given below in (68) regarding case on the incorporated argument. In Baker’s “Passive Incorporation”, the incorporated argument is the passive morpheme.

(68) Passive-Morpheme Case Parameter
a. Case is required (English)
b. Case is required only if case is available (Dutch and German)
c. Case is not required (that is, the visibility requirement is met by means of the incorporation process itself) (Irish, Welsh, (Ukrainian??))

The three different case-marking patterns of incorporated nouns permit three different parameters with respect to the traditional “case-absorption” facts of passives. That is, absorption of the ACC is achieved by assigning the ACC case to the passive morpheme.

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Lithuanian, which will be discussed separately in chapter 4.
Non-absorption of the ACC is achieved by stating that the passive morpheme in a given language need not be assigned case.

Instances of canonical passivization, such as the case of English, now follow without any additional stipulations. English is set as a language in which the passive morpheme always requires (ACC) case (= Case Parameter (68a)). The verb’s ACC case is assigned to the passive morpheme, which forces the underlying object to move to the subject position where it can receive NOM case. The subject position is non-thematic because the external theta role is assigned to the passive morpheme. Thus, English is correctly predicted to disallow impersonal passives of unergative intransitives along the Dutch and German pattern since there is no ACC case available to assign to the passive morpheme. Passives of intransitives are ruled out in this way as Case-Filter or Visibility-Condition violations (Baker 1988:344-345; BJ&R:234-235).

The well-known occurrence of impersonal passives of unergative intransitives in Dutch and German (and elsewhere in non-English Germanic) is accounted for by assuming for these languages Case Parameter (68b), i.e., that the passive morpheme requires case only if it is available. Where case is available with transitives, Dutch and German pattern with English: ACC is assigned to the passive morpheme and the direct object raises for NOM. In the case of intransitives, however, where no ACC is available, passivization in Dutch and German is still possible since case on the passive morpheme is a “relativized” requirement.

It is the third option, Case Parameter (68c), that we will come to focus on, since this is the option that is specifically designed to allow for the absence of ACC case absorption. In other words, if the passive morpheme is not assigned ACC case, then this case should be
available for the direct object. This is precisely the proposal for Ukrainian in BJ&R (236-239) and the proposal for other passive + ACC structures in Baker 1988 (346-349).

However, as noted by Goodall 1993 and Maling 1993, treating /-no/-to/ as a passive morpheme that does not require case falsely predicts that Ukrainian -no/-to should occur with intransitive verbs, as well as transitives. Recall that it is the case requirement of the passive morpheme in English that rules out the formation of impersonal passives from intransitives. The result is that Ukrainian -no/-to patterns with English with respect to the transitivity of the verb from which it is formed, while patterning with Irish, Welsh, and other languages in admitting ACC objects. Ukrainian -no/-to would thus require a combination of parameters in (68), namely, one that would have separate values for transitive and intransitive stems. Simply stated, the passive morpheme in Ukrainian -no/-to cannot require case and not require case at the same time.

Baker’s (1988:347-348) examples of the Irish and Welsh pattern include both of the passive-types predicted by (68c): the “transitive” passive with the ACC object (along the Ukrainian -no/-to pattern) and the impersonal passive from intransitives (which in Ukrainian is ruled out). Compare, for example, the Welsh impersonal passive in (69) with its ungrammatical Ukrainian -no/-to counterpart in (70):

(69) Welsh Impersonal Passive
    Dannswyd gan y plant.
    danced:[-AGR] by the children
    ‘It was danced by the children.’ [Baker 1988:347, citing Perlmutter & Postal 1984b:144]

(70) Ukrainian -no/-to: Unergative Intransitive
    *Bulo tanc’ovano dit’my.
    AUX:PAST danced:-NO children:INST
    ‘It was danced by the children.’

An additional example is given in (71-72):
(71) Welsh Impersonal Passive
Cwfywd gan Ali a Spinks neithiwr.
fought:[-AGR] by Ali and Spinks last-night
‘It was fought by Ali and Spinks last night.’ [Perlmutter and Postal 1984b:144]

(72) Ukrainian -no/-to: Unergative Intransitive
*Včora vvečeri bulo boksovano Ali j Spinksom.
yesterday in-evening AUX:PAST boxed:-NO [Ali and Spinks]:INST
‘Last night was fought by Ali and Spinks.’

The result is that the parameter proposed by Baker 1988 and BJ&R to account for the
ACC object of passives overpredicts the distribution of Ukrainian -no/-to and casts doubt
on the universal validity of their approach. It may be argued that Ukrainian -no/-to, like
its Polish counterpart, is not genuinely passive and, thus, should not require coverage
under the analysis of Baker and BJ&R. Recall, however, that in the presence of an initial
external argument on the verb-stem, Ukrainian -no/-to (unlike its Polish counterpart)
patterns with an agentive INST by-phrase and eventive (rather than stative-adjectival)
semantics (see Adams 1998). Examples of uncontroversially passive -no/-to forms are
given below in (73). The mere existence of such forms shows that there can be no
implicational relation between the passive + ACC resource in a language and the ability to
form impersonal passives from intransitives (cf. ungrammatical (70) and (72)), as implied
by the theory of Baker 1988 and BJ&R and formalized in Case Parameter (68c).

(73) Ukrainian -no/-to: Passives
a. Tabir bulo zajnjato amerykans'kym vijs'kom.
camp:ACCAUX:PAST occupied:-TO American troops:INST
‘The camp was occupied by American troops.’ [Wieczorek 1989:117]

b. Ja spodivajusja, šče cej žart ne bude vykorystano “Pravdoj
I hope that this joke:ACC NEGAUX:FUT used:-NO Pravda:INST
Ukrainy“.
of-Ukraine
‘I hope that this joke won’t be used by Ukrainian Pravda.’ [Wieczorek 1994:47]
c. Na Valentyn Stepanovyča včyneno napad nevidomy
on Valentyn Stepanovyč committed:-NO attack:ACC unknown
osobamy.
individuals:INST
‘An attack has been committed on Valentyn Stepanovyč by unknown
individuals.’ [Adams 1998:72]

Thus, regardless of whether or not the case-theoretic properties of passive morphemes
can truly be shown to follow those of incorporated nouns, the parameters that are
developed on this basis in (68) fail to predict the most basic facts for Ukrainian.
Ukrainian appears to constitute a subtype of passive that would require a special
“subparameter”, which is most likely not available in the inventory of noun-incorporation
case patterns.

Another problem that Ukrainian -no/-to presents for the theory of Baker 1988 and
BJ&R is that the ACC object appears in structures that lack an underlying external
argument. Under the theory that the passive morpheme is an argument, such an argument
would fail to be theta-marked in such structures and would thus stand in violation of the
Theta-Criterion. There are three predicate-types in Ukrainian that form -no/-to from verbs
that either lack an external theta role or fail to select one. These include ObjExp verbs,
adversity impersonal verbs, and so-called “anticausatives”.

(74) Ukrainian -no/-to: ObjExp Verb (repeated from (43))
   a. Active
   Nespodivani zvistky zdyvuvaly Ivana.
   unexpected news:NOM.PL surprised:PL Ivan:ACC
   ‘Unexpected news surprised Ivan.’

   b. -no/-to
   Ivana bulo zdyvovano nespodivanymy zvistkamy.
   Ivan:ACC AUX:PAST surprised:-NO unexpected news:INST

78 “Anticausatives” refer to verbs of change of state, such as ‘break’, ‘dry’, and ‘open’, which participate in
a causative alternation. See Levin & Rappaport Hovav 1995, ch. 3, for discussion.
‘Ivan was surprised by unexpected news.’

(75) Ukrainian -no/-to: Adversity Impersonals ((a-b) repeated from (42))

a. Nyzynu zaltyo vodoju.
   lowland:ACC flooded:-TO water:INST
   ‘The lowlands are flooded with water.’ [Boljux 1992:46]

b. Raneno v hrudy tjažko, a [ volossja tiľ'ky obsmaleno poroxom].
   injured:-NO in chest seriously but hair:ACC only singed:-NO powder:INST
   ‘He was seriously injured in the chest, but his hair was only singed with gunpowder.’ [Arvat 1975:265]

c. Derevo bulo vypaleno sonecm.
   wood:ACCAUX:PAST burned:-NO sun:INST
   ‘The wood was burned/warped by the sun.’

(76) Ukrainian -no/-to: Anticausative (repeated from (25))

   Vikno začyneno / rozbyto.
   window:ACC closed:-NO broken:-TO
   ‘The window closed/broke.’ [adapted from Wieczorek 1994:53]

The examples in (74-76) are all unaccusative: they lack an external theta role and contain only internal arguments. Since there is no external argument that can be dethematized, the -no/-to examples in (74-76) are not passive under standard assumptions. Recall that while Ukrainian -no/-to can apply to passive structures, it is not required to. It follows that a theory designed to characterize passivization per se, rather than the primitives that passive structures follow from, excludes the -no/-to forms in (74-76), which are no less productive in the language than the straightforward passives in (73).

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79 Note that the Polish -no/-to forms corresponding to (75-76) are ungrammatical due to the absence of a [+sentient] participant:

(i) Polish -no/-to: Adversity Impersonal (cf. (75c))
   * Drzewo spalono słońcem.
   wood:ACC burned:-NO sun:INST

The Polish equivalent of the anticausative in (ii) is possible only in the “indefinite-personal” reading:

(ii) Polish -no/-to: Anticausative
   Wybito szybę.
   broken:-TO window-pane:ACC
   ‘Someone / *wind / *storm broke the window pane.’
So the problem that the \textit{-no/-to} forms in (74-76) pose for the passive-morpheme-as-an-argument theory is that they have no external theta role to assign to this argument. Under a passive analysis for (74-76), we would need a way to circumvent the 1AEX violation that passives of unaccusatives are believed to incur (Perlmutter & Postal 1984a). It will be recalled that the 1AEX Law roughly states that verbs with derived subjects, such as unaccusatives, cannot be passivized. Accounting for Ukrainian \textit{-no/-to} of unaccusatives in Baker’s framework involves finding a new area of parameterization. The question is what can be parameterized to “beat” the 1AEX Law. Baker (1988:329-333) proposes that this is the site of generation of the passive morpheme (see also BJ&R:232). In those cases in which an unaccusative verb is apparently passivized, the passive morpheme is generated in the direct object position. The passive morpheme now appears in a position in which it can receive the theta role usually assigned to the direct object. Essentially, then, Baker is proposing a parameterization of theta-absorption, i.e., which theta role gets absorbed by the passive morpheme.

Baker proposes to achieve this by means of parameterizing the categorial status of the passive morpheme, as in (77):

(77) Passive-Morpheme Category Parameter

\begin{itemize}
  \item [a.] The passive morpheme is an Infl element (English, Dutch, German...)
  \item [b.] The passive morpheme is an N element (North Russian??/ Lithuanian?? (Ukrainian??))
\end{itemize}

According to (77a), in English, Dutch, German, and all other languages in which the passive targets the verb’s external argument exclusively, the passive morpheme is an Infl element. It is base-generated under Infl and receives (= absorbs) the verb’s external theta role. Alternatively, in languages which allow passives of unaccusatives, for which Baker
(1988:329, 349-350) cites, among others, North Russian and Lithuanian, the passive morpheme is an N element, as in (77b), and is assigned the verb’s internal theta role.

We will see in chapter 4 that treating the passive morpheme as an N category makes a series of incorrect predictions for North Russian and Lithuanian nonagreeing passive-participial predicates. The crucial point will be that in contrast to Ukrainian -no/-to, the corresponding nonagreeing predicates in North Russian and Lithuanian assign an external theta role (initial or derived) to a full lexical-NP subject. Likewise, for transitive verbs, the internal argument is also lexically realized; as a result, the direct internal position cannot be dethematized, as predicted by the Category Parameter (77b). Furthermore, under a theory that allows the passive morpheme to be generated in any NP position, it remains a mystery how to regulate the categorial selection for the passive morpheme within a single language, i.e., between the canonical and nonagreeing passive-participial constructions.

For now, let us focus on whether the Category Parameter provides any useful insights for Ukrainian. The problem is that, as in North Russian and Lithuanian, the direct-object position in the Ukrainian -no/-to examples in (74-76) is also fully thematic. Recall that these are ACC-case-assigning unaccusatives. The Category Parameter (77b) falsely predicts that the direct internal argument will be the source of dethematization that licenses passivization. What is striking about the Ukrainian -no/-to examples of unaccusatives in (74-76) is that there is no dethematization at all, neither of an external nor internal argument. The result is that parameterizing the theta-absorption facts will not provide any type of explanation for these examples. An analysis of (74-76) in such a framework would require admitting optionality in whether theta assignment to the
passive morpheme is necessary. This would amount to parameterizing the Theta Criterion, or the LF well-formedness constraint that is responsible for it, which is clearly not a desirable result. Another approach could be to provide separate analyses for the genuinely passive instances of Ukrainian \(-\text{no/-to}\) in (73) and the non-passive examples in (74-76). That is, it could be argued that \(/-\text{no/-to/}\) in each set of structures is a discrete, if homophonous, morpheme with a distinct set of requirements with respect to theta- and case assignment. This could effectively remove (74-76) from the empirical coverage of Baker 1988 and BJ&R, but, as a consequence, it would force the need for a special analysis just for these anomalous \(-\text{no/-to}\) forms. It will be shown in section 3.3.2 that all forms of Ukrainian \(-\text{no/-to}\) can be treated in the same way if the presence of the ACC object is not obligatorily related to the status of the external argument. That is, the key to explaining (or even properly describing) Ukrainian \(-\text{no/-to}\) does not lie in “deriving” Burzio’s Generalization. In fact, it is not entirely clear if the latter is even relevant.

Note that Ukrainian \(-\text{no/-to}\) is treated in similar fashion in Franks (1995:348, 356-359), where, in the spirit of Baker 1988 and BJ&R, a “Case-Absorption Parameter” is proposed to parameterize the cases that the passive morpheme can absorb or check.\(^{80}\) The analysis that Franks pursues is one in which the case facts fall out from the position in which the passive morpheme is generated, i.e., in the upper Agr (responsible for NOM) or in the lower Agr (responsible for ACC). In the case of the former, NOM is checked by the passive morpheme and only the ACC of the lower Agr is available for the underlying

\(^{80}\) Note that Franks (1995:355-358) differs from Baker 1988 and BJ&R in assuming that the “suppressed” external argument of \(-\text{no/-to}\) in both Polish and Ukrainian is assigned to a PRO subject, rather than treating the passive morpheme itself as a theta- and case-bearing argument. This analysis appears to be correct for Polish (cf. the pro-arb subject analysis for Polish \(-\text{no/-to}\) discussed in section 3.2), but it is unclear how it can be correct for Ukrainian at the same time. Recall that it was argued in section 3.2 that Polish and Ukrainian \(-\text{no/-to}\) differ precisely with respect to the status of the external argument.
object. In the case of the latter, ACC is checked by the passive morpheme and only the NOM of the upper Agr is available for the underlying object. The Case-Absorption Parameter states that in languages like Ukrainian, both sites of generation are possible, which yield both the nonagreeing -no/-to form and the canonical agreeing passive.

As mentioned earlier in connection with Baker’s (1988) Category Parameter, there is no explicit statement as to what regulates the optionality in the site of the passive morpheme’s generation within a language that admits both options. The basic idea behind the Case-Absorption Parameter yields the correct results for Ukrainian, but it is unclear what such a parameter follows from. Why, for example, can the passive morpheme be generated in more than one position only in those languages that allow ACC objects of passives? And what accounts for the differences we have seen between Ukrainian and Polish, which apparently need to be set in the same way for case- and theta-absorption. Note, in particular, that under any approach that relies on parameterizing case- and theta-absorption facts, it remains a mystery how to account for the great disparity of implicit subject properties between Ukrainian and Polish, discussed in section 3.2.3. Clearly, treating the passive morpheme as a full-fledged argument, or assuming a PRO-argument subject, will yield the correct results with respect to binding and control for Polish -no/-to only.81 The lack of implicit-subject effects in Ukrainian -no/-to suggests the need for distinct analyses.

The conclusion of this subsection is that the parameterization of case- and theta-absorption fails to correctly account for Ukrainian -no/-to in several crucial respects, and falsely predicts Ukrainian -no/-to to pattern with its Polish counterpart. My proposal,

81 Recall that under the present analysis, Polish -no/-to does not contain a passive morpheme, which rules out the passive-morpheme-as-argument proposal of Baker 1988 and BJ&R.
which will be taken up shortly in section 3.3.2, is that the case facts of Ukrainian \(-\text{no/}t\) follow from the featural specification of the \(-\text{no/}t\) morpheme and the requirements that this set of features imposes on the operation Merge. Before moving on to this discussion, we will briefly examine another, more recent parameter-driven analysis of Ukrainian \(-\text{no/}t\) proposed in Boeckx 1998.

3.3.1.2 Boeckx 1998 and \(-\text{no/}t\) + Default ACC

For the sake of completeness, we now turn to the broad-based crosslinguistic study of passivization in Boeckx 1998, where Ukrainian \(-\text{no/}t\) is dealt with briefly. Following the essence of Baker 1988 and BJ&R, Boeckx develops a mechanism, subject to crosslinguistic parameterization, by which the usual suppression of a verb’s external theta role is linked under passivization with the absorption of its ACC case. Under canonical passivization in Boeckx’s (1998:188-193) theory, a covert subject, which is generated in light \(v\), receives the external theta role associated with this projection and checks (or “paralyzes”) \(v\)’s ACC case feature. \(T\)’s NOM-case feature is subsequently checked by raising of the underlying object for the usual reasons.\(^{82}\) On Boeckx’s theory, this empty pro argument is licensed by a strong “aspectual feature” of the passive morpheme.\(^{83}\) This pro argument, like any argument, must obligatorily receive both a theta role and case (cf. the argument status of the passive morpheme in Baker 1988 and BJ&R).

\(^{82}\) Note the assumption in Boeckx 1998 that \(T\) obligatorily contains a NOM case feature (as a property of the functional head), regardless of the morphosyntactic properties of the lexical items undergoing concatenation.

\(^{83}\) Under Boeckx’s theory, the notion of Aspect is encoded in a functional category that is responsible for “undoing” the canonical object checking relations in \(v\). Note that Aspect is not being used in the traditional sense to refer to the temporal consistency of verbs, as in the perfective/imperfective distinction in Slavic.
To account for impersonal passives of unergative intransitives, as in Dutch and German (as well as French and many other languages), Boeckx (1998:258-260) relies on the notion that these languages have “inherent case resources”. The idea involves an extension of Hale and Keyser’s (1993) proposal that unergative intransitives are hidden transitives. For reasons that are not entirely clear, though required by the analysis, languages that have inherent case as a lexical resource obligatorily assign inherent ACC to the hidden object of these hidden transitives. Note that inherent case is exceptional: it is licensed directly in its merged position. Thus, when the hidden object of unergative intransitives bears inherent ACC, there is no case feature in the v-complex against which the pro subject of passives can check its own case feature. Under Boeckx’s theory, it follows that pro raises to T, where it checks T’s NOM case feature. In such a way, impersonal passive formation occurs only when the pro subject of passives is forced to check its case feature against T. The impersonal passive is ill-formed in English, on this theory, since in non-inherent-case-assigning languages, pro is forced to check its case feature against the hidden structural case feature in V (adjoined to v). As a result, in the absence of a raised lexical NP (the verb-stem is intransitive), T’s case feature will go unchecked and the derivation will crash.

Boeckx (1998:261) thus proposes the following parameter to account for those language types that form impersonal passives of unergative intransitives:

(78) The Inherent Case Parameter (paraphrased)
All and only those languages that have “inherent case resources” allow the formation of impersonal passives.

It may be immediately objected that (78) is falsified by almost every Slavic language. Indeed, in Ukrainian, for example, the “inherent case resources” are significantly more
robust than in any of the languages cited by Boeckx, though the formation of impersonal passives from unergative intransitives along the lines of Dutch and German is ruled out.  

Let us leave the question of impersonal passives aside and consider whether Boeckx’s framework makes any correct predictions regarding the -no/-to + ACC construction. Actually, given the machinery laid out above, it appears that Ukrainian -no/-to should not occur. This is because its pro argument would be forced to check V’s ACC case feature with the result that ACC would not be available for the object. Furthermore, if the pro subject of Ukrainian -no/-to were to check ACC, then T’s case feature would remain unchecked. Recall that this is precisely what ruled out the formation of impersonal passives in English. That the ACC complement of Ukrainian -no/-to is indeed structural, rather than inherent, is demonstrated by the Genitive of Negation and Partitive Genitive which hold in Ukrainian for structural objects only:

(79) Ukrainian -no/-to: Genitive of Negation
Na druhyj den’ ne bulo znajdeno joho čovna.
 on following day NEG AUX:PAST found:-NO his boat:GEN
‘On the following day his boat wasn’t found.’ [Shevelov 1969:177]

(80) Ukrainian -no/-to: Partitive Genitive
Spočatku bulo vypytó vody a potim vidrizano xliia.
first AUX:PAST drunk:-TO water:GEN and then sliced:-NO bread:GEN
‘First some water was drunk and then some bread was sliced.’

Boeckx (1998:301-302) explains the occurrence of Ukrainian -no/-to by referring to a poorly motivated notion of “default case” for the ACC object. This is essentially a way of getting around the problems just described. Under the theory that the ACC object in

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84 To explain away Russian, Boeckx claims that certain languages have the wrong type of expletive to properly take advantage of its inherent case resources. This predicts that Czech, which does allow impersonal passive formation (of quirky-case-assigning verbs only), must have a null expletive featurally distinct from that of Russian and Ukrainian, which do not allow such passives. Furthermore, Czech would require an expletive with the specific set of features that admits the impersonal passives mentioned above,
Ukrainian -no/-to is default, and, as a result, is not required to enter a checking relation with the pro subject, pro will be free to check T’s case feature. On the default-case theory, Ukrainian -no/-to would thus converge for the same reason that impersonal passives in Dutch and German do, namely, because the pro subject does not need to check ACC case (since it is either inherent or default) and, as a result, is free to enter a checking relation with T.

Boeckx cites the example in (81), originally from Sobin (1985:653), to support his claim that the ACC object of Ukrainian -no/-to is assigned default case. Boeckx’s basic assumption is that the left-edge “boundary position” of the ACC object indicates that it is a left-dislocated topic assigned default case along the lines of French (82) (and its English gloss):

(81) Ukrainian -no/-to
Cerkvu bulo zbudovano v 1640 roci.
church:ACC AUX:PAST built:-NO in 1640 year
‘The church was built in the year 1640.’

(82) French: Left-Dislocated Subject
Moi l’ embrasser, jamais!
me:ACC her to-kiss never
‘Me kiss her, never!’

Boeckx’s notion of default case for Ukrainian -no/-to is undermined by the following two examples. In (83) the ACC object appears VP-internally in a narrow-focus structure. In (84) the ACC object appears preverbally, as in (81), but with an optionally non-D-linked, non-topicalized interpretation (under which the entire clause is maximally focused).

Neither configuration allows default case in the extraposed, dislocated sense intended by

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85 Note, additionally, that I am not aware of default ACC anywhere else in Ukrainian, nor are any such examples provided by Boeckx to independently motivate his claim.
Boeckx. Thus, (83-84) show that the ACC case in Ukrainian -no/-to is not default, while (79-80) above show that it is not inherent.

(83) Ukrainian -no/-to
    U misti bulo zbudovano novu cerkvu.
        in city AUX:PAST built:-NO new church:ACC
    ‘In the city was built a new church.’

(84) Ukrainian -no/-to
    Čy ty čula, ščo stalošja? Nemovlja bulo znajdeno v smitnyku.
        PRT you hear what happened baby:ACC AUX:PAST found:-NO in dumpster
    ‘Did you hear what happened? A baby was found in a dumpster.’

The fact that the ACC case in Ukrainian -no/-to is structural rather than default is fatal for Boeckx’s account of this construction and presents a serious challenge to his unified theory of the Passive.

3.3.2 Agreement and Merge

In this section I will suggest that the unusual case facts of Ukrainian -no/-to follow from the operation Merge, in conjunction with whether or not a predicate contains agreement morphology. The central claim is that the relevant property for the syntax of Ukrainian -no/-to is not the ACC object, or V’s ACC case feature, but the presence of the nonagreeing word-final morpheme /-o/.87

That crucial idea here from minimalism (Chomsky 1993, 1994) is that all information necessary for a convergent derivation is encoded in the lexical entries of the items undergoing concatenation. The derivation is driven by the need to check uninterpretable features such as the phi-features of verbs, structural case, and the D-feature (= EPP-feature) of T. The following non-trivial assumptions for the projection of phrase structure

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86 See section 4.4 for more discussion of this example.
will be followed: ³⁸(i) only the functional structure necessary for convergence is projected (there is no universal and invariant syntactic “template”) (Thráinsson 1996, Grimshaw 1997); and (ii) checking relations may be established by all instances of concatenation (i.e., by both Merge and Move) (Epstein et al. 1998). Note that these assumptions have the combined effect of readmitting the head-complement relation into the computation (Bobaljik 1995, Bobaljik & Thráinsson 1998), rather than stipulating the definition of feature checking as exclusively a spec-head or head-head relation, instantiated exclusively in the functional domain of the clause. The strongest hypothesis, which is assumed, is that all feature checking takes place as the structure is built. This has the desirable conceptual consequence of eliminating the need to specify feature strength (van Gelderen 1996, Chomsky 1998).³⁹ The idea is that all features are strong as soon as they enter the derivation. In the case of Slavic, where it appears that all uninterpretable formal features are weak (in the sense of Chomsky 1993, 1994), with the possible exception of T’s EPP-feature, an account of the syntax of Ukrainian -no/-to would require a series of covert movements that appear, at first blush, to place an extreme burden on the language learner, while providing no insight into the empirical questions at hand. Since the choice of checking theory is not decided by the empirical evidence presented, and thus does not hinge on it, the least technical option is assumed.

³⁸ Note that nonagreement is distinct from default agreement. The former contains special morphology dedicated to projecting nonagreeing predicates, while the latter is essentially an agreeing structure whose controller is underspecified for agreement.
³⁹ This approach to phrase structure and feature checking was initially presented for nonagreeing predicates in Slavic in Lavine, Harves & Billings, to appear. This framework is not meant to argue for a particular model of minimalist syntax. It is more of a short-hand that allows us to focus on the structure-building and feature-checking operations relevant to Ukrainian -no/-to.
³⁹ Note that this assumption also removes the strict complementarity between theta-theory and movement (that is, between Merge and feature-checking) proposed in Chomsky 1994 (1995a:312). For a critical discussion of this problem see Bobaljik (1995:313-316).
The following are some of the immediate consequences of this approach for Ukrainian -no/-to. First, ACC case need not be checked against the complex head \([_{AgrO} V^o AgrO^o}]\), well-known from earlier work in the minimalist framework, but merely against V at Merge, under specifiable conditions.\(^90\) Next, the lack of agreement morphology on the -no/-to predicate will eliminate the need for a functional projection whose sole purpose would be to check this feature. Finally, there is no place in the theory for “extra-featural” statements in the form of theta- and case-absorption parameters. Under Chomsky’s “Inclusiveness Principle” (1995a:225), which states that the interfaces consist of nothing more than arrangements of lexical features, such statements are presumably invisible to the syntax.

The key observation here is that in the absence of an agreeing null expletive, V’s agreement features are in complementary distribution with its case feature (ACC). This is to say that if there is only a single lexical NP with which V and its extended projection can Merge in the course of a derivation, it will not be able to check both agreement and ACC case.

The facts of -no/-to and the Ukrainian canonical passive bear this out. The -no/-to predicate is obligatorily nonagreeing. Recall from section 3.1 that erstwhile inflectional /-o/ was reanalyzed as a derivational marker dedicated to the function of projecting nonagreeing predicates. In contrast, the canonical passive (-n-/t-) is obligatorily agreeing; like all productive adjectives and participles, it bears phi-features for gender (in the \(SG\)) and number. Assuming that only NOM NPs engage in agreement, which is

\(^90\) Recall that the ACC case feature is borne by V, not AgrO or light \(v\). Linking ACC-case checking with the latter functional categories is only necessitated by the assumption that feature checking must take place in the functional domain of the clause.
certainly the case in Slavic, if not universally, the uninterpretable phi-features of the agreeing -n-/t- participle will only be checked in the case of merging with a NOM NP. The merger of an agreeing participle with an ACC object would require that the syntax subsequently change the morphology of the NP in the course of the derivation (i.e., from ACC to NOM) to check agreement. This type of derivation would stand in violation of the standard restraint on the computational system that permits it to work with fully-formed syntactic objects only.

The mysterious notion of “case absorption” by the passive morpheme can now be shown to follow from the failure of a V_pass category, specified as [+ AGR], to check both agreement and ACC case in the presence of a single lexical NP. Let us first consider the case of nonagreeing -no/-to, where there is no such conflict between agreement and ACC case. It may be safely assumed that V_no/to has no agreement features. Assuming that there is no such thing as “case absorption”, the derivation of the Ukrainian -no/-to predicate in (85) will proceed as in (86):

(85) Ukrainian -no/-to (repeated from (84))
    Nemovľja bolo znajdeno.
    baby:ACC AUX:PAST found:-NO
    ‘A baby was found.’

(86) Derivation of (85)2.3
    a. Merge V_no/to and NP:ACC

\[\text{VP} \quad \text{V}_{\text{no/to}} \quad \text{NP:ACC} \quad \{\text{check ACC}\}\]

91 The subject-predicate agreement features of AgrS or T should properly be understood as features of V. Note that under the present analysis there is no need to assume covert adjunction of V to AgrS or T for feature checking against the complex head \([T V^o T']\) or \([AgrS V^o AgrS']\).
92 Note that “NP” will be used as a cover term for NPs and DPs when there is no need to distinguish the two.
93 Lines with a terminal arrow indicate feature checking.
b. Merge AUX and VP

The key point to bear in mind here is that after V merges with the object and checks ACC case, there is no subsequent need to check agreement, since word-final /-o/ bears no agreement features. As a result, the movement (or “re-merger”) of the ACC object to the Spec,TP position does not entail a checking relation with the nonagreeing AUX.

Note that in (86) each instance of Merge (or Move) satisfies the basic economy condition known as Last Resort, which bans all unnecessary movements. A general definition of Last Resort is given in Chomsky 1993:

(87) Last Resort (Chomsky 1993:32)

A step in a derivation is legitimate only if it is necessary for convergence-- had the step not been taken, the derivation would not have converged.

Given a theory in which all features are strong once they occur, let us adopt the stronger formulation of Last Resort proposed by Bobaljik (1995), which makes specific reference to Merge.

94 Note that the operation Re-Merge is an instantiation of Move (Epstein et al. 1998).
(88) Last Resort (Bobaljik 1995:309)
A syntactic operation (Merge/Move) involving two elements (α,β) is licit only if it satisfies some property [i.e., feature] of either α or β (or both).

In the case of the agreeing counterpart to (85-86), given below in (89-90), we will see that the case-suppression effect is subsumed by a more general failure of feature checking to go through.

(89) Ukrainian -n-/t- (agreeing counterpart to (85))

Nemovlja bulo znajdene.

baby:NOM:NEUT:AUX:PAST:NEUT found:NEUT
‘The baby was found.’

In our discussion of the derivation of (89), let us assume that Vₐ⁻/t⁻ can potentially bear both agreement features and an ACC-case feature; that is, we assume that there is no such thing as “case absorption”. Note that, as a result, there are two different options for the first step in the derivation: Vₐ⁻/t⁻ can merge with an ACC NP and check its case feature or it can merge with a NOM NP and check agreement. Under the definition of Last Resort given in (88), both of these steps (i.e., both (90a) and (90a’)) are licit operations.

(90) Derivation of (89)

a. Merge Vₐ⁻/t⁻ and NP:NOM

a’. Merge Vₐ⁻/t⁻ and NP:ACC

The next step in the derivation involves merging the tense-bearing AUX with VP, where it checks T’s Tense feature. Under the assumptions that we have adopted, however, this step is problematic for the Vₐ⁻/t⁻ + ACC structure in (90b’). V’s uninterpretable agreement features need to be checked against an NP from the Numeration. Assuming that there is
no null expletive available for this purpose, a checking relation will have to be established between the ACC NP and V before the tense-bearing AUX is merged. If AUX is merged first with VP, there will be too much intervening material between the NP and V to establish a sufficiently local relation to check V’s agreement features. That is, merging the AUX as the next step after (90a’) would subsequently force V to raise overtly to T, which does not occur in Ukrainian. As a result, the step in (90b’), though itself a licit move, leads ultimately to a non-convergent derivation.

(90)  b. Merge AUX and VP  b’. Merge AUX and VP

Recall that in the V\text{-n-/-t-} + NOM structure in (90a), V’s agreement features are checked at Merge. As a result, there will be no need to establish an additional checking relation between NP and V in the V\text{-n-/-t-} + NOM structure; merging the AUX with VP in (90b) is, therefore, not a problem.

It is crucial to note for the next step in the derivation that agreement features of NPs are [+Interpretable] and, thus, are not deleted when checked. For (90c-c’), this will mean that agreement features allow repeated movements (in contrast to case features). As a result, the AUX merged in (90b-b’) will be able to have its agreement features checked in (90c) (i.e., in the case of the V\text{-n-/-t-} + NOM structure) in a straightforward way, by means of re-merging the NOM NP with T’. Note that in the case of the V\text{-n-/-t-} + ACC structure in

\[^{95}\text{Recall that -}\text{n-/-t-} \text{ signifies an agreeing participial form. } /-\text{n-/-t-} / \text{ is the passive-participial derivational}\]
(90c’), the ACC NP may licitly re-merge in the same position, presumably to check the EPP-feature of T (which is also checked by the NOM NP in (90c)), but the uninterpretable agreement features of both the AUX and the passive participle will remain unchecked and the derivation will crash. To be sure, the NP in (90c’) is in a local checking relation with the AUX, but its ACC-case marking apparently prevents it from checking and deleting the AUX’s agreement features. The relevant structures are given below:

(90) c. Merge NP:NOM and T’       c’. Merge NP:ACC and T’

To review, each step in both derivations has been shown to be licit from the point of view of Last Resort in (88). The difference is that only in the Vₙ₋ₜ + NOM structure does the underlying object check agreement against V and AUX. What this presentation of the Merge and feature-checking facts shows is that the notion of “case absorption”, as well as Burzio’s Generalization more generally, may actually be redundant statements that follow from the mechanics of the derivation. The fact that the underlying objects of passives and unaccusatives fail to be licensed in their base position cannot be because ACC case is unavailable to this position. In the derivations in (86) (-no/-to) and (90) (agreeing -n/-t-), we were forced to assume that ACC case was available, since we know that in (86) it has to be. Rather than stipulating a series of parameters to account for the stem to which inflectional morphology attaches, agreeing for gender and number.
facts of \(-no/-\text{to} + \text{ACC}\), we assume the \text{ACC} is available in agreeing participial predicates as well. In the latter case, we find that the derivation with the \text{ACC} object simply fails to converge. The derivation of \(-no/-\text{to} + \text{ACC}\) minimally differs from \(-n/-t- + \text{ACC}\) by the necessity, in the latter, to check agreement. For this reason, it is concluded that “case absorption” and Burzio’s Generalization follow from agreement and, most likely, the EPP (see Marantz 1991 and Harley 1995:174-178). The result is that passive-participial morphology + \text{ACC} is not a priori ruled out, but instead is predicted to occur as long as the morphology on the predicate can be properly licensed (checked).

3.4 Polish and Ukrainian \(-no/-\text{to}\) and the EPP

The purpose of this section is to review and make more explicit the various EPP facts that have been discussed throughout this chapter and, in the case of Ukrainian, in chapter 3 as well. Let us begin with the Spell-Out structures that are proposed for the \(-no/-\text{to}\) construction in each of the languages, given in (91):\(^{96, 97}\)

\[(91) \begin{align*}
a. \text{Polish } -no/-\text{to} & \quad b. \text{Ukrainian } -no/-\text{to} \\
\text{TP} & \quad \text{TP} \\
\text{pro-arb}_{\text{i}} & \quad \text{TP} \\
\text{T'} & \quad \text{NP}_{i}\text{ACC} \\
\text{T} & \quad \text{vP} \\
\text{-no/-to} & \quad \text{VP} \\
\text{t}_{\text{i}} & \quad \text{V-} \\
\text{NP}_{i}\text{ACC} & \quad \text{AUX} \\
\text{V-} & \quad \text{V}_{-no/-\text{to}} \\
\text{t}_{\text{i}} & \\
\end{align*}\]

\(^{96}\) These structures include all instances of Merge and Re-Merge.  
\(^{97}\) The structure for Polish \(-no/-\text{to}\) in (91a) is essentially the one proposed in Maling 1993. What distinguishes my proposal is the “abstract” base-generation of the \(-n/-t-\) morpheme under T, as suggested by the AUX HYPOTHESIS.
Note that the structures in (91a-b) make an immediate prediction regarding the way in which the EPP-feature of T will be satisfied in the two languages. In the case of Polish -no/-to in (91a), a fully-thematic external argument base-generated in the Spec,vP position moves to Spec,TP. This is in contrast to Ukrainian -no/-to, in which the EPP-feature of T is satisfied by movement of the internal ACC NP.\(^98\) The EPP-checking facts for Polish are supported by the implicit-subject tests discussed in section 3.2.3. The pro-arb subject of Polish -no/-to is in a position to participate in the binding of internal arguments and the control of embedded adverbial clauses and infinitives. Note that under discourse-neutral word order for Polish -no/-to, the underlying object remains VP-internal. Constructions in which the object of Polish -no/-to appears preverbally indicate topicalization rather than EPP-feature checking. Such topics may be assumed to occupy the specifier of a functional projection between CP and TP (perhaps the specifier of an adjoined TP, as proposed by King 1995 for Russian).

Examples of Polish -no/-to under neutral discourse are given in the following question-answer paradigm in (92). The intended reading is one in which the entire clause is maximally-focused and thus non-D-linked. As indicated in the glosses, the (a’, b’) examples with the raised internal argument are generally interpreted as topics.

(92) Polish -no/-to

Q. Co się stało?
‘What happened?’

a. Znaleziono niemowlę na śmieciarki.
found:-NO baby:ACC at dumpsite
‘They found a baby at a dumpsite.’

\(^98\) It was shown by Babby (1989), on the basis of data (in part) from Ukrainian -no/-to, that the older (GB) formulation of the EPP, which required either a thematic subject or a non-thematic pleonastic one (Chomsky 1982:10), could not be maintained universally. Recall that the present analysis makes use of the minimalist assumption that subject properties are (potentially) dissociated, which allows the EPP to be checked independently from case and agreement.
a’. Niemowlę znaleziono na śmietniku.
‘They found the baby at a dumpsite.’
‘They found a baby at a dumpsite.’

b. Wsadzono cudzoziemca do więzienia.
placed:-NO foreigner:ACC in prison
‘They put a foreigner in prison.’

b’. Cudzoziemca wsadzono do więzienia.
‘They put the foreigner in prison.’
‘They put a foreigner in prison.’

Note that these word-order facts are consistent with the AUX HYPOTHESIS for Polish -no-/to, which states that there is no passive-participial morphology involved in this construction and that the external argument (or derived external argument in the case of unaccusatives) is fully projected and syntactically active.

The analysis for Ukrainian is once again more complex and the results, unfortunately, are not entirely conclusive. Let us begin in (93) with the Ukrainian -no-/to counterpart to the Polish examples in (92). Note that native-speaker judgments here varied regarding the most natural word order for a discourse-neutral response. Some preferred the verb-initial order in the (a-b) examples, while others, in contrast to the judgments for Polish -no-/to, found this word order extremely awkward (presumably as an EPP-violation) and preferred the response with the raised object in the (a’-b’) examples.99

(93) Ukrainian -no-/to
Q. Ščo stalošja?
‘What happened?’

a. Bulo znajděno nemovlí v smitnyku.
AUX:PAST found:-NO baby:ACC in dumpster
‘A baby was found in a dumpster.’

99 Note that the judgments for the Polish examples in (92) were robust and consistent. The variation in the Ukrainian judgments is either an artifact of poor elicitation or an indication of a difference in “ranking” between the conflicting constraints of RightAlign (for focus) and EPP-checking, in the Optimality-Theoretic sense discussed in chapter 2.
a’. Nemovlj a bulo znajdeno v smitnyku.
‘A/The baby was found in a dumpster.’

b. Bulo posadzeno inozemca do v’jazyn c.
   AUX:PAST place:-NO foreigner:ACC in prison
   ‘A foreigner was put in prison.’

b’. Inozemca bulo posadzeno do v’jazyn c.
   ‘A/The foreigner was put in prison.’

Note that it is only in the case of the (a’-b’) examples with an indefinite, non-D-linked subject that we can isolate a “pure” EPP-effect, that is, movement to satisfy T’s EPP-feature that is independent not only from case and agreement, but also from discourse interpretation. For those Ukrainian speakers who prefer the verb-initial (a-b) examples, or the (a’-b’) examples with the definite interpretation on the raised object, “pure” EPP-checking in this sense is not available.

Returning to the structures for Polish and Ukrainian -no/-to in (91), we note that the raised internal argument in Ukrainian occupies the same position as the pro-arb subject in Polish. At this point it is worth considering whether these arguments, related positionally, share the same properties with respect to the binding of reflexives and control of the understood subject of embedded adverbial participles (gerunds). Recall that the implicit-subject tests discussed for Ukrainian in section 3.2.3 concerned only the suppressed external argument. Let us now consider whether the EPP-satisfying preverbal ACC object of Ukrainian -no/-to takes part in binding and control like the external pro-arb argument of its Polish counterpart. The data in (94-95) indicate that it does not:

(94) Ukrainian -no/-to: Binding of Reflexive svoj- ‘self’s’
   a. Ba’ka bulo vbyto *svojimi/ joho dit’my.
      father:ACC AUX:PAST killed:-TO REFL his children:INST
      ‘The father was killed by his children.’
b. Studentiv bude vidvedeno na *svoju/ jixnju kafedru.
   students:ACC AUX:FUT taken:-NO to REFL their department
   ‘The students will be taken to their department.’

(95) Ukrainian -no/-to: Control of Adverbial Gerund (GER)

a. *Inozemca bulo posadżone do v'jaznyci, ne poproščavšys'
   foreigner:ACC AUX:PAST placed:-NO in prison NEG say-good-bye:GER
   z rodynoju.
   with family
   ‘The foreigner was put in prison, not having said good-bye to his family.’

b. *Nas bulo vpuščeno do budynku, ne domovyvšys’
   us:ACC AUX:PAST admitted:-NO in building NEG come-to-an-agreement:GER
   z dyrektorom.
   with director
   ‘We were admitted into the building without having come to an agreement with
   the director.’

These facts immediately suggest that for Ukrainian -no/-to the Spec,TP position
implicated in EPP-checking may not be an A-position as it is in Polish, but rather an A’-
position, from which binding and control are generally not instantiated. The possibility of
the EPP-position varying crosslinguistically with respect to A- versus A’-status has been
widely discussed in recent literature (see, for example, Babyonyshev 1996 and Alexiadou
& Anagnostopoulou 1998). The fact that some speakers of Ukrainian prefer a D-linked
interpretation on the ACC object when it appears preverbally provides additional,
interpretational support for the A’-status of the EPP-checking position in Ukrainian
-no/-to. Babyonyshev (1996:39) notes that the EPP position can have a “dual status”
within a language depending on what type of constituent occupies it. The basic idea is
that “non-canonical subjects”, such as PPs and non-NOM NPs, check the EPP in an A’-
position (and, as a result, are obligatorily D-linked), while canonical NOM subjects check
the EPP in an A-position, with an optionally non-D-linked interpretation. The ACC object
of Ukrainian -no/-to as a non-canonical EPP-checker appears to support Babyonyshev’s
proposal. Due to the disparity in native-speaker judgments, however, the results of this discussion will have to remain inconclusive until further examination of a wider range of data is possible.

Note that crosslinguistically, the EPP-feature of T is satisfied in one of two ways: (i) by moving (i.e., re-merging) an XP, or (ii) by merging an XP.\footnote{Alexiadou & Anagnostopoulou (1998) suggest a third mechanism for EPP-checking: V-raising (i.e., $X^\ominus$-movement).} We have only considered instances of the former operation for Ukrainian -no/-to. For the sake of completeness, let us briefly consider the latter, which is achieved only by means of expletive-Merge. Following the results of chapters 2, we note that the role of the expletive is to allow structures that encode a particular focus structure to converge. That is, where focused material that might otherwise satisfy the EPP is right aligned, insertion of an expletive ensures that T’s uninterpretable D-feature will be checked. In languages such as Icelandic, for example, the insertion of an expletive actually makes the right-alignment of focused material possible. Let us consider, for a moment, the example of quirky-case-assigning passives in Icelandic, where, like Ukrainian -no/-to, the underlying object is already marked for case and raising of this object, consequently, takes place for EPP-checking:

(96) Icelandic Quirky-Case-Assigning Passive

a. Stólunum hafði verið stolið á uppboðinu.  
the-chairs:DAT had:[-AGR] been stolen at the-auction

b. Pað hafði verið stolið fjðrum stólum á uppboðinu.  
there had:[-AGR] been stolen four chairs::DAT at the-auction

c. *Hafði verið stolið fjðrum stólum á uppboðinu.  
\[Sigurðsson 1992:14\]
The D-linked (definite) interpretation of the raised internal argument in (96a) is exactly what we have found in Ukrainian -no/-to. The question is whether the use of an expletive to establish focus on the underlying object, as in Icelandic (96b), is equally necessary in the case of Ukrainian. It is claimed in Franks (1995:316) that Ukrainian has the overt expletive pronoun vono. Note that if Ukrainian vono were indeed to function as a non-thematic, place-filling subject (along the lines of Icelandic pad), as suggested specifically for Ukrainian -no/-to in Billings 1993, then the ungrammaticality of (97a) would be unexpected:

(97) Ukrainian -no/-to: Question-Answer Paradigm

Q. Ščo stalošja?
‘What happened?’

a. ??? Vono bulo poškodženo mašynu v avariji.
EXPL AUX:PAST damaged:-NO car:ACC in accident

b. Mašynu bulo poškodženo v avariji.

c. Bulo poškodženo mašynu v avariji.

‘A/The car was damaged in an accident.’

The key point of comparison is between Icelandic (96c) and Ukrainian (97c). As noted in chapter 2, the Ukrainian example is fully grammatical, under the correct discourse conditions, without the aid of an EPP-satisfying expletive, in sharp contrast to the starred Icelandic example.102

Finally, it might be objected that the EPP is satisfied in structures such as (97c) by an expletive that is phonologically null. Ideally, we would expect any empty category to

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101 For the purposes of this discussion, it is sufficient only to rule out (97a). There is no need to distinguish between (97b-c). Note merely that at least one of the two latter options was chosen by each informant.

102 The dubious expletive status of Ukrainian vono is also discussed in section 3.1.2.1, where it is shown that the widely-discussed attested examples of vono + -no/-to from Ukrainian literature are best analyzed as agreeing structures in which vono is a fully-referential pronoun with a NEUT.SG antecedent.
have the same properties as its phonologically-realized counterpart. Chomsky
(1995a:294) proposes that an element (overt or null) can be said to be included in a
Numeration if it has an effect on the PF or LF output. Assuming that a null expletive has
no PF output, let us consider whether its effect can be detected at the latter interface,
concerned with interpretation. An argument for LF-output effects is the presence of the
well-known “Definiteness Effect” (Safir 1985). That is, an expletive chain is well-
formed only when the expletive’s lexical “associate” is indefinite. Note, for example, the
ungrammatical expletive-counterpart to Icelandic (96a), given in (98):

(98) Icelandic
*Pað hafði verið stolið stólunum á uppboðinu.
there had:[-AGR] been stolen the-chairs:DAT at the-auction

The same point can be shown on the basis of the English example in (99):

(99) English (Unaccusative)
  a. There arrived a young man.
  b. *There arrived the young man.

The presence of a null expletive in Ukrainian -no/-to would thus be indicated by a
requirement that the verb-initial structure pattern with indefinite complements only. This
is clearly not the case, as shown in (100), in which the underlying object is a narrowly
focused definite NP:

(100) Ukrainian -no/-to
  a. Bulo posadženo do v’jaznyci Vasyl’ja.
     AUX:PAST placed:-NO in prison Vasyl’:ACC
     ‘Vasyl’ was put in prison.’
  b. Bulo vyhnano z roboty Ivana Jakovyča.
     AUX:PAST driven-out:-NO from work Ivan Jakovyč:ACC
     ‘Ivan Jakovyč was fired.’

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103 See also Jonas 1996, Bobaljik & Jonas 1996, and, especially in connection to the question of null
104 The narrow focus in (100a-b) is indicated in the English gloss by bold-type, which is read with heavy
constituent stress.
These well-formed Ukrainian examples are in sharp contrast to the ungrammatical expletive constructions with definite underlying objects in Icelandic (98) and English (99b). Following the earlier conclusions of chapter 2, it appears that there is no LF-interpretive evidence for the presence of null expletives in Ukrainian -no/-to. Treating the examples in (100a-b) as containing an expletive-associate chain would force us to stipulate a special, anomalous type of expletive-associate relationship just for this single Ukrainian construction. Furthermore, under the assumption that the EPP is checked independently by movement of the underlying object NP, vono-insertion appears to be a Full-Interpretation violation, in the sense of Chomsky 1993, since vono does not enter into any checking relations (cf. (97a)).

3.5 Chapter Summary

The main concern of this chapter has been to provide a proper characterization of the erstwhile inflectional NEUT.SG morpheme /-o/ in Polish and Ukrainian passive-participial predicates. The reanalysis of /-o/, supported in both languages by purely phonological developments, led to radically different syntactic structures for participles in -no/-to, both between the two languages, and in the historical development of each individual language. Following recent work in minimalist syntax, syntactic variation in Polish and Ukrainian -no/-to has been treated in terms of change in the featural composition of the /-no/-to/ morpheme itself.

The main result of this chapter has been to provide an explicit characterization of the formal respects in which the -no/-to constructions in the two languages differ. These differences are best captured by the various claims of the AUX HYPOTHESIS for Polish and
the corresponding finding that the AUX HYPOTHESIS consistently fails to hold for Ukrainian. The AUX HYPOTHESIS states that the */-no/-to/ morpheme in Polish was reanalyzed as an auxiliary-like element heading T(ense). The immediate consequence of this claim for Polish */-no/-to/ is that this construction contains no passive-participial morphology and, thus, the lack of ACC-case “absorption” falls out automatically. Initial evidence for this claim came from section 3.1, where it was shown that the loss of overt tense-marking auxiliaries accompanied the productive development of this construction in Old Polish.

Additional evidence for the AUX HYPOTHESIS for Polish */-no/-to/ was presented in section 3.2. Here, on the basis of a wide range of predicate types, it was shown that Polish */-no/-to/ exhibits considerable differences with the canonical agreeing passive in terms of its combinatorial properties. Polish */-no/-to/ was found to undergo productive formation from semantic unaccusatives, psych verbs, and unergative intransitives, all predicate-types that are ruled out in Polish for canonical agreeing passives. It is significant that Ukrainian */-no/-to/ was shown to pattern in this respect with the Polish canonical passive, rather than with Polish */-no/-to/. Recall that Ukrainian */-no/-to/ allows a passive by-phrase and combines freely with tense-marking auxiliaries. Implicit-subject tests further distinguished Polish */-no/-to/ from its Ukrainian counterpart. Under the hypothesis that Polish */-no/-to/ lacks passive-participial morphology, it was predicted that the external argument in such structures should be in a position to bind reflexives and control the understood subject of embedded adverbial participles and infinitives. This is exactly what we found for Polish, in sharp contrast to Ukrainian */-no/-to/, where similar tests indicated that the underlying external argument was suppressed in the usual way
under passivization. The conclusion is that while /-no/-to/ is Polish has been reanalyzed as a functional head, /-no/-to/ in Ukrainian remains a derivational affix, consisting of the usual passive-participial stem, /-n/-t-/, plus a new morpheme in the language, /-o/, which has the dedicated function of projecting nonagreeing predicates.

In section 3.3 we discussed results based on parameterizing theta- and case-absorption. First, given the fact that the external theta role in Polish -no/-to is assigned to a full-fledged argument position, its inclusion in the passivization literature was found to be inappropriate and only to obscure the basic properties of this construction. As for Ukrainian -no/-to, we have seen that the parametric approach has had only limited success in describing this construction, and even less success in explaining any of its core properties. For the present purposes, the main problem with the framework of Baker 1988 and BJ&R is that it predicts an implicational relation between the licensing of ACC case in passive-participial constructions and the formation of impersonal passives from unergative intransitives. Such an approach is forced by attributing special case-assigning (or checking) properties to the passive morpheme (or to a pro argument of passives, as in Boeckx 1998). The result is that Ukrainian -no/-to is falsely predicted either not to occur, or to have a significantly wider distribution (or, in the case of Boeckx 1998, to assign a special “default” ACC case).

Rather than relying on a series of parameters to account for the ACC object of passive-participial morphology, we have sought to assume that any passive verb can licitly Merge with an ACC object. It was shown that whether the derivation converges depends on the rest of the features that are involved in the derivation (most importantly, in the case of Ukrainian -no/-to, convergence was found to hinge on the presence or absence of
agreement features). That is, all the information necessary for the derivation is encoded in the lexical entries of the items undergoing concatenation. Extra-featural statements are ruled out on conceptual grounds as violations of the Inclusiveness Principle.

Finally, the structures given for Polish and Ukrainian -no/-to in section 3.4 were shown to predict two different strategies for checking T’s EPP-feature: canonical checking on the part of a full-fledged external argument (Polish) versus the overt raising of an internal argument (Ukrainian). This analysis of EPP-checking was supported by word-order facts and interpretational evidence. Following the results of chapter 2, no evidence was found for expletive-Merge as an EPP-satisfying mechanism in Polish and Ukrainian.

The result is that two superficially identical constructions in closely related languages were shown to exhibit radically different syntactic structures in a way that can be explicitly stated and empirically tested.