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RESEARCH

Gender Representation and Defaults in Lithuanian

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This study examines gender representation and defaults in Lithuanian by investigating the inflection on predicative adjectives (PAs). We provide novel evidence for two types of defaults in the representation of gender, masculine being the unmarked gender, and neuter being the absence of gender. It is demonstrated that neuter PAs appear when the subject lacks gender features accessible for agreement with the PA, which we refer to as non-agreement. In contrast, masculine PAs appear when the PA agrees with a subject bearing an unmarked gender feature. We analyze masculine and feminine as sharing a feature [GEND] that originates on *n*, the locus of gender features (following Lecarme 2002; Lowenstamm 2008; Kramer 2015; 2016), with the default gender – the masculine – bearing only this feature, and the more marked gender – the feminine – having an additional feature [FEM]. Neuter corresponds to the absence of these features. By placing gender features on the nominalizing head *n*, our account explicitly relates the distribution of gender inflection to nominal syntax and agreement.

Keywords: default gender; feature absence; nominal structure; non-agreement; Lithuanian

1 Introduction

This study examines gender representation and defaults in Lithuanian (Baltic) by investigating the inflection on predicative adjectives (PAs). While it has been suggested before that masculine is a default gender in Lithuanian (Mathiassen 1996; Holvoet & Semėnienė 2006; Bruno 2012), by applying a number of diagnostics associated with default gender (e.g. Corbett 1991; Corbett & Fraser 1999; Kramer 2015) we demonstrate that masculine morphology does not appear on PAs in all environments identified with gender defaults. We show that a single language can in fact have two types of defaults in the representation of gender: masculine is the unmarked gender, whereas neuter, as we argue, corresponds to the the absence of gender features.

We demonstrate that Lithuanian PAs – which inflect for neuter (N), masculine (M), and feminine (F) – exhibit a split. Some default environments yield masculine inflection on PAs, while others instead yield neuter. For instance, when the subject has unmarked gender, the realization on PAs is masculine, e.g. a coordinated expression with gender-mismatched DPs (1). In contrast, when the subject lacks gender, the PA is neuter, e.g. in case of infinitival subjects (2), which we refer to as non-agreement.

(1) [Moteris ir vyras] yra gražūs/*-ios/*-ù.
woman.F and man.M are beautiful-NOM.M.PL/*-NOM.F.PL/*-N
'The woman and the man are beautiful.'

(2) Ambrazas et al.(1997: 645)
[Pavargti už tėvynę] yra gražù/*-ùs/*-ì.
suffer.INF for homeland is beautiful-N/*-NOM.M.SG/*-NOM.F.SG
'To suffer for one's homeland is beautiful.'

To capture this difference, we propose that neuter corresponds to the absence of gender features, whereas masculine and feminine share a gender feature which we refer to as [GEND]. As the unmarked gender, masculine is represented only by the feature [GEND], whereas the marked feminine gender is represented by [GEND] and the additional feature [FEM].[1] Taking gender features to originate on *n* (following Lecarme 2002; Lowenstamm 2008; Kramer 2015; 2016), we propose that Lithuanian *n*s must bear [GEND]. That is, there is no "neuter" *n*.

The absence of neuter *n* reflects the fact that lexical nouns in the language are never neuter and allows us to derive the distribution of masculine and neuter PAs. In particular, we correctly capture that neuter PAs surface in cases of non-agreement: i) when a subject lacks *n*[GEND] or is unprojected; or ii) when the agreement between a PA and the subject is disrupted. In contrast, we show that masculine surfaces when the PA agrees with a subject whose *n* bears unmarked gender.

Our study introduces a unified approach framed within Distributed Morphology (DM) in which defaults are "layered", with one default (the masculine) being more specific than another (the neuter). By further identifying gender features on the nominalizing head *n*, our account also explicitly relates the distribution of gender inflection with nominal syntax and agreement. Additionally, previous work has suggested that gender defaults can be modeled by the absence of gender features (e.g. Kramer 2015). However, this study indicates the need for a split between an unmarked feature value and feature absence.

This paper is organized as follows. In Section 2, we provide an overview of Lithuanian gender and inflectional morphology. In Section 3, we apply a battery of diagnostics associated with defaults showing that an adjective is masculine when it agrees with a subject with unmarked gender, whereas it is neuter when agreement for gender is not possible. In Section 4, we provide a morphosyntactic analysis for the representation of unmarked gender, the masculine, and the absence of gender, the neuter. After showing how our analysis captures the default behaviors of masculine and neuter, we extend our analysis to various aspects of nominal syntax, including the representation of neuter pronouns, deadjectival nominals, and to the morphology of neuter adjectives. Section 5 concludes and addresses broader questions about gender representation.

2 Description of Lithuanian gender

Before we proceed to our discussion of default environments, it is first necessary to review descriptive facts about adjectival inflection and gender. Lithuanian has been reported to have three genders: masculine, feminine, and neuter (Ambrazas et al. 1997: 134). However, the neuter is not inherent to any lexical noun in the language; the only inherently neuter elements are the following pronouns (3):[2]

(3) Neuter pronouns (adapted from Ambrazas et al. 1997: 181–184)
kas 'what'; *kažkas* 'something'; *niekas* 'nothing'; *šitaĩ* 'it, this'; *taĩ* 'it, this'; *víena/kìta* 'one/another' for events; *vìsa/vìsa taĩ* 'everything'; *viskas* 'everything'

While lexical nouns are distributed across two genders, PAs show a three-way contrast (4)–(6).[3] Thus, Lithuanian resembles other languages like Ukrainian in exhibiting

[1] We use the term *markedness* in the traditional descriptive sense to refer to category asymmetries or hierarchy; for discussion of gender markedness, see e.g. Bobaljik & Zocca 2011 and references therein.

[2] Lithuanian formerly had a category of neuter nouns, which was lost prior to the sixteenth century. See Borise 2015 and references therein for discussion.

[3] For completeness, we note that PAs are not the only type of element in the language that exhibit a three-way distinction. For example, passive participles appear in masculine, feminine, or neuter forms (i). For reasons of space, we focus on adjectives in this paper, and refer the reader to Šereikaitė (in prep) for some discussion of participles.

more gender categories of PA agreement than there are gender categories of nouns (see Corbett 1980; 1991; Corbett & Fraser 1999 for discussion of Ukrainian and other languages).

(4) Viskas yra graž-ù.
everything.NOM.N is beautiful-N
'Everything is beautiful.'

(5) Jis yra graž-ùs.
he.NOM.M.SG is beautiful-NOM.M.SG
'He is beautiful.'

(6) Ji yra graž-ì.
she.NOM.F.SG is beautiful-NOM.F.SG
'She is beautiful.'

In contrast, attributive adjectives only appear in masculine and feminine forms, as illustrated in (7)–(8). Even in cases where a noun is typically assigned a default gender, e.g. an interjection, the neuter attributive form is not possible, and the masculine is used instead, as in (9). Hence, the absence of neuter attributive adjectives is consistent with the fact that neuter nouns are absent in the language.

(7) sald-ùs/*-ù med-us
sweet-NOM.M.SG/*-N honey-NOM.M.SG
'sweet honey'

(8) sald-ì/*-ù vyšn-ia
sweet-NOM.F.SG/*-N cherry-NOM.F.SG
'sweet cherry'

(9) tyl-ùs/*-ù *oj*
quiet-NOM.M.SG/*-N INTJ
'quiet oj'

In terms of morphology, masculine and feminine adjectives have distinct forms for number and case, whereas neuter adjectives do not. This is illustrated in Table 1 with the adjective *gražus* 'beautiful', which belongs to the *(i)u*-class of adjectives (see Ambrazas et al. 1997: 148–159 for different adjectival paradigms).

As can be seen in Table 1, the neuter form in the *(i)u* class is distinct from all other inflectional forms. In the adjectival class *-(i)a*, the neuter form and the nominative singular feminine form appear with the same inflectional ending. However, the two show distinct

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(i) a. Viskas buvo nudažý-t-a.
everything.NOM.N was paint-PASS.PST.PTCP-N
'Everything was painted.'

b. Stalai buvo nudažý-t-i.
tables.NOM.M.PL were paint-PASS.PST.PTCP-NOM.M.PL
'The tables were painted.'

c. Kėdės buvo nudažý-t-os.
chairs.NOM.F.PL were paint-PASS.PST.PTCP-NOM.F.PL
'The chairs were painted.'

Table 1: Inflectional paradigm of Lithuanian adjectives from the *(i)u*-class.

		NOM	ACC	GEN	DAT	INS	LOC
M	SG	*graž-ùs*	*grãž-ų*	*graž-aũs*	*graž-iám*	*graž-iù*	*graž-iamè*
	PL	*grãž-ūs*	*graž-iùs*	*graž-ių̃*	*graž-íems*	*graž-iaĩs*	*graž-iuosè*
F	SG	*graž-ì*	*grãž-ią*	*graž-iõs*	*grãž-iai*	*graž-ià*	*graž-iojè*
	PL	*grãž-ios*	*graž-iàs*	*graž-ių̃*	*graž-ióms*	*graž-iomìs*	*graž-iosè*
N		*graž-ù*					

stress patterns, as demonstrated for the minimal pairs in (10)–(11): stress falls on the root in the neuter, and on the inflectional ending in the feminine. It is thus generally possible to distinguish neuter forms.

(10) a. gẽr-as
good-NOM.M.SG

b. ger-à
good-NOM.F.SG

c. gẽr-a
good-N

(11) a. žãl-ias
green-NOM.M.SG

b. žal-ià
green-NOM.F.SG

c. žãl-ia
green-N

The fact that neuter forms do not alternate for number and case (as shown in Table 1) does not imply that neuter adjectives lack feature distinctions altogether. For example, neuter adjectives can appear in different case positions, which suggests that they can bear a case value. Evidence comes from deadjectival nominals. These forms appear in neuter and can occur in, e.g. accusative object position (12), genitive objects under negation (13), or instrumental complements of prepositions like *su* 'with' (14).[4]

(12) a. Jis mate tik gerus dalykus.
He.NOM saw only good.ACC.M.PL things.ACC.M.PL
'He saw good things only.'

b. Jis mate gẽra ir blõga.
He.NOM saw good.N and bad.N
'He saw good and bad.'

[4] A reviewer asks if neuter deadjectival nominals can appear as objects of nonstructural case-assigning verbs. (i–ii) suggests that verbs like *tarnauti* 'serve,' which take an object with nonstructural dative case, may not be compatible with these nominals. Thus, as the reviewer notes, these elements display similar behavior to indeclinable elements in some Slavic languages (see e.g. Bošković 2006).

(i) Jis tarnavo blogiui ir gėriui.
he served evil.DAT.M.SG and good.DAT.M.SG
'He served evil and good.'

(ii) *Jis tarnavo bloga ir gera.
he served bad.N and good.N
'He served bad and good.'

(13) Ambrazas et al. (1997: 136)

a. Ne-patyręs blogų dalykų, ne-pažinsi gerų dalykų.
NEG-experienced bad.GEN.M.PL things.GEN.M.PL, NEG-know good.GEN.M.PL things.GEN.M.PL
'Having experienced no evil things, you cannot recognize good things.'

b. Blõga ne-patyręs, gẽra ne-pažinsi.
bad.N NEG-experienced, good.N NEG-know
'Having experienced no evil, you cannot recognize good.'

(14) a. Su blog-iu ne-pakovosi.
with evil-INS.M.SG NEG-fight
'You cannot fight with evil.'

b. Su blõg-a ne-pakovosi.
with evil-N NEG-fight
'You cannot fight with evil.'

Additional evidence for the compatibility of neuter and case values can be observed with neuter pronouns[5] such as *viskas* 'everything' and *taĩ* 'this', which can appear in different cases, as illustrated in Table 2. For discussion of the neuter with number values, see Section 4.4.1 on neuter pronouns; for discussion of the neuter with case values, see Section 4.4.2 on deadjectival nominals, and also see Adamson & Šereikaitė 2018.

Having reviewed basic facts of Lithuanian adjectival inflection and gender, we now turn to our discussion on default gender and non-agreement. In the rest of this paper, we generally gloss gender morphology and exclude number and case values on adjectives for ease of exposition, unless otherwise indicated.

3 Default gender vs. non-agreement forms

In this section, we provide evidence from Lithuanian PAs demonstrating that the language has two types of defaults: gender-default forms and non-agreement forms. We show that PAs agreeing with a subject with default gender appear with masculine morphology, whereas PAs appear with neuter morphology in cases of non-agreement, where the PA cannot agree in gender features with a subject. We use syntactically established tests on defaults from Corbett (1991), Kramer (2015) and others to illustrate this split.

3.1 Gender default

Some researchers have suggested that masculine is the default or unmarked gender in Lithuanian (Mathiassen 1996; Holvoet & Semėnienė 2006; Bruno 2012). We provide extensive evidence below demonstrating that masculine indeed functions as the default gender.

Table 2: Paradigms of *taĩ* 'this/it.N' and *viskas* 'everything.N'.

NOM	taĩ	visk-as
ACC	taĩ	visk-ą
GEN	t-o	visk-o
DAT	t-am	visk-am
INS	t-uo	visk-uo
LOC	t-ame	visk-ame

[5] While pronominal inflection is not the focus of our article, we note that neuter pronouns such as *visk-as* 'everything' inflects similarly (though not identically) to some masculine nouns (e.g. *mišk-as* 'forest.M.SG.NOM'). We thank an anonymous reviewer for pointing this out.

However, we would first like to note that in another line of work, Armoskaite (2011) outlines the possibility that feminine might be a default gender in Lithuanian. She points out that a subclass of nouns that refer to people of either gender, such as *dabit-a* 'dandy' (15) end with the (nominative singular) suffix *-a*, which is otherwise typically used with feminine nouns (e.g. *ras-a* 'dew-F'). One may interpret the availability of feminine declension on these nouns as evidence that feminine is a type of default.

(15) Armoskaite (2011: 120–121)
a. Ta moteris yra tikr-à dabita.
that.F woman.F is real-F dandy
'That woman is a real dandy.'
b. Tas vyras yra tìkr-as dabita.
that.M man.M is real-M dandy
'That man is a real dandy.'

Even though the *-a* declension is often associated with the feminine, the noun triggers masculine agreement when it refers to men, as indicated by the masculine adjective 'real' in the example (15b). Nouns like *dabita* therefore select their declension class independently of gender (Armoskaite 2011: 121). This suggests that declension class and gender are indeed dissociated (see Harris 1991; Alexiadou 2004; Armoskaite 2011; Kučerová 2018; among others). Given this dissociation, we do not treat the evidence from these nouns as indicating that feminine is the default gender.

We provide five pieces of evidence below for masculine being the default gender in Lithuanian.

3.1.1 Mixed-gender groups

Our first two diagnostics pertain to the semantics of gender with animates. Evidence for treating masculine as a default gender comes from mixed-gender groups (see also Holvoet & Semėnienė 2006: 106; Paulauskienė 2007: 72; Bruno 2012: 57). Lithuanian has a class of nouns that can be either masculine or feminine gender depending on the sociocultural gender of the referent, e.g. nouns like *atlet-ai* 'athletes-M' or *atlet-ės* 'athletes-F.' When referring to a group consisting of both men and women, the nominal triggers masculine agreement, including on PAs (16). However, when the nominal is feminine, it can only refer to a group of women, and the PA in these cases instead takes a feminine form (17). This supports the unmarked status of the masculine.

(16) Atletai yra aukšt-ì/*-os/*-a.
athletes.M are tall-M/*-F/*-N
'Athletes (males and females/males) are tall.'

(17) Atletės yra aukšt-os/*-ì/*-a.
athletes.F are tall-F/*-M/*-N
'Athletes (females) are tall.'

3.1.2 Unknown gender

Another piece of evidence concerns unknown gender. Some nominal roots are compatible with either masculine or feminine PAs depending on the gender of the referent. When these roots appear in subjects referring to people of unknown gender, PAs inflect as masculine (e.g. *ligon-is* 'patient.M' in (18)), which is another indication that masculine is the default gender (Kramer 2009: 17). The feminine DP *ligon-ė* 'patient-F' can only be used for female referents (19).

(18) Ligonis yra judr-ùs/*ì/*ù.
patient.M is restless-M/*-F/*-N
'A patient (unknown gender or male) is restless.'

(19) Ligonė yra judr-ì/*ùs/*ù.
patient.F is restless-F/*-M/*-N
'A patient (female) is restless.'

3.1.3 Coordination of gender-mismatched DPs

The third diagnostic comes from coordination of gender-mismatched DPs with both animates and inanimates, which shows a "resolving" form of gender agreement on PAs. A coordinated subject whose nominal conjuncts mismatch in gender triggers masculine agreement on the PA (20)–(21). Observe that for completeness we include both singular and plural forms for PAs.[6] We follow other researchers (Wechsler & Zlatić 2003; Kramer 2015: 174–180; Anagnostopoulou 2017) in taking coordination resolution to refer to default or unmarked values (for alternative views on resolution, see Corbett 1991; 2006). Unlike other languages such as Modern Greek, Lithuanian does not vary a PA's gender according to animacy: animate and inanimate DP subjects exhibit the same pattern e.g., (22)–(23). In addition, these examples do not involve a closest conjunct pattern, as the PAs inflect in the masculine regardless of the order of the conjuncts e.g., (20)–(23).

(20) Kėdė ir stalas buvo purvin-ì/*-as/*-os/*-à/*-a.
chair.F and table.M were dirty-M.PL/*-M.SG/*-F.PL/*-F.SG/*-N
'The chair and the table were dirty.'

(21) Stalas ir kėdė buvo purvin-ì/*-as/*-os/*-à/*-a.
table.M and chair.F were dirty-M.PL/*-M.SG/*-F.PL/*-F.SG/*-N
'The table and chair were dirty.'

(22) Vyras ir moteris buvo graž-ūs/*-ùs/*-ios/*-ì/*-ù.
man.M and woman.F were beautiful-M.PL/*-M.SG/*-F.PL/*-F.SG/*-N
'The man and the woman were beautiful.'

(23) Moteris ir vyras buvo graž-ūs/*-ùs/*-ios/*-ì/*-ù.
woman.F and man.M were beautiful-M.PL/*-M.SG/*-F.PL/*-F.SG/*-N
'The woman and the man were beautiful.'

We thus take the evidence from coordination resolution as support for masculine being the default gender.

3.1.4 Loanwords

We now turn to diagnostics pertaining to the morphological assignment of default gender. Our next piece of evidence for a masculine default comes from gender assignment to loanwords (Corbett 1991: Ch. 4). Bruno (2012: 79) shows that loanwords referring to inanimates are assigned masculine in Lithuanian, lending credence to the idea that masculine serves as a default gender, as exemplified in (24)–(25) (see

[6] Note that postverbal subjects show the same behaviour with respect to coordination resolution. We thank an anonymous reviewer for bringing this to our attention.

Mathiassen 1996: 69–73 and Vaicekauskienė 2007 for further discussion on Lithuanian loanwords).[7]

(24) bált-as van-as
white-M van-M
'a white van'

(25) žãl-ias bin-as
green-M bin-M
'a green bin'

Building off these observations, we add that inanimate loanword subjects can only trigger masculine and not neuter on PAs, suggesting default assignment is not relativized to the attributive or predicative position.

(26) Van-as yra balt-as/*-à/*-a.
van-M is white-M/*-F/*-N
'The van is white.'

(27) Bin-as yra žal-ias/*-ià/*-ia.
bin-M is green-M/*-F/*-N
'The bin is green.'

3.1.5 Onomatopoeia and interjections

While the other tests have probed the representation of gender on PAs, the gender assignment on attributive adjectives also provides important insights.[8] Observe that onomatopoeic sounds can be modified with attributive adjectives, in which case the adjective must be masculine; neither feminine nor neuter is possible (28).[9]

[7] According to Bruno (2012), loanwords referring to animates, unlike the inanimate expressions, are assigned according to sociocultural gender, as in (i). Furthermore, the assignment of gender may also be influenced by phonological factors, i.e. phonological resemblance to other nouns in the language. One example would be *past-a* 'pasta-F', which is assigned feminine gender due to its phonological similarity with Lithuanian words belonging to the *-a* declension (e.g. *ras-a* 'dew-F'). Our examples presented here are assigned the masculine default gender because they are not conditioned by sociocultural or phonological factors.

(i) pastov-ùs member-is / pastov-ì member-ė
usual-M member-M / usual-F member-F
'a usual member'

[8] While attributive adjectives are possible with onomatopoeia and interjections, PAs are semantically odd. We therefore test gender inflection of adjectives by using attributives rather than PAs.

[9] A reviewer raises the possibility that the attributive adjective takes masculine inflection in examples like (28) because there is an elided noun *garsas* 'sound' that accompanies this onomatopoeia. Indeed, it is possible to use *brrr* both with and without an overt noun *garsas* (i). However, this type of ellipsis is ungrammatical with other phrases in which a noun is modified by another noun. For example, the noun *liepų* 'linden' is marked with genitive case and it modifies the head noun 'street', but the head noun cannot be elided (ii). Given this contrast, we suggest that the onomatopoeic examples in (28) do not involve elided nouns.

(i) Mes išgirdome tyl-ų *brrr* (gars-ą).
we.NOM heard.PST.1PL quiet-M brrr sound-M
'We heard a quiet brrr sound.'

(ii) Kažkieno balsas perskrodė tylią liepų *(gatvę).
someone.GEN sound.NOM cut.through quite-ACC linden.GEN street.ACC
'Someone's voice cut through the quiet linden street.'

(28) Adapted from Mathiassen (1996)
Mes išgirdome tyl-ų/*-ią/*-ù *brrr*.
we.NOM hear.PST.1PL quiet-M/*-F/*-N brrr
'We heard a quiet brrr.'

As was illustrated in Section 2, the same type of behavior can be observed with interjections such as *oj*. Only masculine adjectives can modify the interjection; feminine and neuter adjectives are ungrammatical.

(29) Buvo tik tyl-ùs/*-ì/*-ù *oj* iš mano lūpų ir viskas…
be.PST.3 only quiet-M/*-F/*-N INTJ from my lips and everything
'There was only a quiet oj from my lips and that's it.' (Internet example)[10]

Interim summary In this subsection, we have investigated the distribution of gender on PAs in default gender environments. Masculine agreement on PAs is triggered by subjects that are nominals referring to mixed-gender groups, nominals referring to a person of unknown gender, gender-mismatched coordinated nominals, and loanwords. Neither feminine nor neuter forms are available on PAs in these environments, which we take as evidence that masculine is a default gender. In addition, attributive adjectives modifying onomatopoeic sounds and interjections also occur in masculine forms, which we take as further evidence of masculine's default status.[11]

3.2 Non-agreement

While masculine appears to behave as a default gender, we employ various default diagnostics in this subsection that trigger neuter on PAs. We show that in cases of non-agreement, where a gender feature is not transmitted from a subject to a PA, the adjective appears in the neuter.

3.2.1 Non-structural case

We first discuss instances of non-agreement where the gender features of the subject are not accessible for agreement with a PA. The first piece of evidence comes from grammatical subjects with non-nominative case.

Lithuanian is like Icelandic (on which, see Zaenen et al. 1985; i.a.) in that it has non-nominative grammatical subjects, which bear non-structural cases but otherwise exhibit properties of canonical nominative subjects (Šereikaitė in prep). For example, predicates like *trūkti* 'to lack', *užtekti* 'to have enough', *stigti* 'to be short of', *pakakti* and 'to suffice' take a dative subject. The dative DP behaves like a subject in that it binds a subject-oriented anaphor *savo* as in (30) (Legate et al. 2019). The non-nominative subject does not agree with the predicate, and instead the verb displays third-person morphology, which is default morphology in the language (Šereikaitė in prep). We follow H. Sigurðsson (1996), Bobaljik (2008), Preminger (2011; 2014), and E.F. Sigurðsson (2017), among others, in taking this to be the result of agreement not obtaining.

(30) Man$_i$ trūkst-a pinigų savo$_i$ reikmėms.
me.DAT lack-PRS.3 money.GEN self's needs.DAT
'I lack money for my own needs.'

[10] https://banga.tv3.lt/lt/2content.content_view_diary_other/383242.204142-=(3138858844 accessed on 11/07/2018.

[11] Recent research has also employed predicate ellipsis to highlight markedness asymmetries (e.g. Bobaljik & Zocca 2011). We simply note that the elliptical resources of Lithuanian do not allow us to use this diagnostic.

(31) Man trūkst-a/*trūkst-u pinigų.
me.DAT lack-PRS.3/lack-PRS.1SG money.GEN
'I lack money.'

Dative subjects can also occur in constructions with PAs, as in (32)–(33). The dative experiencer here patterns as a non-nominative subject in serving as a binder of the subject-oriented *savo*. Crucially, in these cases, the PA can only be neuter. We take this to be another instance of non-agreement of the PA, which strikingly takes neuter.

(32) Man$_i$ buvo šalt-a/*-as/*-à ne tik lauke, bet ir savo$_i$ namuose.
me.DAT be.PST.3 cold-N/*-M/*-F not only outside but and self's house
'I felt cold not only outside, but also in my own house.'

(33) Man$_i$ buvo bais-ù/*-ùs/*-ì net ir savo$_i$ kambaryje.
me.DAT be.PST.3 scared-N/*-M/*-F even and self's room
'I felt scared even in my own room.'

In contrast, observe that Lithuanian nominative subjects in constructions similar to (32) trigger agreement on PAs, which is a well-known fact from other languages such as Icelandic. In these cases (34), the PA cannot be neuter; it is either masculine or feminine depending on the gender of the subject.

(34) Aš buvau šalt-as/-à/*-a kaip ledas.
I.NOM.1SG be.PST.1SG cold-M/-F/*-N as ice
'I was cold as ice [=my body was cold].'

3.2.2 Pancake Sentences

The second diagnostic is based on so-called "Pancake Sentences". In Scandinavian languages such as Swedish and Norwegian, certain PAs inflect for neuter singular regardless of the features of a subject (Hellan 1986; Enger 2004; 2013; Josefsson 2006; 2009; Wechsler 2013; cf. also Danon 2012; 2014 on Hebrew *ze* sentences). For example, in (35), the subject bears common gender and plural number, but the PA is neuter singular. This yields a particular interpretation of the subject; in (35), that is 'eating pancakes is good'.

(35) *Swedish* (adapted from Wechsler 2013)
Pannkak-or är gott.
pancake-COMM.PL be.PRES good.N.SG
'Situations involving pancakes are good.' (i.e. eating pancakes is good)

An analogue to Scandinavian Pancake Sentences can be found in Lithuanian. Certain PAs take neuter even when they occur with masculine or feminine subjects as in (36)–(37). Ambrazas et al. (1997: 137) observe that PAs take neuter when they express the "meaning of a generalized quality", and also "they are never attributes to a noun, and the quality they refer to is never an attribute to a concrete thing". We take one such instance of this to be Pancake Sentences (for other discussion of different environments with neuter, see Ambrazas et al. 1997: 135–137). We further observe that, like Scandinavian Pancake Sentences, neuter PAs in these constructions yield a certain interpretation. These sentences have an eventive interpretation; hence, (36a) means the pancakes 'are healthy to eat' rather than 'are in a healthy state', which is the interpretation with an agreeing PA, as in (36b). The same contrast can be observed in (37).

(36) a. Blynai yra sveik-a/#-ì/*-os.
pancakes.M are healthy-N/#-M/*-F
'Pancakes are healthy (to eat).'

b. Blynai yra sveik-ì/#-a/*-os.
pancakes.M are healthy-M/#-N/*-F
'These pancakes are in a healthy state.' (i.e. they have not been ripped apart)

(37) a. Trumpos kojinės yra graž-ù/#-ios/*-ūs.
short.F socks.F are nice-N/#-F/*-M
'Short socks are nice (to wear).'

b. Trumpos kojinės yra graž-ios/*-ūs/#-ù.
short.F socks.F are nice-F/*-M/#-N
'These short socks are nice.' (i.e. they have nice qualities)

That the inflection of PAs in Pancake Sentences does not express the features of the subject has been analyzed as non-agreement (Hellan 1986; Wechsler 2013; Danon 2012; 2014). We take Lithuanian Pancake Sentences to be the same type of non-agreement, since in these constructions, the PA can only be neuter, irrespective of the features of the subject.

3.2.3 Infinitival subjects

Now we turn to a case of non-agreement where the subject lacks gender features. Infinitives can appear as subjects of copular sentences (38), in which case they trigger neuter on PAs. We take infinitival subjects to lack gender features, following other authors (Corbett 1991; Corbett & Fraser 1999; Kramer 2015); also see Section 4.3 for discussion.

(38) Ambrazas et al. (1997: 645)
Pavargti už tėvynę yra graž-ù/*-ùs/*-ì.
suffer.INF for homeland is beautiful-N/*-M/*-F
'To suffer for one's homeland is beautiful.'

An anonymous reviewer points out that in these types of sentences, a subject position may potentially be filled with a null expletive, with the to-infinitive clause topicalized. However, the reviewer suggests that this hypothesis is ruled out due to the existence of dative quirky subjects (discussed in Subsection 3.2.1). Crucially in those cases, the subject position is filled by the dative DP rather than a potentially expected null expletive.

Evidence from genitive of negation in Lithuanian suggests that to-infinitive clauses in copular sentences do not behave like A-bar-moved elements, which we would expect if there was a null expletive subject. Lithuanian genitive of negation tracks objects which would otherwise be assigned a structural accusative case, as illustrated in (39a)–(39b) (for overview see Arkadiev 2016; Sigurðsson & Šereikaitė 2019).

(39) Arkadiev (2016: 38)
a. Jonas perskaitė laišką/*laiško.
Jonas.NOM read.PST.3 letter.ACC/letter.GEN
'Jonas read the letter.'

b. Jonas ne-perskaitė laiško/*laišką.
Jonas.NOM NEG-read.PST.3 letter.GEN/letter.ACC
'Jonas didn't read the letter.'

When the matrix verb is negated, the object of a to-infinitive complement can also be affected by genitive of negation (Arkadiev 2016). Specifically, the object can bear genitive

case as well as accusative, as exemplified in (40)–(41). Genitive of negation is retained when the complement is topicalized, thus undergoes A-bar movement, as in (42).

(40) Jonas trokšta [perskaityti šią knygą].
Jonas.NOM be.eager.PRS.3 read.INF this book.ACC
'Jonas is eager to read this book.'

(41) Jonas ne-trokšta [perskaityti šios knygos/??šią knygą].
Jonas.NOM NEG-be.eager.PRS.3 read.INF this book.GEN/this book.ACC
'Jonas is not eager to read this book.'

(42) [Perskaityti šios knygos/?šią knygą]$_i$ Jonas tikrai ne-trokšta t_i.
read.INF this book.GEN/this book.ACC Jonas.NOM really NEG-be.eager.PRS.3
Lit. 'To read this book, Jonas is not eager at all.'

In contrast, to-infinitive clauses in negated copular sentences do not show the behavior of the topicalized infinitive complement, in that they do not allow genitive of negation.

(43) [Perskaityti šią knygą/*šios knygos] near leñgv-a.
[read.INF this.ACC book.ACC/this.GEN book.GEN] NEG.be.3.PRS easy-N
'To read this book is not easy.'

The behavior of the to-infinitive clause in copular sentences is parallel to a grammatical subject that is a neuter pronoun, which also cannot appear with genitive case.

(44) Viskas/*visko ne-buvo taip leñgv-a.
everything.NOM.N/everything.GEN.N NEG-be.3.PST that easy-N
'Everything was not that easy.'

We therefore conclude that to-infinitive clauses can be subjects of copular sentences, and thus that the PA is neuter because these clauses lack gender.

3.2.4 *Weather*-type constructions

Our final case of non-agreement occurs when the subject is not projected, as in *weather*-type constructions. *Weather*-type constructions have been suggested to trigger default agreement (e.g. Corbett 1991: 204 on neuter in Russian; Kramer 2015: 143 on feminine in Zayse and Zargulla). In Lithuanian, PAs in *weather*-type constructions appear with the neuter, with masculine and feminine being ungrammatical (45).

(45) (Lauke) tams-ù/*-ùs/*-ì.
(outside) dark-N/*-M/*-F
'It is dark (outside).'

We attribute the non-agreement behavior of PAs in these environments to non-projection of a subject. This is evidenced by a contrast between weather constructions with verbs versus weather constructions with PAs. In (46), weather constructions with verbs such as *lyti* 'to rain' are grammatical with overt cognate subjects. In contrast, PAs do not allow cognate subjects as in (47). The availability of cognate subjects with weather verbs points to a plausible analysis with weather *pro*; however, this does not hold for weather-type adjectives, which we take to suggest that no such argument is projected. The non-projection of weather *pro* in these constructions results in non-agreement. (Note that the language lacks overt expletives).

(46) Vakar (lietus) lijo visa dieną.
yesterday rain.NOM rain.PST.3 all day
'Yesterday it was raining all day.'

(47) Lauke (*tams-a) yra tams-ù.
outside darkness-F is dark-N
Intend. 'It is dark (outside).'

To conclude, we showed that PAs inflect in the neuter and not in masculine or feminine in non-agreement environments, i.e. when the features of a subject are not visible to a PA. We have distinguished three environments where the non-agreement takes place: i) when the features of the subject are not accessible for agreement, as has been shown with subjects with non-structural case and Pancake Sentences; ii) when the subject lacks gender, as was the case for infinitives; and iii) when the subject is unprojected, as in *weather*-type constructions.

3.2.5 Summary

In this section, we have demonstrated that Lithuanian presents a split in the distribution of masculine and neuter PAs in environments identified in the literature as being associated with defaults. The masculine PA forms occur in situations where the gender of the subject bears unmarked gender. Specifically, masculine on PAs occurs with subjects which are loanwords, coordinated expressions, nominals referring to a mixed group or referents with unknown gender. In contrast, neuter PA forms occur in situations when gender features of the subject are not transmitted, which we referred to as non-agreement. Given our results, feminine appears to be the marked gender in the language. The results of our diagnostics are summarized in Table 3.

The split behavior we have identified points to the presence of two classes of default diagnostics, which are often conflated in the literature on defaults. In this section, we have provided evidence that one class identifies the unmarked gender feature, whereas the other identifies feature absence.

4 Analysis

Having examined the split between masculine and neuter PAs in default environments, we now present a morphosyntactic analysis of this split. When PAs agree with a subject that bears unmarked gender, the realization on PAs is masculine. However, when the subject lacks accessible gender features, the realization of the PA is neuter. We model this distinction in terms of feature representation: while masculine and feminine share a feature

Table 3: Summary of diagnostics.

	Diagnostic	FEM	MASC	NEUT
Default Gender	Mixed-Group Plural	*	✓	*
	Unknown Gender Animate	*	✓	*
	Gender-Mismatched Coordination	*	✓	*
	Default Loanword Assignment	*	✓	*
	Onomatopoeia & Interjection	*	✓	*
Non-Agreement	Non-structural Case	*	*	✓
	Pancake Sentences	*	*	✓
	Infinitival Subjects	*	*	✓
	Weather-Type Constructions	*	*	✓

[GEND], neuter corresponds to the absence of gender features. We propose that gender features originate on the nominalizing head *n* (following Lecarme 2002; Lowenstamm 2008; Kramer 2015; 2016), and claim that in Lithuanian, *n must* bear gender features; that is, there is no "neuter" *n*. We extend our analysis to the behavior of neuter pronouns, deadjectival nominalizations, and related phenomena.

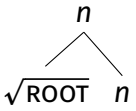
4.1 Theoretical framework

This subsection consists of two parts: first, we discuss the theoretical background for gender features originating on the nominalizing head *n* in Section 4.1.1, and then formalize how agreement and non-agreement interact with the realization of PA inflection in Section 4.1.2.

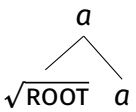
4.1.1 Gender representation and *n*

We situate our analysis within the Distributed Morphology (DM) framework (Halle & Marantz 1993; Harley & Noyer 1999; Halle 1997; Embick & Marantz 2008; among many others). Following much of the DM literature, we assume categories like noun and adjective are decomposed into a root and a category-defining head (Marantz 1997; 2001; Arad 2003; Embick 2010), and that roots *must* combine with categorizing heads (Embick & Marantz 2008: 6; see also Embick 2015). As sketched in (48), a root combines with *n* to form a noun or it can combine with *a* to form an adjective.

(48) a.



b.



As in many languages, Lithuanian *n* determines the gender of a nominal, as in the case of the overt *n* suffix *-ien*.[12] When this suffix is added, the noun is always feminine, regardless of the gender of the corresponding noun with a nominalizing head -∅ (49)–(51).[13] The

[12] An anonymous reviewer notes that Lithuanian has examples where an overt *n* appears to be compatible with more than one gender, such as the examples in (i–ii) from Armoskaite (2014: 174) with the nominalizer *-um*. (See also Armoskaite 2011; 2014 for discussion.) We suggest, following Armoskaite (2014: 181), that cases like (ib)–(iib) may involve a covert nominalizing head with feminine gender stacked on *-um*. Being the outermost *n*, this covert *n* determines the gender of the whole nominal (see also Kramer 2015: Ch. 10 on *n*-stacking).

(i) a. aišk-um-as
clear-*n*-NOM.M.SG
'clarity'

b. aišk-um-a
clear-*n*-NOM.F.SG
'a clear place'

(ii) a. balt-um-as
white-*n*-NOM.M.SG
'whiteness'

b. balt-um-a
white-*n*-NOM.F.SG
'a white place'

[13] Note that the inventory of *n* heads includes not only a masculine *n* realized as -∅ but also a feminine *n* realized as -∅. For example, the the following nouns marked with feminine include a zero nominalizer as in *kėd*-∅-ė 'chair-*n*-NOM.F.SG' or *knyg*-∅-*a* 'book-*n*-NOM.F.SG'. In addition, it is also possible to have overt masculine *n* heads, e.g. *vasar*-∅-*a* 'summer-∅-NOM.F.SG' vs. *vasar-oj-us* vs. 'spring crops-*n*-NOM.M.SG'.

gender of the noun can also be observed through the inflection on agreeing elements such as attributive adjectives. For completeness, we include case, gender, and number information in the glosses here. Lithuanian has a number of other nominalizing suffixes that determine the gender; for discussion and overview of these nominalizers, see Armoskaite 2011; 2014.

(49) a. skan-ùs svogūn-∅-as
tasty-NOM.M.SG onion-*n*-NOM.M.SG
'tasty onion'

b. skan-ì svogūn-ien-ė
tasty-NOM.F.SG onion-*n*-NOM.F.SG
'tasty onion soup'

(50) a. graž-ùs vakar-∅-as
beautiful-NOM.M.SG evening-*n*-NOM.M.SG
'beautiful evening'

b. graž-ì vakar-ien-ė
beautiful-NOM.F.SG evening-*n*-NOM.F.SG
'beautiful supper'

(51) a. skan-ì bulv-∅-ė
tasty-NOM.F.SG potato-*n*-NOM.F.SG
'tasty potato'

b. skan-ì bulv-ien-ė
tasty-NOM.F.SG potato-*n*-NOM.F.SG
'tasty potato soup'

We thus adopt the view from other works that gender features originate on the nominalizing head *n* (Lecarme 2002; Lowenstamm 2008; Acquaviva 2008; Kramer 2015; 2016; see also Šereikaitė 2018 for evidence that Lithuanian *n* carries gender features, and Armoskaite 2011; 2014 for a related approach).

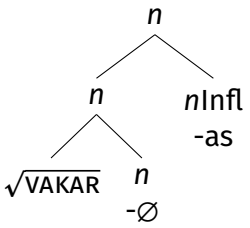
For Lithuanian, we propose that the inventory of *n* heads all bear a gender feature, which we encode as the feature [GEND]. Thus the feature [GEND] will be included in the representation of both masculine and feminine, since these are the true gender categories in the language. Furthermore, as our results from Section 3 showed, the feminine gender is more marked than masculine. We encode this markedness relationship by analyzing the masculine as only having [GEND], while the feminine bears the additional feature [FEM], as indicated below in (52). This reflects markedness through feature containment (Bobaljik 2012; also see Harley & Ritter 2002 for a related approach based on feature geometry), where the representation of the more marked gender contains the representation of the unmarked gender. The predictions of this account are explicitly discussed and compared with alternative analyses in Section 4.2 and Section 4.4. Our feature representation of *n*s is illustrated in (53). The nominalizing head *-ien* bears [FEM][GEND], while the null nominalizing head -∅ bears masculine gender, thus [GEND].

(52) *n*[GEND][FEM] (feminine)
n[GEND] (masculine)

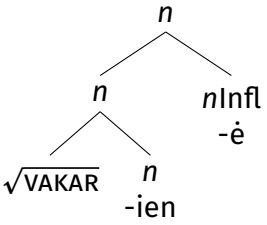
(53) *vakar-ien-ė* 'supper-*n*-F' [$\sqrt{\text{VAKAR}}$ $n_{[\text{GEND}][\text{FEM}]}$]
vakar-∅-as 'evening-*n*-M' [$\sqrt{\text{VAKAR}}$ $n_{[\text{GEND}]}$]

While gender features originate on *n*, they are expressed along with number and case on inflectional suffixes, which we refer to as XInfl (i.e. *a*Infl, *n*Infl, etc.). XInfl expresses syntactic features of heads from which they are "dissociated" in the postsyntax (Embick 1997; Embick & Noyer 2007; Kramer 2009; Norris 2014). For example, the noun *vakaras* consists of a root $\sqrt{\text{VAKAR}}$, a null nominalizer that bears [GEND] feature, thus masculine, and the *n*Infl suffix *-as*, which expresses gender, number, and case features,[14] as in (54a). The noun *vakarienė* 'supper' is built from the same root, but instead has an overt *n* suffix *-ien* that bears [GEND][FEM], which makes the noun feminine.

(54) a. vakar-∅-as 'evening-*n*-NOM.M.SG'



b. vakar-ien-ė 'supper-*n*-NOM.F.SG'



The example in (54) presents an instance in which a single root can combine with *n*s of different genders. An anonymous reviewer wonders why it is not the case that any root can combine with *n*s of any gender. We assume that the selectional relationship between roots and *n*s is governed by specific semantic and arbitrary licensing conditions (see Kramer 2015: Ch. 3 for discussion). For instance, (54a) is ungrammatical when a feminine *n* realized as -∅ is used (*[$\sqrt{\text{VAKAR}}$-∅-a] 'evening-*n*-NOM.F.SG'); though this could in principle be built in the morphosyntax, it may not meet the licensing conditions imposed by the interfaces.

Unlike *n*, gender features are never inherent to adjectives, which yields the following inventory (55).

(55)

Types of *n*s	Types of *a*s
n[FEM][GEND]	*a*
n[GEND]	

Under our approach, Lithuanian lacks "plain" featureless *n*; i.e. there is no "neuter" *n*. This is motivated by the following factors. First, all lexical nouns in the language have gender, being inherently either masculine or feminine, and not neuter. This is reflected in the inventory of *n*s in (55). Second, attributive adjectives are never neuter (see Section 2). This is consistent with the widely assumed idea that attributive adjectives modify *n*P.

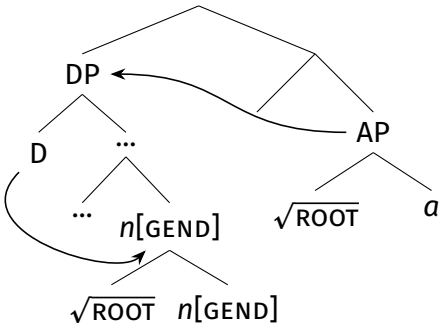
[14] XInfl realization is also sensitive to declension class. For example, in the nominative masculine singular, *n*Infl can be *-as* for the *(i)a* class (e.g. *vakar-as* 'evening-NOM.M.SG'), or can be *-us* for the *(i)u* class (e.g. *turg-us* 'market-NOM.M.SG'). See Ambrazas et al. 1997: 107–126 for more on nominal declensions in Lithuanian.

4.1.2 Agreement vs. non-agreement

We now discuss how gender features are transmitted to PAs. Given that adjectives do not have gender features inherently, we assume that PAs agree with a subject through upward Agree (Baker 2008).[15] Agreement with nominals is with the features of the topmost projection in the nominal domain (Danon 2011; 2013), typically D, which collects features originating internal to the nominal through agreement, including the gender features on *n*. That D collects gender features is evidenced by inflection on demonstratives, which agree in gender (56). Agreement between a PA and a DP subject is illustrated in (57).

(56) ta vakar-ien-ė
that.F supper-*n*-F
'that supper'

(57)



Recall that adjectives exhibit a three-way distinction expressed on *a*Infl: masculine, feminine, and neuter.When an adjective agrees with a nominal bearing [GEND][FEM], *a*Infl will exhibit feminine agreement. When the adjective agrees with a nominal bearing [GEND], *a*Infl will exhibit masculine agreement. In contrast, in cases of non-agreement, where the adjective does not have access to features of a nominal to agree with, the adjective will be realized with neuter inflection, which we propose corresponds to the absence of gender features.

In the postsyntax, *a*Infl will be dissociated from *a*. *a*Infl will be realized according to the Elsewhere Condition, with neuter forms being the least specified, lacking gender features (cf. Kramer 2015). Masculine and feminine forms, in contrast, will be specified for gender features. This is shown in (58) for the adjective *gražu*.

(58) -i ↔ [GEND][FEM] *graž-ì* 'beautiful-F'
-us ↔ [GEND] *graž-ùs* 'beautiful-M'
-u ↔ ELSEWHERE *graž-ù* 'beautiful-N'

Because gender features originate on *n*, our proposal predicts that adjectives are neuter when they fail to agree with nominals. Hence, non-agreement occurs: i) when a subject lacks *n* or is unprojected or ii) when agreement between a PA and an argument is disrupted. In contrast, PAs appear in masculine when they agree with a subject that has an unmarked gender feature originating on *n*. We now discuss how our analysis applies to each of the cases discussed in Section 3.

[15] Note that while we assume the PAs probe upward, other analyses of how agreement between a subject DP and a predicative adjective takes place are also possible. For example, if we adopt the Predicate Internal Subject Hypothesis (e.g. Kuroda 1988), the subject could be generated in SpecAP, in which case at the point of merging the DP subject, the AP would not need to look upward. We thank a reviewer for bringing this to our attention.

4.2 Analyzing default gender

PAs inflect as masculine in default environments when they agree with DP subjects with unmarked gender. The PA agrees with the topmost projection D, which receives [GEND] from *n* when *n* is projected. We identify three types of situations when the PA inflects for the unmarked gender (masculine).

The first case of unmarked gender inflection on the PA is when the interpretation of the subject does not have a stronger presupposition associated with the feminine gender. Lexical nouns referring to mixed-gender groups (consisting of men and women) and people of unknown gender are derived from a root with *n*, which bears the feature [GEND]. This is consistent with the fact that the PA is inflected in the masculine for both mixed-gender groups (59) and unknown gender (60), as was discussed in Sections 3.1.1 and 3.1.2, respectively.

(59) Atletai yra aukšt-ì/*-os/*-a.
athletes.M are tall-M/*-F/*-N
'Athletes (male and female) are tall.'

(60) Ligonis yra judr-ùs/*-ì/*-ù.
patient.M is restless-M/*-F/*-N
'A patient (unknown gender or male) is restless.'

The nominalizing head *n* with [GEND][FEM] is not available for either of these cases because when referring to animates, as the feminine feature introduces a stronger presupposition about the sociocultural gender of the referents, namely that they are women. This presupposition is inconsistent with an individual of unknown gender, as it suggests that the referent is known to be a woman. For mixed-gender groups, as is well-known, marked gender presuppositions must apply to each individual in a group.[16] Consequently, feminine is available for these nouns when all of the referents are known to be women (62).[17] In this case, *n* would bear [GEND][FEM]. (In this discussion, we are only referring to animate-denoting roots that are compatible with either masculine or feminine. We note that some animate nouns have fixed arbitrary gender, and in those cases, gender presuppositions play no role in the determination of gender of the nominal).

(61) Ligonė yra judr-ì/*-ùs/*-ù.
patient.F is restless-F/*-M/*-N
'A patient (female) is restless.'

(62) Atletės yra aukšt-os/*-ì/*-a.
athletes.F are tall-F/*-M/*-N
'Athletes (women) are tall.'

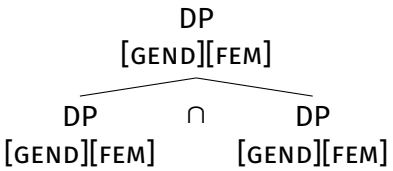
As there is no neuter *n*, neuter is unavailable for the PA, even in the absence of gender presuppositions. *n* is projected, and [GEND] is accessible for agreement.

The second situation of PA inflection for unmarked gender is when a subject consists of two coordinated nominals with different genders. As discussed in 3.1.3, coordinated gender-mismatched nominals yield masculine inflection on PAs as in (63). Observe that for completeness we include both singular and plural forms for PAs.

[16] For discussion of semantic markedness of feminine animates in Indo-European languages, see Jakobson 1932/1984; Corbett 1991; Bobaljik & Zocca 2011; Kramer 2015; Sudo & Spathas 2016; among many others.
[17] Moreover, feminine forms are used when the presuppositions are satisfied, following, e.g. Maximize Presupposition (Heim 1991).

(63) Stalas ir kėdė buvo purvin-ì/*-as/*-os/*-à/*-a.
table.M and chair.F were dirty-M.PL/*-M.SG/*-F.PL/*-F.SG/*-N
'The table and chair were dirty.'

This follows from our analysis if we assume gender features are syntactically resolved in coordination through set intersection (Wechsler & Zlatić 2003; Börjars & Vincent 2006; Wechsler 2008). In essence, the gender features of the two conjuncts will be percolated up to the coordinate phrase when these features are shared by both conjuncts (see also Anagnostopoulou 2017). Coordination of two feminine nominals will result in feminine inflection on a PA (64)–(65); coordination of masculine nominals will yield masculine by the same principle (not included).[18]

(64)


(65) Kėdė ir lentyna buvo purvin-os/*-ì/*-a.
chair.F and shelf.F were dirty-F.PL/*-M.PL/*–N
'The chair and the shelf were dirty.'

In our analysis, masculine and feminine share a feature in common, namely [GEND]. Therefore, intersecting the features of the two conjuncts yields [GEND] as in (66), and this value percolates up to the coordinate phrase. Thus we correctly derive the fact that gender resolution yields masculine and not neuter, as in (63). Observe that if we used an alternative analysis where feminine is [+FEM] and masculine is [-FEM], we would not be able to derive the coordination facts. This is because the two would have no feature in common, and therefore, their intersection would be empty, thus incorrectly yielding neuter.

(66)
MASC	& FEM	= MASC
{[GEND]}	∩{[GEND],[FEM]}	= {[GEND]}

Our analysis makes a further prediction for resolution. It is possible to coordinate gender-mismatched conjuncts where one is a neuter pronoun. If neuter corresponds to the absence of gender features, we predict that coordinating a neuter pronoun with another nominal, regardless of its gender, will result in neuter inflection on a PA. As we show in (68), this prediction is borne out.[19]

(67)
FEM	& NEUT	= NEUT
{[GEND],[FEM]}	∩{ }	= { }
MASC	& NEUT	= NEUT
{[GEND]}	∩{ }	= { }

[18] The set intersection analysis specifically applies to gender, and does not extend to the resolution of number, which may require set union instead. We thank an anonymous reviewer for pointing this out.

[19] One may wonder about the possibility that the PA is neuter in (68) because it is a Pancake Sentence. However, recall that Pancake Sentences require an eventive, generic interpretation (Section 3.2.2). However, this interpretation is not available with predicates like 'dirty' (i), indicating that (68) is not a Pancake Sentence.

(i) ⁎Kėdė/kėdės yra pur̃vin-a.
chair.F/chairs.F is dirty-N
'A chair is dirty/Chairs are dirty.'

(68) Kėdė ir viskas aplinkui buvo purvin-a/*-os/*à/*-ì/*-as.
chair.F and everything.N around was dirty-N/*-F.PL/*-F.SG/*-M.PL/*-M.SG
'The chair and everything around was dirty.'

(69) Stalas ir viskas aplinkui buvo purvin-a/*-os/*à/*-ì/*-as.
table.M and everything.N around was dirty-N/*-F.PL/*-F.SG/*-M.PL/*-M.SG
'The table and everything around was dirty.'

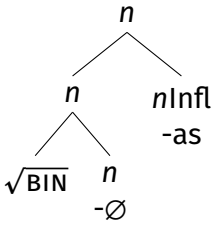
Note that switching the order of the conjuncts here does not change the gender of the adjective.[20]

(70) Viskas, kas yra sudėta čia, ir kėdė štai ten yra
everything.N that be.PRS.3 placed here and chair.F right there is
purvin-a/*-os/??-à/*-ì/*-as.
dirty-N/*-F.PL/*-F.SG/*-M.PL/*-M.SG
'Everything placed here and the chair over there is dirty.'

(71) Viskas, kas yra sudėta čia, ir stalas štai ten yra
everything.N that be.PRS.3 placed here and table.M right there is
purvin-a/*-os/*-à/*-ì/*-as.
dirty-N/*-F.PL/*-F.SG/*-M.PL/*-M.SG
'Everything placed here and the table over there is dirty.'

The last situation is when *n* is projected and is assigned the unmarked gender rather than the marked gender (feminine). This occurs in cases of loanwords, which we discussed in Section 3.1.4. When a loanword enters the language as a noun, we propose that it enters as a root, which must be nominalized with *n*, realized as null in (72). Because roots must appear with categorizing heads, loanwords are nominalized with *n*, being assigned the unmarked masculine by default.

(72) *bin-∅-as* 'bin-*n*-M' [$\sqrt{\text{BIN}}$ $n_{[\text{GEND}]}$]



Agreement for gender features between the subject and a PA proceeds unhampered, and the PA will receive a value for [GEND]. In other words, the neuter is unavailable on PAs because loanword subjects have a projected *n* bearing [GEND]. This feature is visible for agreement with D, and consequently with the PA, resulting in it bearing masculine, as in (73).

(73) Binas yra žal-ias/-*ià/-*ia.
bin.M is green-M/*-F/*-N
'The bin is green.'

This analysis of loanwords also applies to onomatopoeia, and interjections, which we discussed in Section 3.1.5. Recall that onomatopoeia, and interjections can be modified with masculine attributive adjectives, as in (74)–(75). They too must appear as roots, and must

[20] We thank an anonymous reviewer for bringing this to our attention.

therefore be nominalized by *n* to be modified by an attributive adjective. No neuter *n* is available, so in the absence of sociocultural or phonological conditioning factors for assignment (see fn. 7), the root merges with the *n* with unmarked [GEND]. If neuter were a possible gender on *n*, we might expect attributive adjectives to inflect as neuter when modifying nouns assigned a default gender such as interjections or onomatopoeia, contrary to fact.

(74) tyl-ùs/*-ì/*-ù *oj*
quiet-M/*-F/*-N INTJ
'quiet oj'

(75) tyl-ùs/*-ì/*-ù *brrr*
quiet-M/*-F/*-N brrr
'quiet brr'

Interim summary Our analysis captures the distribution of masculine as a default gender by connecting gender features to the nominalizing head *n*, and the data support our proposed feature representation for neuter, masculine, and feminine. We now proceed to our discussion of how PAs can fail to have their gender features valued, resulting in neuter inflection.

4.3 Analyzing non-agreement

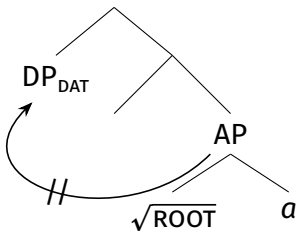
PAs inflect as neuter when they fail to receive features from a subject; in other words, when there is no agreement between the PA and the subject.[21] We now proceed to illustrate three environments where the non-agreement occurs.

The first environment where the PA is neuter is when the gender features of the subject are not accessible for agreement. This happens in situations with non-nominative subjects (76), which we also discussed in Section 3.2.1.

(76) Man buvo šalt-a/*-as/*-à.
me.DAT was cold-N/*-M/*-F
'I felt cold.'

We suggest that in cases like (76), the dative experiencer enters the derivation with ϕ-features, but the PA cannot agree with the DP due to the case-discriminating nature of the probe (Preminger 2011; 2014; E.F. Sigurðsson 2017). For concreteness, we adopt the idea that case-discrimination is the result of a probe attempting to agree with an argument that has non-nominative case, which causes the probe to abort. This is illustrated in (77), with two slashes indicating non-agreement. The result is that the PA does not value features, and consequently, is realized with neuter inflection.[22]

(77)



[21] This can be stated in a Failed Agree approach, whereby Agree can fail to value the features on the probe, and this does not cause the derivation to crash, as proposed by Preminger (2011; 2014).

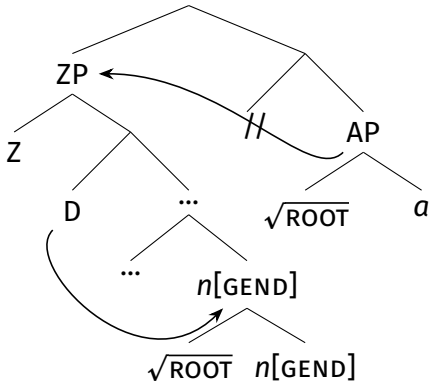
[22] An anonymous reviewer asks what triggers a probe if the adjective lacks gender features. We assume that when adjectives enter the derivation, they do carry unvalued ϕ-features, including u[GEND], which triggers the probe's search for a goal. When the probe fails to find a goal with valued [GEND], the inflection on the adjective is realized as neuter.

Another situation where nominal features are not visible to the PA is in Pancake Sentences (see Section 3.2.2). Observe that the subjects in these instances do project *n*, as indicated by the agreement of the subject with the attributive adjective in (78).

(78) Trumpos kojinės yra graž-ù/#-ios/*-ūs.
short.F socks.F are nice-N/#-F/*-M
'Short socks are nice (to wear).'

We propose that the topmost layer of Pancake subjects includes an ZP stacked on top of a DP as in (79). The ZP is responsible for the interpretation of the subject as eventive and generic. Even though the subject has *n*, we propose that the gender features of Pancake subjects originating on *n* do not percolate to their topmost projection ZP (cf. Ingason & Sigurðsson 2017 on definiteness). Consequently, gender features are not available for agreement with other elements in the clause (cf. Danon 2012; 2014; Wechsler 2013). Hence, when the PA probes up to agree with the topmost layer, namely ZP, it fails to value its features because the features internal to the subject are not available on ZP, thus yielding neuter inflection on the PA.

(79)



Proposing additional structure for these sentences is similar in spirit to Josefsson 2009,[23] which introduces additional covert structure for the subject of Scandinavian Pancake Sentences, and is also similar to Danon's (2012) study, which suggests that the D layer of the subject in Hebrew *ze* sentences are featurally "defective", yielding non-agreement. The precise nature of ZP is beyond the scope of our paper, and we leave it for further research.

The second case where the PA is neuter is when the subject lacks *n*, and therefore lacks gender, resulting in non-agreement. Infinitival subjects (see Section 3.2.3) present an example of this type of subject. The evidence for the lack of *n* in infinitival subjects comes from their inability to occur with attributive adjectives, as in (80), which should adjoin to *n*P.

(80) (*Stipr-ù/-ùs/-ì) gerti yra ne-sveik-a/*-as/*-à.
heavy-N/-M/-F drink.INF be.PRS.3 NEG-healthy-N/*-M/*-F
'To drink (heavily) is not healthy.'

Infinitives can be contrasted with deverbal nominalizations, which also have verbal structure, but unlike infinitives, are nominalized with *n* (for a similar distinction, see Alexiadou et al. 2011). This is illustrated with nominalizations formed with the suffix *-im/-ym* (for

[23] We note, however, that the Lithuanian case facts do not straightforwardly support an extension of Josefsson's (2009) analysis of Scandinavian Pancake Sentences, which have similar properties. Josefsson argues for the subject of Pancake Sentences having verbal structure, partly on the basis of pronominal subjects bearing accusative case. The example in (78), in contrast, requires nominative, suggesting it lacks verbal structure.

discussion, see Zaika 2016). These nominals are indeed deverbal, as they are compatible with verbal prefixes such as the *per-* along with the reflexive *si* clitic (81). We predict that, in contrast to infinitives, *-im/-ym* nominalizations support attributive adjectives and have gender. This is borne out, as is evident from the masculine agreement on the attributive adjective.

(81) Jam gręsia stipr-ùs/*-ù per-si-gėr-im-as.
he.DAT threaten heavy-M/*-N PFV-RFL-drink-*n*-M
'He (his health) is threatened by heavy over-drinking.'

The interpretation of *-im/-ym* deverbal nominalizations can be generic. We propose that like Pancake Sentences, generic interpretations of *-im/-ym* nominalizations are derived through the addition of a ZP. Under such an interpretation, the *-m* nominalization triggers neuter on the PA.

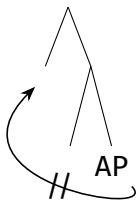
(82) Stripr-ùs per-si-gėr-im-as yra labai ne-sveik-a/#-as/*-à.
strong-M PFV-drink-*n*-M is very NEG-healthy-N/#-M/*-F
'Heavy over-drinking is very unhealthy.'

The last environment where the PA is neuter is when the subject is not projected, as in *weather*-type constructions like (83), which we discussed in Section 3.2.4. Crucially, as suggested in Section 3.2.4, we take these constructions to be different from regular weather constructions with a projected weather *pro* because constructions with neuter PAs do not allow a nominal argument, whereas constructions with weather verbs like 'rain' do.

(83) (Lauke) tams-ù/*-ùs/*-ì.
(outside) dark-N/*-M/*-F
'It is dark (outside).'

We analyze these cases of non-agreement as lacking projected subjects. Consequently, a PA has no argument to agree with, yielding neuter inflection on a PA. (For other potential analyses of *weather*-type constructions, see also Schäfer 2012; Wood 2017).

(84)



Summary In this subsection, we applied our analysis to derive the behavior of neuter as a non-agreement form. We observed that neuter inflection on PAs results from agreement disruption or the non-projection of *n*. In 4.4, we extend our analysis to other cases of default behavior.

4.4 Extensions

We now apply our analysis to other phenomena in the language, suggesting that neuter pronouns and deadjectival nominals lack *n*, and therefore lack gender. We further discuss how the morphology of neuter adjectives is consistent with our analysis of gender features, which we have represented in terms of containment relations.

4.4.1 Neuter pronouns and their features

Our analysis places inherent gender features solely on *n*, with neuter being the absence of gender. This correctly predicts that there are no neuter nouns in the language. However, recall from Section 2 that the language does have neuter pronouns, e.g. *viskas* 'everything.N', which always appear with neuter inflection on PAs was illustrated in (4), repeated here in (85).[24]

(85) Viskas yra graž-ù/*-ùs/-*ì.
everything.N is beautiful-N/*-M/*-F
'Everything is beautiful.'

To account for this, we extend the *n* hypothesis to pronouns, and propose that in Lithuanian, masculine and feminine pronouns project *n*, in the spirit of theories that posit complex internal nominal structure in pronouns (e.g. Bjorkman 2017; Panagiotidis 2019 for gender). In contrast, neuter pronouns, as we argue, do not project *n*, and therefore lack gender. We contend that our analysis is supported by the absence of a number alternation for neuter pronouns. We follow Picallo (2006) and Alexiadou et al. (2011) in taking the projection of *n* to be required to support the projection of Num. We therefore predict that the language lacks a number distinction between singular and plural for neuter pronouns, unlike the corresponding masculine and feminine. This is borne out, as illustrated by the morphology of demonstrative pronouns in (86), which show a distinction between masculine, feminine and neuter. We take the lack of the distinction between singular and plural forms to suggest that neuter pronouns lack number features in general. It is important to note that the data presented here may constitute evidence that gender and number features in Lithuanian are bundled together, as pointed out by a reviewer; for discussion of this type of bundling approach, see Kramer 2015; 2016.

(86) a. tas
that.M.SG

b. ta
that.F.SG

c. tie
that.M.PL

d. tos
that.F.PL

e. taĩ
that.N

[24] Neuter pronouns can be modified by postnominal adjectives. As (i) shows, these adjectives appear in neuter forms. However, we do not treat these adjectives as attributive. Observe that attributive adjectives can be stacked (ii), while postnominal adjectives cannot (iii) (cf. Larson & Marušič 2004). One plausible analysis is that these adjectives occur in reduced relative clauses (cf. Cinque 2010; 2014); we leave this to future research.

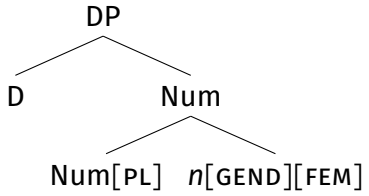
(i) Girdėjau, jog viskas graž-ù yra tik tai, ką pamatome ant scenos.
heard, that everything.N beautiful-N yra only that, which see on stage
'I heard that everything beautiful is only what we see on the stage.'
https://www.minfo.lt/posts/l-motiejauskaite-pasirinkus-bet-kokia-sporto-saka-reikia-savotisko-uzsispyrimo-ir-kad-tai-teiktu-emocine-arba-fizine-nauda (Accessed 11/17/18)

(ii) Kiekvien-as brang-us žãl-ias daikt-as yra ant lentynos.
every-M expensive-M green-M thing-M is on shelf
'Every expensive green thing is on the shelf.'

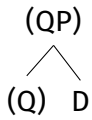
(iii) *Viskas žãl-ia brang-ù /brang-ù žãl-ia yra ant lentynos.
everything-N green-N expensive-N /expensive-N green-N is on shelf
'Everything that is expensive and green is on the shelf.'

Based on this distinction, we assume that the structure of pronouns is as sketched in (87). Observe that masculine and feminine personal pronouns project *n*, and therefore can project Num, while in contrast, neuter pronouns do not project *n* and therefore cannot project Num. Since some neuter pronouns are also quantified (such as *viskas* 'everything'), we also include Q in their representation.

(87) a. F.PL pronoun

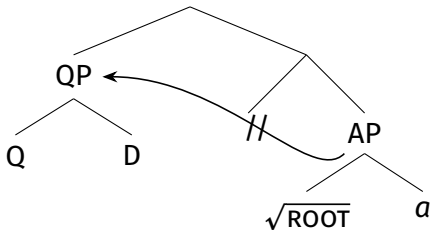


b. N pronoun



Instances like (85) with neuter pronominal subjects, and PAs thus involve non-agreement, because the PA does not receive a gender value from the neuter pronoun subject. This is illustrated in (88).[25]

(88)



The last point we would like to make about neuter pronouns concerns case features. We have demonstrated in Section 2 that neuter pronouns like *viskas* 'everything' and *taĩ* distinguish different case forms (e.g. *visk-ą* 'everything-ACC.N'). Thus, while these categories lack gender and number, they seem to have case. This is consistent with our analysis, since the D head more generally can bear case features (see Šereikaitė 2019 for evidence of D bearing case features in Lithuanian).

4.4.2 Deadjectival nominals

Another phenomenon to which we can extend our analysis is deadjectival nominals, as in (89). As can be observed, neuter deadjectival nominals can be copular subjects (Ambrazas et al. 1997: 136), in which case they must trigger neuter on a PA.

[25] The other possibility is that gender features fail to percolate to the topmost projection of the DP, as was our analysis for Pancake Sentences. The most plausible candidate for preventing percolation is a quantifier, as several of the neuter pronouns are quantificational. Quantifiers, however, do not trigger neuter on a PA when they occur with nouns (i), thus something else would need to be said for their variable blocking behavior.

(i) Kiekvienas obuolys yra žal-ias/*žal-ia.
every.M apple.M is green-M/*green-N
'Every apple is green.'

(89) Modified from Ambrazas et al. (1997: 136)
Sald-ù yra gard-ù/*-ùs/*-ì.
sweet-N is delicious-N/*-M/*-F
'Sweet is delicious.'

Despite their adjectival morphology, deadjectival nominals share characteristics with nominals in that they appear in argument positions, as mentioned in Section 2. For example, they can occur in accusative object positions, as in (12), repeated in (90a)–(90b).

(90) a. Jis mate gẽra ir blõga.
he.NOM saw good.N and bad.N
'He saw good and bad.'

b. Jis mate tik gerus dalykus.
He.NOM saw only good.ACC.M.PL things.ACC.M.PL
'He saw good things only.'

Although they resemble nominals in this respect, we propose that neuter deadjectival nominals lack *n*, just like infinitives (see Section 4.3), resulting in the neuter inflection seen on the PA. Support for this analysis comes from a comparison between the nominalizations that do involve *n* and the deadjectival nominals that lack it (for similar distinction see Alexiadou et al. 2012; Alexiadou & Iordăchioaia 2014). We first note that the deadjectival nominals allow adverbial but not adjectival modification (91a), whereas overtly suffixed nominalizations show the opposite pattern (91b).

(91) a. Velnišk-ai/*velnišk-a sald-ù yra gard-ù.
devilishly-ADV/*devilish-N sweet-N is delicious-N
'Devilishly sweet is delicious.'

b. velnišk-as/*velnišk-ai sald-um-as
devilish-M/*devilishly-ADV sweet-*n*-M
'devilish sweetness'

The second argument comes from comparatives, which are permitted with deadjectival nominals but not overtly suffixed nominals.

(92) a. Saldž-iau yra ger-iau.
sweet-COMP.N is good-COMP.N
'Sweeter is better.'

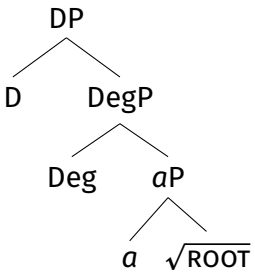
b. *saldž-iau-um-as
sweet-COMP-*n*-M
'sweeter-ness'

These diagnostics suggest that deadjectival nominals lack internal nominal syntax and instead behave like adjectives. However, as we have pointed out, they are able to appear in argument positions (90a), and thus appear to behave as though they have "external" nominal syntax.

Our analysis draws from a precedent from recent literature showing that certain types of nominalizations are derived without *n* (Alexiadou et al. 2011; Bošković 2013; Villalba 2013; Alexiadou & Iordăchioaia 2014; Iordăchioaia 2014; among others). Because these deadjectival nominals lack *n*, they consequently lack gender. This accounts for both the neuter form of the deadjectival and the fact that they appear with PAs with neuter inflection

(89). We assign them the structure in (93), which lacks the nominalizing head *n*, and therefore lacks gender. We include a DegP to capture the fact that these deadjectivals can appear with comparatives.[26]

(93)



As far as case features of these adjectives are concerned, recall that deadjectival nominals can appear in an accusative object position (90). We propose that these deadjectival nominals do indeed receive case values and these values are realized with the same neuter forms. In other words, adjectival neuter inflection is syncretic across case values (see Table (1)).

4.4.3 Morphology of neuter adjectives

Lastly, we relate our analysis to the morphology of neuter adjectives. Recall that our representation of the feminine corresponds to the features [GEND][FEM], which contains the representation of the masculine, [GEND], while the representation of the neuter lacks gender features. Assuming the Elsewhere Condition, our analysis predicts that it is impossible to syncretize neuter and feminine for *a*Infl to the exclusion of the masculine (all else being equal). This would be a type of *ABA syncretism (see Bobaljik 2012; Smith et al. 2018; among others).

Recall from Section 2 that adjectives of the *iu*-class do not exhibit gender syncretism: all three forms have different inflections; examples are provided in Table 4 for the nominative

Table 4: ABC pattern of adjectives.

	A	**B**	**C**
	N	**M = [GEND]**	**F = [GEND][FEM]**
(i)u-class	graž-ù	graž-ùs	graž-ì
	sald-ù	sald-ùs	sald-ì
(i)a-class	žãl-ia	žãl-ias	žal-ià
	gẽr-a	gẽr-as	ger-à

[26] It is reported by Ambrazas et al. (1997) that masculine adjectives can be used in situations similar to the neuter deadjectivals (i). However, they are not always interchangeable (ii) (cf. (89)) and the masculines are in fact restricted in their distribution (ii), tending to have a specific interpretation, possibly suggesting they involve elided nouns or additional nominal structure. We leave these cases to future research. A reviewer notes that the use of masculine adjectives as in (i–ii) is similar to the use of long adjectives in predicative positions in Russian, which have also been analyzed as involving ellipsis or a null noun (e.g. see Bailyn 1994).

(i) Ambrazas et al. (1997: 136)
Blõg-o/Blõg-a ne-patyręs, gẽr-o/gẽr-a ne-pažinsi.
bad-M/bad-N NEG-experienced, good-M/good-N NEG-know
'Having experienced no evil, you cannot recognize good.'

(ii) ??Sald-us yra gard-us.
sweet-M is delicious-M
'Sweet is delicious.'

singular. In other words, they only exhibit ABC patterns. The adjective class *-(i)a* distinguishes between neuter and feminine forms with stress, even though the inflectional forms appear to be the same, as shown in Table 4. We take the stress facts to indicate that neuter and feminine forms are in fact distinct, and therefore also exhibit ABC patterns, not ABA.

One apparent counterexample comes from a subset of derived adjectives belonging to the *(i)a* class, which share an inflectional ending and are stressed the same way in the neuter and the nominative feminine singular.

(94) a. **dulk-ét-a**
dust-*a*-N
'dusty'

b. dulk-ét-as
dust-*a*-M

c. **dulk-ét-a**
dust-*a*-F

(95) a. **raud-ón-a**
red-*a*-N
'red'

b. raud-ón-as
red-*a*-M

c. **raud-ón-a**
red-*a*-F

While the neuter and feminine appear to be identical on the surface, we suggest that this does not run counter to our claims. The adjectives in (94)–(95) contain "strong" stem suffix exponents (cf. Ambrazas et al. 1997: 159–162), e.g. *-ėt* and *-on*, which attract stress even in the context of a "strong" suffix like the feminine nominative singular *-à*. We thus propose that the Vocabulary Items for the feminine and neuter are always distinct. The feminine ending *-a* includes stress in its Vocabulary Item. However, the stress fails to shift with "strong" stems. As a consequence, these forms overlap with the neuter, whose suffix is not stressed for the *(i)a* class.[27]

(96)

Vocabulary Items	STRONG STEM	NON-STRONG STEM
-à ↔ [GEND][FEM]	*raud-ón-a* 'red-*a*-F'	*ger-à* 'good-F'
-as ↔ [GEND]	*raud-ón-as* 'red-*a*-M'	*gẽr-as* 'good-M'
-a ↔ ELSEWHERE	*raud-ón-a* 'red-*a*-N'	*gẽr-a* 'good-N'

5 Conclusion

The empirical contribution of this paper has been to show that there exists two classes of default diagnostics in the domain of gender representation, which are often conflated in the literature. We have provided evidence that in Lithuanian, one class, masculine, identifies the unmarked gender feature, and the other, neuter, points to the absence of gender features.

[27] The failure of these stems to shift stress is not limited to the feminine nominative singular form. In (i-a), we see that for example in feminine locative forms, the inflection is stressed. However, when the stem of the adjective is strong as with *raudóna* 'red', the inflection is not stressed, and instead, the stem receives the stress, as in (i-b).

(i) a. žal-iosè
green-LOC.F.SG

b. raud-ón-ose
red-*a*-LOC.F.SG

To capture this split, we offered an explicit and restrictive theoretical DM account of gender representation in Lithuanian, in terms of features, their locus, and how they are transmitted to PAs through agreement. Our study offers a unified "layered" approach to two types of defaults in terms of feature specificity and the Elsewhere Condition, with one, the masculine, being more specific than the other, the neuter. This approach contrasts with some previous studies such as Corbett & Fraser 1999. In this work, there are also two types of defaults: the *normal case default* and the *exceptional case default*. The normal case default occurs in cases of underspecification, i.e. "after failing to find a more specific value" (Corbett & Fraser 1999: 71). The exceptional case default, in contrast, occurs in atypical or exceptional circumstances, e.g. where there is no nominal with which to agree. While their approach derives two types of defaults in fundamentally and conceptually different ways, our approach has reduced the difference between defaults purely to feature representation (see Kramer 2015: 141 for a related discussion).

As far as the locus of features is concerned, we provided a novel argument for linking gender features to the nominalizing head (following Lecarme 2002; Lowenstamm 2008; Kramer 2009; 2015; 2016; among others). Given that the language lacks neuter nouns, we proposed that it lacks an *n* without gender features and showed that this correctly derives not only the distribution of neuter PAs, but also the properties of deadjectival nominals and neuter pronouns. One alternative would have been to adopt the Distributed Gender Hypothesis (Steriopolo & Wiltschko 2010; Steriopolo 2018), which posits multiple distinct loci of gender features in the nominal domain: in Steriopolo (2018: 4), these loci are at *n* (semantic/natural gender), and D (discourse/referential gender). For this type of account, neuter features could be located on D but not on *n*. However, if D can be assigned neuter to all regular nominals, then it is not immediately clear to us how we would derive the ungrammaticality of neuter attributive adjectives. It is also unclear how this type of account would capture the hierarchy effects between masculine and neuter that we have argued for.

Lastly, in terms of agreement, our study further contributes to the growing body of evidence that the inability to agree with an argument does not yield ungrammaticality (cf. Preminger 2014). This is supported by the fact that PAs are neuter in cases of non-agreement (i.e. when the subject lacks gender features accessible for agreement), rather than causing the derivation to crash.

Further questions that remain concern how our representation of gender relates to three-gender languages. Crucially, we are not proposing that these languages lack "neuter" *n*s. We follow Kramer's (2015) proposal that three-gender languages represent neuter nouns with *n*s that lack gender features. In these languages, default gender, and non-agreement diagnostics may yield the same results. For example, Icelandic uses neuter inflection on adjectives in different types of default environments. As shown in (97a)–(97b), both onomatopoeia as well as a dative subjects trigger neuter inflection. These environments thus conflate the distinction presented by Lithuanian (cf. (28), and (32) for minimal pairs).

(97) *Icelandic*

a. hátt mjá/voff/búmm
loud.N meow/woof/boom
'a loud meow/woof/boom' Gender Default (Onomatopoeia)

b. Henni er kalt.
her.DAT is cold.N
'She feels cold.' Non-agreement (Non-Structural Case)

The split between default gender, and non-agreement in Lithuanian affords the opportunity to examine what makes certain syntactic environments "default". Further research should

investigate similar gender splits among default environments, especially in languages like Lithuanian that exhibit more gender categories in PA agreement than there are gender categories of nouns. While our system treats defaults, and representation as "layered" for gender, it remains an open question whether other features like case exhibit the same type of behavior, and can be captured under the same type of approach.

Abbreviations

a = adjectivizing head, COMM = common gender, COMP = comparative, GEND = gender, INTJ = interjection, *n* = nominalizing head, PFV = perfective, RFL = reflexive. For a list of standard abbreviations, refer to the Leipzig Glossing Rules.

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Competing Interests

The authors have no competing interests to declare.

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