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Contact-Induced Change in the Domain of Grammatical Gender in Pontic Greek Spoken in Georgia

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Abstract: This paper presents an empirical study on the cross-linguistic influence of contact languages (Turkish, Georgian and Russian) in the domain of grammatical gender in Pontic Greek spoken by the Pontic-speaking community of Georgia. The study is based on corpus data collected during several periods of fieldwork within the Pontic-speaking community of Georgia. The questions addressed in the paper are: What innovations can be observed in the understudied variety in the gender domain, and, if any innovation is observed, are they due to the impact of contact languages? I argue that contact-induced changes in the gender domain manifest themselves in the assignment of gender to loan nouns, and contribute to the establishment of the default gender value. The main findings reveal that, in comparison with other Pontic varieties, this variety is on the one hand more sensitive to the animacy hierarchy, and, on the other, shows increased use of the feminine gender as a result of the incorporation of feminine loans from a gendered language, i.e., Russian.

Keywords: gender; animacy; agreement; borrowing; language contact; Pontic

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1. Introduction

This paper investigates contact-induced change in the domain of grammatical gender in Pontic Greek (PNT) spoken by the Pontic–Greek community of Georgia. The understudied variety of PNT is a new contact variety that has been underrepresented in the literature on language contact. The available publications and resources relate mostly to the PNT varieties spoken in Turkey or by PNT speakers in Greece (Papadopoulos 1955; Oikonomidis 1958; Tombaidis 1988; Drettas 1997; Mackridge 1987, 1999; Revithiadou and Spyropoulos 2012; Sitaridou 2013, 2014a, 2014b among others). Pontic spoken by the Pontic–Greek community of Georgia (PNT_{GE}), which was/is used within a different language situation and was/is in contact with new languages, has been less systematically investigated. Some grammatical descriptions are available in Lazarev (1950), Eloeva (1997), Mikaberidze and Shakhpazidi (2000) and Berikashvili (2017).

In the case of PNT speakers in Georgia, the contact languages at hand are two languages with agglutinative morphology (Turkish and Georgian—both genderless) and a language with fusional morphology (Russian—a gendered language). Further, a significant impact of Standard Modern Greek (SMG) was witnessed on PNT following mass emigration to Greece from Georgia in the 1990s. However, the data on SMG influence is not included in the present study, as it demonstrates a different contact situation. The impact of Russian as a source language (SL) is larger than that of Georgian, which comes into play only in the 20th century, when internal migration began from original settlements to cities, generally to the capital of Georgia, Tbilisi (see Angelidis 2003). Contact with Russian was more intense, encompassing a high degree of bilingualism. Turkish borrowings and constructions are mostly relics from earlier stages of the language and were already integrated in this variety in the 19th century, when Pontic Greeks came to Georgia. The Greek community of Georgia excluding the PNT_{GE} speakers, includes also speakers of Urum, the

basic substrate of which is Anatolian Turkish (see Skopeteas 2016 for grammatical features of Urum; Sideri 2006; Höfler 2020 for sociological and sociolinguistic accounts on the Greek community of Georgia).

The changes in the gender system in Greek contact varieties (including dialectal data, heritage Greek, etc.) have been analyzed in various studies focusing on the gender assignment to loanwords, integration of loans into inflection classes and mismatches in gender agreement (see Karatsareas 2009 for Cappadocian; Ralli et al. 2015 for Heptanesian and Pontic; Berikashvili 2016 for Pontic spoken in Georgia; Manolessou and Ralli 2020 for South Italian Greek; Ralli and Makri 2020 for Canadian Greek; Alexiadou et al. 2020 for Heritage Greek speakers in the USA).

This paper focuses on: (a) the role of animacy on inflection and case syncretism, and (b) the strategies of gender assignment to loan nouns, which results in additional contact-induced changes in PNT_{GE}. More specifically, different gender assignment strategies are discussed based on commonly accepted gender assignment factors that govern the accommodation and integration of loans (see Poplack et al. 1982; Corbett 1991; Clyne 2003; Matras 2009; Winford 2003; Gardani 2020 among many others). A form-matching factor, i.e., the phonological–structural shape of the word, has a crucial role in gender assignment in PNT_{GE}. However, other factors are also involved. Assignment to the inflection class (IC) also depends on the phonological form of the ending. ICs at the same time are sensitive to the morpho-syntactic role of the animacy hierarchy, or more specifically, the [±human] feature characteristic to all PNT varieties. This causes on the one hand a grammatical gender decline, and on the other the differentiation of ICs based on animacy and semantic agreement (in terms of Corbett 2006) in nominal concord. The interaction of gender and the [±human] feature in inflection is analyzed following the subgenders approach proposed by Corbett (1991). The main findings reveal that in comparison with the other PNT varieties, the understudied variety: (a) is more sensitive to the animacy hierarchy, displaying more consistent use of the *-es/-as* inflectional suffixes in plural based on animacy distinction; and, (b) shows increased use of the feminine gender. Some of the possible structural innovations introduced indirectly through lexical borrowings from Russian are mentioned.

The paper is structured as follows: Section 2 briefly describes the corpus data collection. Section 3 provides background information on animacy and ICs in PNT, and includes results on case syncretism in native and borrowed words in the understudied variety. Section 4 discusses gender assignment to nouns based on semantic, phonological and morphological criteria, and highlights the main innovation of PNT_{GE}: neutralization of the tendency towards neuter use by increasing feminine gender use in some grammatical environments. Section 5 concludes the paper.

2. Materials and Methods

The study is based on corpus data collected during several fieldwork periods in the Pontic Greek community of Georgia by Kotanidi, Berikashvili and Skopeteas in 2005, 2014–2016. The corpus contains 435 media files of spontaneous and semi-spontaneous speech. In total 57 native-speaking consultants were recorded (24 males and 33 females, with an age range: 22–88): the average word count per speaker is 935 words. The corpus contains approximately 53,295 words. All the consultants reproduced narratives on the same topics, namely: ancestors, family, village, culture, people, marriage, feasts and language. They also translated different sentences, described pictures and gave spontaneous interviews.

The purpose of this data collection was on the one hand to document the language and create a text collection that can be used for the study of the language and for observation of language changes, and on the other hand to clarify the use of different linguistic phenomena in the understudied variety of PNT.

The data collected reflects three stages of Pontic history regarding the migration process inside Georgia and from Georgia: Stage A: Homeland (original settlement areas in Georgia, recorded data in Georgian villages), Stage B: Internal migration (to urban centers in Georgia, mostly to the capital of Georgia—Tbilisi, recorded data in cities: Batumi and

Tbilisi) and Stage C: Emigration (to countries of the European Union, recorded data in Thessaloniki, Greece). However, the data from the last stage (C) is not included in this paper, as it shows a different contact situation, with the influence of Modern Greek as a standard language above other dialects. Some examples from this stage are mentioned merely when it is necessary for discussion. All the data are annotated according to the existing standards in field linguistics, following the Leipzig Glossing Rules, using Toolbox and ELAN software. The whole corpus is available to the academic community via the TLA and includes three subcollections (final version 2019, persistent identifier: https://hdl.handle.net/1839/00-0000-0000-0021-4DA4-3, accessed on 23 November 2021).

3. Animacy Hierarchy and Case Syncretism

3.1. Background Information on Animacy, Inflection Classes and Case Syncretism in Pontic

PNT is characterized by a tripartite gender distinction (masculine, feminine, neuter), which applies to all nominal phrases and is visible in agreement. Besides, PNT is also sensitive to the animacy hierarchy (1).

(1) humans > other animates > inanimates (see Dahl 2000, p. 99)

The animacy hierarchy causes (a) case syncretism in plural, i.e., identical form of the core grammatical cases: nominative/accusative, that have different morphosyntactic features; (b) gender alteration in plural, so-called metaplasm in Greek terminological tradition (see Papadopoulos 1955, pp. 45–46; Oikonomidis 1958, pp. 146–48; Revithiadou and Spyropoulos 2012, pp. 59–62), which covers not only the replacement of the morphological markers, but also the choice of the definite article, i.e., syntactic feature of gender; and (c) selection of gender in the nominals agreement and predicate argument domain.

A limitation of grammatical gender use due to the animacy category is characteristic to PNT and is shared by other Asia Minor Greek (AMG) dialects. It is caused by both language-external and language-internal factors (see Dawkins 1916; Janse 2004; Spyropoulos and Kakarikos 2009; Karatsareas 2009, 2011, 2014; Horrocks 2010, etc.). The language-external factor includes contact with Turkish, which does not possess the grammatical category of gender; the language-internal factor is the tendency towards using neuter in the dialect. In some other AMG dialects, as for instance in Cappadocian (Spyropoulos and Kakarikos 2009, p. 52) the [±human] feature has undertaken the role of gender. In PNT both features, grammatical gender and the animacy hierarchy are active. Though animacy is a semantic value, it is labeled as inflectionally active (Spyropoulos and Kakarikos 2009) because the inflection depends upon animacy hierarchy, which results in additional differentiation in ICs.

The relation between gender and inflection in PNT is as follows: gender is not the main criterion for the differentiation of ICs, although traditional grammars of PNT often discuss nominal inflection based on the gender properties, alongside stem-endings (Papadopoulos 1955, pp. 48–49; Oikonomidis 1958, pp. 156–206; Drettas 1997, pp. 118–29). More important for PNT inflection is animacy, as it shows different inflectional suffixes in the plural for [+human] and [−human] entities, accordingly. Gender and ICs are commonly accepted to be strongly related cross-linguistically. Different proposals have been made based on the order of assignment of IC and gender. Some authors (for instance Corbett 1991) claim that IC is always assigned before gender, while others (for instance Aronoff 1994; Thornton 2001) maintain that gender to class is the dominant order, but this need not be a universal and can vary cross-linguistically (see Doleschal 2001 and the references therein). The relation of gender and ICs in Greek is also a debatable issue (see Melissaropoulou 2013 for an overview of different approaches to Greek). The direction of assignment of IC and gender has been discussed by Ralli (2000, 2002), for whom morphology (including IC) is more important for gender assignment. Melissaropoulou (2013, 2016) on the other hand provides discussion based on different dialectal varieties that support mostly Aronoff's (1994) claim of the direction of gender towards the inflection class.

Generally, PNT nominal inflection follows the SMG inflection system, with further differentiation of ICs based on the animacy feature. SMG nominal inflection as proposed by Ralli (2000, [2005] 2012) consists of eight inflection classes and is based on the diversity of

allomorphic stems and the system of inflectional suffixes. This classification can be adopted for PNT ICs as well but with further readjustments (see Table 1 for examples of each class in PNT).

Table 1. PNT noun inflection classes.

	IC1	IC2	IC3	IC4	IC5	IC6	IC7	IC8
	M/F	M	F	F	N	N	N	N
				Singular				
NOM	ðeskál-os 'teacher'	mártira-s 'witness'	jinéka-ø 'woman'	ɣnósi-ø 'knowledge'	ksíl-on 'stick'	xoráf(i)-(n) 'field'	shkév-os 'plate'	lóman-ø 'clothes'
GEN	ðeskál-(u)	mártira-ø	jinéka-s	ɣnósi-s	ksil-í	xoraf-í	shkév-us	lomat-í
ACC	ðeskál-on	mártira-n	jinéka-n	ɣnósi-n	ksíl-on	xoráf(i)-(n)	shkév-os	lóman-ø
VOC	ðeskál-e	mártira-ø	jinéka-ø	ɣnósi-ø	ksíl-on	xoráf(i)-(n)	shkév-os	lóman-ø
				Plural				
NOM	ðeskál-(i)	mártir-es	jinék-es	ɣnós-is	ksíl-a	xoráf-ä	shkév-ä	lómat-a
GEN	ðeskál-(i)on	martír-on	jinek-íon	ɣnos-íon	ksil-íon	xoraf-íon	shkev-íon	lomat-íon
ACC	ðeskál-(u)/(t)s	mártir-as/-es	jinék-es	ɣnós-is	ksíl-a	xoráf-ä	shkév-ä	lómat-a
VOC	ðeskál-i	mártir-es	jinék-es	ɣnós-is	ksíl-a	xoráf-ä	shkév-ä	lómat-a

The main principles for differentiation of ICs are the same, namely: diversity of allomorphic stems and the system of inflectional suffixes. It is natural that PNT, as one of the Greek dialectal varieties, maintains similar inflection-class properties. However, the inflectional suffixes are not always the same as those from SMG and a slight difference can be found in several cases in the genitive marker for neuter nouns and some inflectional suffixes in plural number (see Berikashvili 2017, pp. 36–47 for detailed information on ICs in PNT_{GE}).

The main peculiarity which should be addressed, and was not indicated in Table 1, is that the first three classes (IC1, IC2 and IC3) show further differentiation in plural based on the [±human] feature (see Table 2 for an example of classes with further semantic differentiation)[1].

Table 2. PNT noun inflection classes with semantic differentiation.

	IC1		IC2		IC3	
	M/F		M		F	
	[+human]	[−human]	[+human]	[−human]	[+human]	[−human]
			Singular			
NOM	ánθrop-os 'person'	ɣám-os 'marriage'	ándra-s 'man'	mína-s 'month'	θeɣatéra-ø 'daughter'	vreshí-ø 'rain'
GEN	ánθrop-(u)	ɣám-(u)	ándra-ø	mína-ø	θeɣatéra-s	vreshí-s
ACC	ánθrop-on	ɣám-on	ándra-n	mína-n	θeɣatéra-n	vreshí-n
VOC	ánθrop-e		ándra-ø		θeɣatéra-ø	
			Plural			
NOM	anθróp-(i)	ɣám-us	ándr-es	mín-as	θeɣatér-es	vresh-ás
GEN	anθrop-(í)on	ɣám-on	ándr-on	mín-on	θeɣater-íon	vresh-ón
ACC	anθróp-(u)s	ɣám-us	ándr-as/-es	mín-as	θeɣatér-es	vresh-ás
VOC	ánθrop-i		ándr-es		θeɣatér-es	

As can be seen in Table 2, the nouns of masculine/feminine (IC1) and masculine (IC2) that denote human entities have different inflectional suffixes for core cases in the plural, while [−human] nouns have case syncretism formally identical with accusative case. Some PNT varieties show parallel forms in IC2 [+human], with case syncretism (see Papadopoulos 1955) identical to the feminine class (IC3).

IC3 feminine nouns show case syncretism in both [+human] and [−human] entities in the plural, and the syncretic forms are different in both cases. The nominative case inflectional suffix *-es* is used as a general form for the syncretic nominative/accusative with

[+human] entities, while the accusative case inflectional suffix *-as* is used with [−human] ones (see Table 2). Consequently, the *-es/-as* variation for the [±human] feature is tied to the morphosyntactic differentiation of nominative (subject case in PNT) and the accusative (object case). The nominative is generalized for [+human] entities, as subjects tend to be generally higher in the animacy hierarchy than objects, while the accusative is generalized for the [−human] ones (see Janse 2004 for the same claim regarding the Cappadocian masculine-animate and neuter-inanimate nouns).

The inflection of the definite article in PNT is presented in Table 3.

Table 3. Inflection of the definite article in PNT.

	M	F	N
	Singular		
NOM	o	i	to
GEN	tu, ti	tis, ti	tu, ti
ACC	ton	tin	to
	Plural		
NOM	i	i	ta
GEN	ton, ti	ton, ti	ton, ti
ACC	tus	tis	ta

The other peculiar phenomena of PNT are: (a) gender alteration in plural, from masculine and feminine to neuter in case of non-human nouns and (b) emergence of neuter agreement within DPs based on animacy distinction. Generally, nominal agreement in PNT is syntactic when targets agree with their controllers' gender in case of [+human] nouns, and semantic—when nouns denoting [−human] entities trigger neuter agreement (see Karatsareas 2014). Gender alteration in DPs with nouns denoting [−human] entities also covers a syntactic feature of gender by the choice of the definite article. Consider, for instance, examples from Table 2 with a neuter article, but feminine/masculine inflectional suffixes in plural (2).

(2)

		Singular		Plural
IC1	o.M	ɣámos 'marriage'	ta.N	ɣámus
IC2	o.M	mínas 'month'	ta.N	mínas
IC3	i.F	vreshí 'rain'	ta.N	vreshás

Thus, the main peculiarity in nominal inflection that shows innovation in PNT depends on the animacy hierarchy, causing on the one hand further division within classes and on the other hand different case syncretism in the masculine and feminine gender. Given this, the main ICs should be supplemented with additional semantically conditioned ICs based on the formation of plural forms. However, as semantic conditioning is considered non-canonical for ICs and does not cover the criterion which states that distribution of lexical items over ICs cannot be semantically motivated (see Palancar 2012 for discussion and Corbett 2009 for principles and criteria of canonical ICs), I will not propose at this moment new ICs in such a situation, but rather categorize them as subclasses (in light of Corbett's (1991) notion of subgenders for agreement patterns) for IC1, IC2 and IC3, thus adopting mainly Ralli's classification (Ralli 2000, [2005] 2012) to this dialectal variety.

3.2. Case Syncretism and Inflection Classes in Pontic Spoken in Georgia

Generally, PNT_{GE} shows the same picture in case syncretism. The main opposition here, both in plural formation and agreement patterns within DP is based on the animacy hierarchy; more specifically, on the [+human] vs. [−human] feature. Case syncretism of core cases applies to all [−human] nouns of the masculine and feminine gender, whereas in the corresponding [+human] nouns in masculine (IC1),[2] there are different inflectional suffixes for nominative and accusative, and in masculine (IC2) and feminine (IC3), the

suffix *-es* is used for both core cases (see Table 4). Therefore, case syncretism also applies to [+human] IC2 masculine nouns.

Table 4. Case syncretism in plural PNT_{GE}.

	IC1		**IC2**		**IC3**	
	M		**M**		**F**	
	[+human]	**[−human]**	**[+human]**	**[−human]**	**[+human]**	**[−human]**
	Plural					
NOM	anθróp-(i) 'person'	ɣám-us 'marriage'	ándr-es 'man'	mín-as 'month'	θäatér-es 'daughter'	vresh-ás 'rain'
ACC	anθróp-(u)s	ɣám-us	ándr-es	mín-as	θäatér-es	vresh-ás

What is different in the understudied variety is a more consistent use of inflectional suffixes *-es/-as* for IC2 and IC3. Therefore, I will concentrate on these two classes. Both classes may have a plural form with the additional *-ð-*epenthesis in the plural, but the inflectional suffixes are the same. See, for instance, examples for IC3 in Table 5.

Table 5. Case syncretism in PL, IC3.

	IC3, F					
	[+human]		**[−human]**			
			Animate		**Inanimate**	
	Plural					
NOM	θäatér-es 'daughter'	manáð-es 'mother'	kosár-as 'hen'	alepúð-as 'fox'	vresh-ás 'rain'	paráð-as [1] 'money'
ACC	θäatér-es	manáð-es	kosár-as	alepúð-as	vresh-ás	paráð-as

[1] The singular form for *paráðas* [<TUR *para*] is *i pará*, i.e., feminine, IC3 (see Papadopoulos 1961, p. 144) in comparison with SMG, where the same word is integrated as masculine, IC2—*o parás*.SG—*i paráðes*.PL (see Charalambakis 2014, p. 1232.)

The main point is that, in both cases, with or without the *-ð-* epenthesis (following Ralli (2000, [2005] 2012), I regard it as part of a stem allomorph), the inflectional suffixes *-es/-as* are consistently used to indicate the [±human] feature. In comparison with other PNT varieties, masculine nouns of IC2 in PNT_{GE} do not show parallel forms in [+human] nouns with different inflectional suffixes for core cases. The only possible form is case syncretism with the *-es* inflectional marker, thus resembling feminine noun formation. See (3).

(Kotanidi et al. 2019, PNT-TXT-LG-00000-A16)

(3) *[. . .] θa* *maθánts* *ás=i* ***jítones.***
[. . .] FUT learn:2.SG from=DEF:M.PL.ACC neighbor:M.PL.NGEN
'You will learn from your neighbors.'

In IC3 feminine nouns, the marker *-es* is always used with [+human] nouns, and the marker *-as* with [−human] nouns, both with animates and inanimates. The list (4) provides some examples of [±human] feminine nouns (IC3) in plural found in the corpus.

(4)

1. [+human] nouns:
jinékes 'woman/wife', *kóres* 'daughter', *mitéres* 'mother', *jajáðes* 'grandmother', *θiáðes* 'aunt', *mamáðes* 'mother', *mamíðes* 'nurse/midwife', *nifáðes* 'sister in law', etc.
2. [−human] nouns (animate):
kosáras 'hen', *kátas* 'cat', *mermíkas* 'ant', *tízas* 'louse'
3. [−human] nouns (inanimate):
ðiaforás 'difference', *ðulías* 'work', *eklisías* 'church', *eksorías* 'exile', *ikónas* 'icon', *istorías* 'history', *θálasas* 'sea', *karðías* 'heart', *líras* 'lira', *liturɣías* 'liturgy', *rízas* 'root', *strátas* 'road', *taleporías* 'suffering', *traɣoðías* 'song', *forás* 'time', etc.

It is worth noting, however, that the suffixes *-as/-es* in inanimate nouns are used interchangeably in the speech of people who live or have lived in Greece. Though this data goes beyond the scope of the article, as it presents the situation in a different linguistic environment, a possible explanation is the influence of SMG, as SMG reanalyzed the nominative (see Argiriadis 1990, p. 210; Andriotis [1995] 2005, p. 127 inter alia) and PNT the accusative as a general form for nominative/accusative.

An important observation is that the suffix *-as* is never used for the [+human]. Forms like *ta ɣaríðas* 'woman', *ta aðelfáðas* 'sister' and *ta nifáðas* 'daughter-in-law', i.e., human nouns with the ending *-as*, mentioned in the literature (see Mackridge 1987, p. 128; Drettas 1997, p. 129; Janse 2002, p. 216) as a peculiar feature of PNT morphology, are not attested in PNT_{GE}.

Borrowed nouns show the same picture. Moreover, while native nouns may show some influence from SMG, the loanwords do not seem to be affected, in that there is no interchangeable use of *-as/-es* inflectional suffixes in inanimates; the only suffix attested with [−human] entities is *-as.* For the elicited data of loan [−human] nouns borrowed from Russian and integrated into the inflectional system of PNT_{GE} (IC3), see Table 6.

Table 6. Loan nouns of Russian origin in PNT_{GE} attested in PL, IC3.

SG.NOM	PL.NOM/ACC	SL Form	Gender in SL
i baráshka 'lamb'	ta baráshk-as	barashka	F
i cháshka 'cup'	ta cháshk-as	chashka	F
i família 'surname, family'	ta famíli-as	familiya	F
i kaféta 'sweets'	ta kafét-as	kanfeta	F
i máska 'mask'	ta másk-as	maska	f
i múzika 'music'	ta múzik-as	muzyka	F
i prabléma 'problem'	ta prablém-as	problema	F
i priróda 'nature'	ta priród-as	priroda	F
i salfétka 'napkin'	ta salfétk-as	salfetka	f
i semiá 'family'	ta semiáð-as	sem'ya	F
i silyótka 'herring'	ta silyótk-as	selyodka	F
i tradítsia 'tradition'	ta tradítsi-as	tradiciya	F
i vótka 'vodka'	ta vótk-as	vodka	F
i vísilka 'deportation'	ta vísilk-as	vysylka	F

As can be seen in Table 6, nouns of Russian origin referring to [−human] entities, both animate and inanimate in plural, are used with the ending *-as*. All of them are of the feminine gender, ending in *-a* in singular and integrated into IC3. See (5a and b) for a singular and plural example from the corpus.

(Kotanidi et al. 2019, PNT-TXT-AN-00000-A13)

(5) a. *I* ***família*** *éton* *Mavromátis.*
DEF:F.SG.NOM surname:F.SG.NOM$_{RUS}$ be:PST:3.SG Mavromatis.
'(His) surname was Mavromatis.'

(Kotanidi et al. 2019, PNT-TXT-AN-00000-A13)

b. *Érθane* *polá* ***famílias*** *apés*
come:PFV.PST:3.PL many:N.PL.NGEN family:N.PL.NGEN$_{RUS}$ inside
s=o *xoríon.*
LOC=DEF:N.SG.ACC village: N.SG.NGEN
'A lot of families came to the village.'

All these words are of the feminine gender in the SL too. In PNT_{GE}, accordingly, the phonological form of these words is associated with the feminine gender and, subsequently, loans from Russian with the ending *-a* are assigned the feminine gender (see Berikashvili 2016, pp. 261–64). All nouns of Turkish origin integrated into IC3 show the same distinction of [+human] and [−human] inflectional suffixes in plural. See Table 7 for loans of Turkish origin found in the corpus.

Table 7. Loan nouns of Turkish origin in PNT_{GE} attested in PL, IC3.

SG.NOM	PL.NOM/ACC	SL Form
i ɣarí 'woman'	i ɣaríð-es	karı
i pachí 'sister'	i pachíð-es	baci
i zurná 'zurna'	ta zurnáð-as	zurna
i mejvá 'fruit'	ta mejváð-as	meyve
i meshá 'forest'	ta mesh(an)áð-as	meşe
i pará 'money'	ta paráð-as	para

These nouns are assigned the feminine gender and follow the same strategy of gender assignment as Russian nouns, i.e., the phonological form of the SL (ending in *-i*, *-a* or *-e*) is reinterpreted as a suffix associated with the feminine gender, and is thus integrated into patterns of PNT_{GE}. See (6) for case syncretism in nouns of Turkish origin denoting [−human] entities.

(Kotanidi et al. 2019, PNT-TXT-VL-00000-B04)

(6) *Éxume* *émorfa* ***mesháðas.***
have:1.PL beautiful:N.PL.ACC forest:N.PL.NGENTUR
'We have beautiful forests.'

Loan nouns of Georgian origin are rare, but still the same phenomenon, i.e., the use of the suffix *-as* for [−human] entities, is found. See Table 8 for some words and (7) for example from the corpus.

(Kotanidi et al. 2019, PNT-TXT-CL-00000-A10)

(7) *T=aɣúr* *forí* *mávra* ***chuxáðas***.
DEF:N.SG.NGEN=boy:N.SG.NGEN put_on:3.SG black:N.PL.NGEN chokha:N.PL.NGENGEO
'The boy wears black chokha.'

Table 8. Loan nouns of Georgian origin in PNT_{GE} attested in PL, IC3.

SG.NOM	PL.NOM/ACC	SL Form
i chixirtmá 'chikhirtma'	ta chixirtm-ás	chikhirtma
i churchxéla 'churchkhela'	ta churchxél-as	churchkhela
i chúxa 'chokha' [1]	ta chuxáð-as	chokha

[1] Chikhirtma—traditional Georgian soup, churchkhela—Georgian national sweets, chokha—Georgian national dress for men.

The generalization based on the corpus data is that [+human] entities show different core-case realization depending on the IC class (either with different inflectional suffixes for core cases (IC1) or with case syncretism (IC2, IC3)), while all [−human] nouns show case syncretism. That it is really a [±human] feature and not opposition animate vs. inanimate that distinguishes the two morphological realizations can be seen in Table 9, which provides examples for animate non-human entities for all three classes.

Table 9. Case syncretism in animate non-human nouns in PNT_{GE}.

	IC1	IC2	IC3
	M	M	F
	Animate [−human]	**Animate [−human]**	**Animate [−human]**
	Singular		
NOM	muxter-ós 'pig'	aeté-s 'eagle'	kosára-ø 'hen'
ACC	muxter-ón	aeté-n	kosára-n
	Plural		
NOM	muxter-á	aet-ás	kosár-as
ACC	muxter-á	aet-ás	kosár-as

An example for IC1, *muxter-á*.PL 'pigs' in Table 8, shows the alteration of inflectional suffixes to neuters (IC5). This phenomenon is not just characteristic to animate [−human] nouns, but to inanimates as well. In [−human] nouns, two forms of gender alteration are distinguished in the plural: (a) either by the choice of the neuter form of the determiners (articles, quantifiers) with no morphological change of inflectional suffixes (See (8) and Table 10), or (b) by the change of both determiners and inflectional suffixes (See (9) and Table 11).

(Kotanidi et al. 2019, PNT-TXT-AN-00000-A09)

(8) *Epínan* *ólä* ***ta*** ***ðulías*** .
do:IPFV.PST.3.PL all:N.PL.NGEN DEF:N.PL.NGEN work:N.PL.NGEN
'They did all the jobs.'

(Berikashvili 2019, PNT-TXT-CL-00000-B23)

(9) ***Ta*** ***kalachía*** *xaláne* *xoría*
DEF:N.PL.NGEN conversation:N.PL.NGEN destroy:3.PL village:N.PL.NGEN
'Talking destroys villages.'

Table 10. Gender alteration in PL with neuter article.

	Masc. (IC2)		**Fem. (IC3)**	
	SG	PL	SG	PL
Nom.	*o mína-s* 'month'	*ta mín-as*	*i óra* 'hour'	*ta ór-as*
Acc.	*ton mína-n*	*ta mín-as*	*tin óra-n*	*ta ór-as*

Table 11. Gender alteration in PL with neuter inflectional markers.

	Masc. (IC2)		**Fem. (IC3)**	
	SG	PL	SG	PL
Nom.	*o petin-ós* 'rooster'	*ta petin-á*	*ipshi* 'soul'	*ta pshí-a*
Acc.	*ton petin-ón*	*ta petin-á*	*tin pshi-n*	*ta pshí-a*

Table 10 shows that there is a morphological alteration of the determiner's gender and as a result semantic agreement within the DP, while Table 11 illustrates the morphological alteration of the noun's gender and, as a result, syntactic agreement within the DP. Moreover, the former examples (Table 10) do not shift nouns from one IC to the other, they just indicate the subclass of IC2 and IC3 respectively, while the latter ones (Table 11) demonstrate class alteration in plural by shifting from IC1 and IC3 to IC5, neuter. The main point in both cases is that [−human] nouns of all genders shift to neuter in the plural, either by changing only the determiner's gender or by the changing of inflectional suffixes as well.

As the semantic conditioning of animacy is very important for the differentiation of ICs in PNT, we have to distinguish controller genders and target genders within DP. Based on the controller's gender, there are two subgenders [+human] and [−human] which are subsidiary to the main masculine and feminine gender being distinguished only by the case-syncretism in plural (see Table 3). Thus, the differentiation within IC1, IC2 or IC3 is less significant than that between the different classes, and there is no need to propose additional independent inflection classes.

However, we can adopt also the agreement class approach and use Corbett's (1991) notion of subgenders to formalize the interaction between the gender and [±human] feature in $PNT_{GE.}$ Table 12 depicts the nominal agreement within DP, and highlights the main semantic differentiation caused by the [±human] feature. An example of IC5 is included for comparison with the neuter formation.

Table 12. Nominal agreement within DP in PNT_{GE}.

	IC1		**IC2**		**IC3**		**IC5**
	M		**M**		**F**		**N**
	[+human]	**[−human]**	**[+human]**	**[−human]**	**[+human]**	**[−human]**	
				Singular			
NOM	o ánθrop-os 'person'	o ɣám-os 'marriage'	o ándra-s 'man'	o mína-s 'month'	i θäatéra-ø 'daughter'	i vreshí-ø 'rain'	to ksíl-on 'stick'
GEN	tu ánθrop-(u)	tu ɣám-(u)	tu ándra-ø	tu mína-ø	tis θäatéra-s	tis vreshí-s	tu ksil-í
ACC	ton ánθrop-on	ton ɣám-on	ton ándra-n	ton mína-n	tin θäatéra-n	tin vreshí-n	to ksíl-on
VOC	ánθrop-e		ándra-ø		θäatéra-ø		
				Plural			
NOM	i anθróp-(i)	**ta** ɣám-us	i ándr-es	**ta** mín-as	i θäatér-es	**ta** vresh-ás	ta ksíl-a
GEN	ton anθróp-(í)on	ton ɣám-on	ton ándr-on	ton mín-on	ton θäater-íon	ton vresh-ón	ton ksil-íon
ACC	tus anθróp-(u)s	**ta** ɣám-us	tus ándr-es	**ta** mín-as	tis θäatér-es	**ta** vresh-ás	ta ksíl-a
VOC	ánθrop-i		ándr-es		θäatér-es		

According to Corbett (1991, pp. 160–65):

(a) subgenders are agreement classes that control minimally different sets of agreement; and,

(b) subgenders constitute a dependent target gender (opposition involves only syncretism and no independent form).

In the same spirit, in PNT_{GE}, the opposition of [+human] vs. [−human] is marked only by syncretism (Table 12) and gives us two sets of morphological realization: those for [+human] and those for [−human]. Subgenders show minimally different sets of agreement and constitute the dependent target's gender in the plural. The target's gender is masculine or feminine in the case of [+human], and neuter in the case of [−human] entities (see Table 13 for the semantically conditioned ICs in PNT_{GE}).

Table 13. Case syncretism of core cases in plural (IC1, IC2, IC3).

IC	**Gender**	**Subgender**	**Examples** [1]
IC1	masculine	[+human]	i anθróp-(i) 'people' tus anθróp-(u)s
		[−human]	ta ɣám-us 'marriage' ta ɣám-us
IC2	masculine	[+human]	i ándr-es 'man' tus ándr-es
		[−human]	ta aet-ás 'eagle' ta aet-ás
IC3	feminine	[+human]	i θäatér-es 'daughter' tis θäatér-es
		[−human]	ta kosár-as 'cock' ta kosár-as

[1] Table 13 does not include examples with heteroclisis (IC alternation), as for instance *o petinós* 'rooster' (IC1)—*ta petiná* (IC5), *o aéras* 'wind' (IC2)—*ta aérata* (IC8), etc.

Schematically, the PNT_{GE} gender system can be presented as indicated in Table 14.

Table 14. The gender system in PNT_{GE}.

Gender	Subgender	Singular	Plural
masculine	[+human]	masculine	masculine
	[−human]		neuter
feminine	[+human]	feminine	feminine
	[−human]		neuter
neuter		neuter	neuter

In sum, ICs in PNT are sensitive to the animacy hierarchy, and can be categorized as subclasses of the main ICs based on the subgender notion proposed by Corbett (1991). In comparison with other PNT varieties, PNT_{GE} shows more consistent use of the *-es/-as* inflectional suffixes based on the animacy distinction. This is evident first (a) in native nouns, where the suffix *-as* is exclusively used with [−human] nouns, but is never attested in human entities; and secondly (b) in borrowed nouns, where no instances of the interchangeable use of *-as/-es* suffixes in inanimate nouns can be found.

4. Gender Assignment

So far, I have shown that PNT_{GE} is sensitive to the animacy hierarchy. In what follows, I discuss gender assignment rules in the understudied variety and demonstrate that PNT_{GE} neutralizes the neuterization tendency of the dialect by incorporating feminine loans from Russian. Some structural innovations are also pointed out.

4.1. Gender Assignment to Loan Nouns in Pontic Spoken in Georgia

Gender assignment covers the assigning of gender to native and loan nouns, based on different semantic, phonological and morphological criteria, and subsequently, after entering the syntactic structure, the same gender is shared with other targets or is replaced by another gender based on the animacy feature.

In this subsection I discuss the general rules of accommodating loans in the structure of $PNT_{GE.}$ Here, three main factors can be distinguished. First is a morphological factor: loan nouns are integrated according to the pattern of Greek nominal morphology: a stem and inflectional ending (see Ralli 2000, [2005] 2012 for the inflection pattern of Greek nominal morphology; Manolessou and Ralli 2020 for general factors that govern the integration of loans in Greek dialects). The stems of loans are simple, as no examples are attested with derivational suffixes (10a, b, c), while the selection of inflectional ending and subsequently integration into ICs depends on the phonological–structural shape of the loan word.

(10)

a. MASC	IC1	o $chobán_{STEM}$-os_{INFL}	<TUR *çoban* 'shepherd'
	IC2	o $diréktor_{STEM}$-as_{INFL}	<RUS *direktor* 'director'
b. FEM	IC3	i $meshá_{STEM}$-$Ø_{INFL}$	<TUR *meşe* 'forest'
	IC3	i $mashína_{STEM}$-$Ø_{INFL}$	<RUS *mashína* 'car'
	IC3	i $churchkhéla_{STEM}$-$Ø_{INFL}$	<GEO *churchkhela* 'churchkhela'
c. NEU	IC6	to $peshkír_{STEM}$-$(in)_{INFL}$	<TUR *peşkir* 'hand/face towel'
	IC5	to $xaladílnik_{STEM}$-on_{INFL}	<RUS *khaladil'nik* 'refrigerator'
	IC6	to $xachapúr_{STEM}$-$(in)_{INFL}$	<GEO *khach'ap'uri* 'cheese-filled bread'

The second triggering factor is a semantic feature: [+human] nouns are mostly assigned gender according to the biological sex: masculine is assigned to the male (11), while feminine to the female (12) entities; i.e., in this case, there is a semantically driven gender priority.

(Berikashvili and Skopeteas 2019, PNT-TXT-FM-00000-B21)

(11) *Ekínos* *en* ***indzhíneros***.
that:M.SG.NOM be:3.SG engineer:**M.**SG.NOMRUS
'He is an engineer.'

(Berikashvili 2019, PNT-TXT-AN-00000-B24)

(12)

I	***bábushka***	*i*	*nína*
DEF:F.SG.NOM	grandmother:**F.**SG.NOMRUS	DEF:F.SG.NOM	Nina:F.SG.NOM
érθen	*ás=in*	*Trapezúnda.*	
come:PFV.PST:3.SG	from= DEF:F.SG.ACC	Trabzon:F.SG.NGEN	

'Grandmother Nina came from Trabzon.'

It is commonly accepted that semantic rules take precedence universally in gender assignment (see Corbett 1991; Corbett and Fraser 2000; Audring 2004; Nesset 2006; Thornton 2009; but see also Rice 2006 for an alternative view and Optimal Gender Assignment Theory).[3] Ralli (2002) also proposes that the semantic feature [+human] is the highest-ranked factor in Greek for the determination of gender in human nouns (see Ralli and Makri 2020, p. 244).

The last factor that plays the crucial role in integration of loans in PNT_{GE} is a phonological one. Here, two different strategies are applied to gender assignment in loans: (a) those words that have endings which show correspondence between the SL and recipient language (RL) determine the choice of the inflection class and gender based on the phonological form, for instance suffixes *-a*, *-ya*, *-e* of the SL are reinterpreted as endings of the feminine (IC3) in the RL (13); while (b) those with null ending (a stem ending in consonant) are assigned the neuter gender either by adding the most productive inflectional suffix *-(in)* or *-on*, that correspond to the neuter gender inflection: IC6 and IC5 accordingly (14, 15).

(Berikashvili 2019, PNT-TXT-FM-2-000-B25)

(13)

Jatí	*ki*	*tsúponen*
why	NEG	close:IPFV.PST:3.SG
ti	*chánt**a;***	
DEF:F.SG.ACC	bag:F.SG.NGENTUR/GEO	

'Why did he/she not close the bag?'

(Berikashvili and Skopeteas 2019, PNT-TXT-FM-00000-B21)

(14)

na	*máθane*	*s=o*	*institút**in**[. . .]*
to	study:IPFV.PST.SBJV:3.SG	LOC=DEF:N.SG.ACC	institute:N.SG.NGENRUS

'to study at the institute [. . .].'

(Berikashvili 2019, PNT-TXT-FM-2-000-B25)

(15)

S=o	*xaladílnik**on***	*kian*	*en.*
LOC=DEF:N.SG.ACC	refrigerator:N.SG.NGENRUS	inside	be:3.SG

'It is inside the refrigerator.'

It has been claimed in the literature that loanwords ending in consonants are generally turned into neuter nouns in Greek with the addition of the *-i* vowel (see Christophidou 2003, p. 105; Ralli and Makri 2020, p. 251). This claim can be extended to PNT (as numerical preponderance of loans integrated into IC6 shows). Thus, in the case of [−human] loans ending in consonants, the phonological form together with the productivity rate result in the selection of an inflectional ending.

An interesting issue is what happens to loan nouns in inflection. Generally, PNT_{GE} tends to integrate loanwords into the patterns of the RL, including ICs and gender assignment (see Berikashvili 2016, pp. 255–76). Gender is assigned to borrowed nouns in a similar way as to native ones, thus highlighting that the structure of the RL has a priority. Moreover, loan nouns from the genderless languages Turkish and Georgian are integrated into the patterns of the RL using the same strategy as those from the gendered language Russian, which shares with Greek the same tripartite gender value system. As already mentioned, assignment to the IC is dependent upon the phonological form of the loan ending. IC membership flags a particular gender value. Thus, I am adopting mainly Corbett's (1991) proposal for direction from IC to gender assignment for loan integration in PNT_{GE}. This is in line with Ralli's (2002) assumption for Greek that inflection class membership flags a particular gender value in non-human nouns.

Considering the inflection classes proposed by Ralli (2000, Ralli [2005] 2012) for SMG, and observing the assignment of loans to ICs in Greek dialects, it is evident that dialects tend to show the same picture: "loans predominantly belong to classes IC1 and IC2 for masculine, IC3 for feminine and IC5 and IC6 for neuter" (see, for instance Manolessou and Ralli 2020, p. 268 for Italo–Romance nouns in South Italian Greek; see also Melissaropoulou 2013, 2016). As observed in other varieties of PNT, where the loans are only from Turkish, the masculine nouns are inflected according to IC2, with some rare exceptions that are adapted according to IC1, feminine borrowings are accommodated in IC3, and neuters in IC6 (see Ralli et al. 2015, p. 434).

In PNT_{GE}, the majority of loan nouns are from Russian, some are from Georgian, besides the understudied variety also inherited Turkish loans from the period that PNT was spoken in Turkey. The most productive inflection classes in the understudied variety are IC6 for neuter nouns and IC3 for feminine. Masculine nouns are rarely borrowed; those that are denote mostly human entities and are distributed among IC2 (the most frequent option for Turkish loans) and IC1 (more frequent for Russian loans) (Berikashvili 2017, pp. 110–11). See Table 15 for statistics from the corpus.

Table 15. Assignment of loans to the inflection classes in PNT_{GE}.

	Turkish Loans		Russian Loans		Georgian Loans	
IC	**n**	**%**	**n**	**%**	**n**	**%**
IC6 (N)	26	55.32	39	29.11	7	58.34
IC3 (F)	14	29.79	78	58.21	5	41.66
IC2 (M)	5	10.63	5	3.73	0	0.0
IC1 (M)	1	2.13	7	5.22	0	0.0
IC5 (N)	1	2.13	5	3.73	0	0.0
Total	47	100.00	134	100.00	12	100.00

It can be seen in Table 14 that PNT_{GE} shows a numerical preponderance of the feminine in gender assignment due to the incorporation of feminine loans of Russian origin.

4.2. Additional Factors of Gender Assignment in Pontic Spoken in Georgia

Additional factors found in other languages regarding gender assignment to loanwords are (a) assignment of gender by semantic analogy, (b) the gender of the noun in the donor language, and (c) assigning of loans to the unmarked gender (see Corbett 1991, pp. 75–82; Clyne 2003, pp. 147–49 for an appropriate discussion in other languages).

Semantic analogy or concept association has been proven to be a supplementary factor for gender assignment in [−human] nouns in Greek, where the gender of a synonymous noun may determine the gender of the loan noun (see Mackridge 1990, p. 108; Holton et al. 2000, pp. 250–51; Clairis and Babiniotis 1998, pp. 66–67 for loans adapted in SMG and Ralli and Makri 2020, pp. 245, 251 for Heptanisian dialect and Canadian Greek). In PNT_{GE}, no such examples are found.

The second specific factor of gender assignment is the gender of the noun in the SL. In PNT_{GE}, loans are transferred either from genderless languages such as Turkish or Georgian, or from a gendered language such as Russian. Thus, while the gender of the SL is not viable in the case of loans of Turkish or Georgian origin, it could be applied to Russian loans. Indeed, there is one set of loanwords transferred from Russian that could be regarded as the result of the impact of the gender category in the SL: the set of nouns ending in *-a*, see Table 16 for examples.

All these nouns are of the feminine gender in Russian. They belong to the second declension; the ending *-a* is used in SG.NOM (Shvedova 1980, p. 484). In PNT_{GE} they are also associated with the feminine gender . However, this is not due to the donor language's gender, but due to the ending *-a* (e.g., *θiγatéra* 'daughter', *xará* 'joy' etc.), used in SG.NOM for nouns of the feminine gender, IC3 in PNT. Thus, at first glance, a convergence of the

two systems can be seen, and as such, it could be concluded that the gender of the donor language is decisive. Still, the phonological form has a priority.

Table 16. Loan nouns of Russian origin with ending *-a* integrated into IC3 in PNT_{GE}.

RL Form	Gender in RL	SL Form	Gender in SL
balnítsa 'hospital'	F	bol'nitsa	F
baráshka 'lamb'	F	barashka	F
cháshka 'cup'	F	chashka	F
dácha 'cottage'	F	dacha	F
kaféta 'sweets'	F	kanfeta	F
kvartíra 'apartment'	F	kvartira	F
mashína 'car'	F	mashina	F
múzika 'music'	F	muzyka	F
nivésta 'bride'	F	nevesta	F
prabléma 'problem'	F	problema	F
priróda 'nature'	F	priroda	F
salfétka 'napkin'	F	salfetka	F
shkóla 'school'	F	shkola	F
vótka 'vodka'	F	vodka	F

The phonological preponderance can be proven by some additional arguments: First, there is a subset of nouns which are of the neuter gender in the SL, with the neuter ending *-e*, e.g., *atnashénie* 'relation', *pakalénie* 'generation', *pravlénie* 'administration', *razvítie* 'development', etc., but because of the phonological form are assigned feminine in PNT_{GE}, and apply to the corresponding inflection class. See (16).

(Kotanidi et al. 2019, PNT-TXT-CL-00000-A07)

(16)

Páɣne	*s=in*	***pravlénian.***
go:3.PL	LOC=DEF.F.SG.ACC	administration:**F.**SG.ACCRUS

'They go to the administration office.'

This can be explained by the fact that PNT has feminine native nouns with the suffix *-e*, e.g., *nífe* 'daughter in law', *xameléte* 'mill', *sienóte* 'relatives', etc. (see Papadopoulos 1955, pp. 41–45). As such, the phonological form of Russian is reinterpreted as a feminine gender suffix. Analogically, SMG, which lacks the feminine ending in *-e*, changes the *-e* suffix of the SL to *-a* and integrates loanwords into the feminine inflection class ending in *-a* (see Holton et al. 2000, p. 250 for SMG examples).

Second, Turkish and Georgian have no gender, but words ending in *-a* in Turkish and Georgian are borrowed using the analogous strategy of those adapted from Russian: the word in the SL has a phonological form that is reinterpreted in PNT_{GE} as an ending denoting a concrete inflection class, namely IC3. See (17).

(Kotanidi et al. 2019, PNT-TXT-VL-00000-B08)

(17)

To	*potám*	*atlávume*	*páme*
DEF:N.SG.NGEN	river:N.SG.NGEN	cross:1.PL	go:1.PL
s=i	***meshán.***		
LOC=DEF:F.SG.ACC	forest:**F.**SG.ACCTUR		

'Crossing the river, we can reach the forest.'

Therefore, the main factor here is that the phonological form of the transferred word in SL influences the gender of the word in the RL, and not the category of the gender itself.

The third additional factor is assigning an unmarked/default gender to loans. According to Poplack et al. (1982, pp. 21–23), this factor applies only to borrowings and not to native words. The default gender is generally taken to be operative if no other is specified, and it is connected to the category with most members. The neuter gender can be regarded as unmarked/default value to a certain degree in PNT_{GE}. The criteria on which the default gender can be established in PNT are a numerical preponderance of neuters in gender

assignment, neuter agreement with [−human] nouns within DPs and neuter agreement with [−human] conjoined noun.

The same gender value has also been proposed as default/unmarked for SMG as well (see Anastassiadi-Symeonidi 1994; Christophidou 2003; Ralli et al. 2015; Manolessou and Ralli 2020 among others; see also Alexiadou et al. 2020 for the default gender value in agreement patterns and references therein). At face value, the neuter is assigned to loans in PNT_{GE} as default/unmarked when no other factors are specified. This can be seen only with consonant-final loans characterized by the surface Ø ending due to the phonological rule, which are assigned the neuter. See Tables 17–19 for some examples from different SLs.

Table 17. Consonant-final loans of Russian origin in PNT_{GE}.

RL Form	Gender in RL	SL Form	Gender in SL
brat 'brother'	N	brat	M
diplóm 'diploma'	N	diplom	M
elemént 'element'	N	element	M
frukt 'cottage'	N	frukt	M
institút 'institute'	N	institut	M
kartóf 'potato'	N	kartofel'	M
karaliók 'oriental persimmon'	N	karalyok	M
pol 'floor'	N	pol	M
stol 'table'	N	stol	M
uspéx 'progress'	N	uspekh	M

Table 18. Consonant-final loans of Turkish origin in PNT_{GE}.

RL Form	Gender in RL	SL Form
divan 'divan, sofa'	N	divan
karaúl 'guard'	N	karavul
peshkír 'hand/face towel'	N	peşkir
maimún 'monkey'	N	maymun

Table 19. Consonant-final loans of Georgian origin in $PNT_{GE.}$ [1].

RL Form	Gender in RL	SL Form
kapík 'penny'	N	k'ap'ik'i [2]
otáx 'room'	N	otakhi
xachapúr 'cheese-filled bread'	N	khach'ap'uri
xalx 'people'	N	khalkhi

[1] Some of the words, for instance, *otakhi* 'room' are borrowed in Georgian from Turkish, so it is not evident what language is a direct SL. [2] The *-i* is a nominative marker in Georgian, but the stem of the word is consonant-final.

However, keeping in mind that neuter nouns, besides those endings in *-in*, *-an*, *-on* are also characterized by an Ø ending (diachronically the result of phonological process, namely the deletion of the unstressed *-i*, e.g., *xoráfi(n)—xoráfn—xoráf:*N.SG.NGEN 'field') (18), it becomes clear that even in these cases the gender assignment can be explained by the phonological correspondence of endings between the SL and RL.

(Kotanidi et al. 2019, PNT-TXT-VL-00000-A10)

(18)	*ke*	*emís*	*i*	*trelí*
	and	1:PL.NOM	DEF:M.PL.NOM	crazy:M.PL.NOM
	válame	*s=o*	***kefál***	*[. . .].*
	put:PFV.PST:1.PL	LOC=DEF:N.SG.ACC	head:N.SG.NGEN	

'And we, like crazies, put that in our minds [. . .].'

Summing up, none of the factors discussed above: (a) semantic analogy, (b) gender of the noun in the SL, or (c) unmarked/default gender, can be considered as additional factors of gender assigning rules in PNT_{GE}.

4.3. Possible Contact-Induced Alternations

I have shown that the innovation of PNT_{GE} in gender assignment is that it has increased the number of feminine loans, if we take the corpus as a reliable representative of the language. This resulted in a reduction of the tendency to use neuters which is generally characteristic of PNT. The neuterization tendency as a language-internal factor of the dialect is evident from: (a) default/unmarked gender value; (b) numerical preponderance of neuters in gender assignment; (c) neuter assignment to diminutives, where the most productive is the suffix *-opon:*N (see Tombaidis 1970, pp. 13–29; Tombaidis 1988, p. 47); (d) neuter agreement with [−human] nouns (see also Karatsareas 2011, 2014); (e) gender alteration from masculine and feminine to neuters in plural (discussed in Section 3); and, (f) double-gender formation in plural, where, generally, neuter should not be expected, for instance *o ðrómos* 'road'—*tus ðrómus:*M.PL.ACC—*ta ðrómata:*N.PL.NGEN (see Ralli et al. 2015 for double gender formation and neuterization tendency in general.)

In PNT_{GE} this tendency to use the neuter form is neutralized in several aspects due to the incorporation of feminine loans from Russian. In this subsection, I outline some suggestions and observations on structural changes, which are possibly due to this lexical incorporation. I mention just two of them: (a) a precondition for establishing a default gender value in PNT_{GE} from neuter to feminine, and (b) extension of the putative cases of the differential subject marking (DSM) to feminine nouns. These properties are not discussed in detail, but just outlined as possible phenomena altered indirectly through lexical borrowings from Russian. A tendency towards default gender shift from neuter to feminine can be observed in the numerical preponderance of the feminine in gender assignment to loans. Native nouns, as well as borrowings, show mostly neuter assignment in PNT_{GE} if measures are taken without Russian loans (see Table 20). In this case, developments caused by the Russian influence in the understudied variety are excluded.

Table 20. Statistics of gender assignment without Russian loans. [1].

	Native Nouns		**Loanwords**	
	n	**%**	**n**	**%**
N	300	46.36	38	57.57
F	217	33.54	22	33.33
M	130	20.10	6	9.10
Total	647	100.00	66	100.00

[1] The loanwords include nouns from Turkish, Georgian and a very small number of recently adapted words from English. All of them are adapted from the genderless languages.

After incorporating Russian loans, the results change drastically, seeing the majority of loan nouns occurring in the feminine (nouns originated in Russian: feminine 78, neuter 44, masculine 12), cf. Table 21.

Table 21. Statistics of gender assignment with Russian loans.

	Native Nouns		**Loanwords**	
	n	**%**	**n**	**%**
N	300	46.36	82	41.0
F	217	33.54	100	50.0
M	130	20.10	18	9.0
Total	647	100.00	200	100.00

Thus, the integration of feminine borrowed nouns, mostly those ending in *-a*, causes contact-induced change towards an alternation of a precondition for establishing a default gender value in PNT_{GE}, as neuter cannot be considered the category with most members in loans.As already mentioned in Section 4.2, a default/unmarked gender is generally taken to be operative when all other factors (phonological, semantic or morphological)

of gender assignment fail, and neuter seems, to some extent, to have that value in PNT. However, even in this case, as already discussed, gender assignment can be explained by the phonological factor. Other environments where a default gender value could be checked are: (a) gender assignment to indeclinable words and (b) use of the determiner as evidence of the default gender value with the embedded language islands (ELI), in terms of Myers-Scotton (2006). However, both these diagnostics seem unreliable for PNT_{GE}, the former because PNT_{GE} generally incorporates loanwords in the morphological system of the RL and the latter because it often appears in the corpus as instance of code-switching without an additional incorporation strategy (i.e., the use of the determiner). The tendency of the default gender shift should still be empirically proven, since the evidence from the collected data is small.

One other peculiar morphosyntactic phenomenon of PNT which could be altered also due to the increased number of feminine nouns in the dialect is concerned with putative cases of DSM. PNT differentiates its subjects on the basis of definiteness specification: in the presence of the definite article the noun head of the DP appears in the accusative case (19a), while in the presence of the indefinite article or bare DP, it appears in nominative case (19b).

DSM instances in PNT

(19) a. *o* *θíon* *ípen*
DEF:M.SG.NOM M.SG.ACC say:PFV.PST:3.SG
'the uncle said . . . '

b. *(ínas)* *θíos* *ípen*
INDEF:M.SG.NOM M.SG.NOM say:PFV.PST:3.SG
'(an) uncle said . . . '

However, the existence of DSM in PNT is a controversial issue, as DSM does not appear outside DPs and does not affect the case properties of the whole DP. DP subjects are still marked with the abstract nominative case. A determiner on the surface level is realized as a morphological nominative, and the head noun as a morphological accusative within DP. The whole DP is assigned syntactic nominative, as DPs generally do in PNT "irrespective of the type of the predicate (transitive, unaccusative, unergative) and the theta role they realize" (Spyropoulos 2020, p. 183). The description of the phenomenon is available in all grammars of PNT (Papadopoulos 1955; Oikonomidis 1958; Tombaidis 1988 etc.; see also Spyropoulos 2020 and references therein). Generally, it is assumed that Pontic DSM is a contact-induced phenomenon from Turkish and is associated with Turkish DOM, also present in other AMG dialects (see Kornfilt 1997, 2008, 2020; Lewis 2000; Göksel and Kerslake 2005 for Turkish phenomenon; and Drettas 1997; Janse 2002, 2004; Revithiadou and Spyropoulos 2012; Spyropoulos 2016, 2020 for DOM in AMG dialects and DSM in Pontic; see also medieval examples from Pontos in Manolessou 2019).

Cases of DSM in PNT are restricted in all varieties to a certain inflectional class, namely IC1, masculine nouns ending in *-os* and SG number. In PNT_{GE} though, the phenomenon is found not only in the masculine, but also in the feminine, i.e., its use is extended to IC3.[4] See (20) for masculine and feminine examples:

DSM with the masculine (IC1) and feminine (IC3) in PNT_{GE}
(Berikashvili 2019, PNT-TXT-MR-00000-B26)

(20) a.

káθete	***o***	***ɣambrón***	*ke*
sit:3.SG	**DEF:M.SG.NOM**	**groom:M.SG.ACC**	and
i	***nífen***	*s=to*	*trapézi* .
DEF:F.SG.NOM	**bride: F.SG.ACC**	LOC=DEF:N.SG.NGEN	table:N.SG.NGEN

'The groom and bride are sitting at the table.'
(Berikashvili 2019, PNT-TXT-LG-00000-B25)

b.

Mólis	*érxunde*	*s=o*
just	come:3.PL	LOC=DEF:N.SG.ACC
xoríon	***nífe***	***ɣambrós[. . .]***
village:N.SG.NGEN	**bride:F.SG.NOM**	**groom:M.SG.NOM**

'When new bride or groom come to the village [. . .]'

Moreover, examples of the DSM can be seen with loanwords: some of them contain DPs as a predicate; if this is the case, they always keep the nominative form. See (21) for examples of the loanwords from Russian.

DSM with Russian loans (IC3)
(Berikashvili 2019, PNT-TXT-MR-00000-B23)

(21) a.

Ólen	***i***	***famílian***
all:N.SG.NGEN	DEF:F.SG.NOM	surname:F.SG.ACCRUS
epéɣnen	*s=o*	*ɣambrón.*
go:IPFV.PST:3.SG	LOC=DEF:M.SG.ACC	groom:F.SG.ACC

'The whole family went to the groom.'

b.

Ínas	***família***	*érθen*
INDEF:M./F.SG.NOM	surname:F.SG.NOMRUS	come:PFV.PST:3.SG
ás=in	*Trapezunda.*	
from= DEF:F.SG.ACC	Trabzon:F.SG.NGEN	

'One family came from Trabzon.'

(Kotanidi et al. 2019, PNT-TXT-AN-00000-A14)

c.

Baɣatúrov	*étone*	***família.***
Bagaturov	be:PST:3.SG	surname:F.SG.NOMRUS

'Bagaturov was his surname.'

By extension DSM also was applied to Turkish loans integrated into the same inflection class, i.e., IC3 (22).

DSM with Turkish loans (IC3)
(Berikashvili 2019, PNT-TXT-FM-00000-B25)

(22) a.

I	***ɣarín***	*kanán*	
DEF:F.SG.NOM	woman:F.SG.ACC_{TUR}	no_one:M.ACC	
k=íshen	*s=o*	*xorion* .	
NEG=have:PST:3.SG	LOC=DEF:N.SG.ACC	village:N.SG.NGEN	

'The woman did not have anyone in the village.'

b.

Érθen	***ínas***	***ɣarí***	*ke*
come:PFV.PST:3.SG	INDEF:M./F.SG.NOM	woman:F.SG.NOMTUR	and
kundá	*to*	*trapézi* .	
push:3.SG	DEF:N.SG.NGEN	table:N.SG.NGEN	

'A woman came and pushes the table.'
(Berikashvili 2019, PNT-TXT-AN-00000-B25)

c.

Étone	*θeotikésa*	*ávlavos*	***ɣarí***.
be:PST:3.SG	religious:F.SG.NGEN	kind:F.SG.NOM	woman:F.SG.NOMTUR

'She was religious and kind woman.'

Thus, the phenomenon of DSM in PNT_{GE} is extended to IC3 feminine nouns, both native and loan. One can argue that *-n* is simply due to a phonological phenomenon, because PNT_{GE} belongs to PNT varieties which retain a word-final *-n* in several environments. Namely: (a) PNT_{GE} keeps the final *-n* in neuter nouns ending in *-on*, *-ion*, *-in* and *-man*,

such as for instance, *xorón* 'dance', *sxolíon* 'school', *rashín* 'mountain', *xóman* 'ground', etc.; (b) it uses the final *-n* as euphonic to avoid the hiatus, when the next word begins with a vowel (this tends to happen in the perfective past context of verbs, but can be witnessed in nouns as well), such as for instance, *ípen* '(s)he said', *ejenéθen* '(s)he was born', *epíken* '(s)he did', etc. However, this is not the case. First, the final *-n* in the provided examples is the accusative marker that is used with masculine and feminine nouns. This can be seen in the minimal pairs of (20). In comparison with the neuter nouns, masculine and feminine ones never have the word-final *-n* in the nominative case, and their gender value, beside the inflectional suffixes, is also indicated by the determiner. Second, if this *-n* was merely euphonic to avoid the hiatus, then we would not have expected it before a consonant, contrary to what is indicated in (22a), and it would have been obligatory before a vowel, contrary to what we see in (21b). Therefore, a pure phonological phenomenon should be ruled out.

The structural innovation of the DSM extension to the IC3 feminine nouns could be introduced indirectly through lexical borrowings from Russian which resulted in an increase of the feminine gender in the understudied variety. The fact that it is not attested in other PNT varieties indicates that this alternation happened because of contact with other languages in the Caucasus. If change had happened earlier, it should be found in other PNT varieties as well. However, to the best of my knowledge, no instances of DSM have been attested or documented with the IC3 feminine nouns in any other PNT variety. The only examples I am aware of are indicated by Oikonomidis (1958) in the Oinoe variety of PNT (23). However, no minimal pairs are provided and the use is without the determiner, contrary to what is expected.

(Oikonomidis 1958, p. 146)

(23)

Aðakés	*krifón*	***ðulían***	*ki*	*jínete.*
here	secret:N.SG.NGEN	work:F.SG.ACC	NEG	become:3.SG

'No secret work here.'

Moreover, the extension of the phenomenon to the IC3, which incorporates feminine nouns, suggests an indirectly possible connection to the numerical increase of feminine nouns in PNT_{GE} due to the incorporation of Russian loans. Of course, there may be more to it than that, and one thing that should be clarified (as outlined by an anonymous reviewer) is whether the factor conditioning the extension of DSM is gender or IC, but this remains a desideratum.

To conclude, in the above subsections, I discussed a number of examples that lead to neutralization of the neuterization tendency in the understudied variety and thus, resulted in a contact-induced change in the dialect.

5. Conclusions

In this article, I discussed gender assignment rules in PNT_{GE} and illustrated that the integration of loans depends on the phonological, semantic and morphological criteria of the dialect, irrespective of the SL. Thus, there is no need to apply additional factors in gender assignment, such as semantic analogy, gender of the noun in the SL or unmarked/default gender. I pointed out that the limitations of grammatical gender functions, occurring due to the morpho-syntactic role of the animacy hierarchy, are evident from (a) case syncretism in plural; (b) gender alteration in plural; and (c) selection of gender in nominal agreement. I also proposed an analysis based on the subgender notion (in terms of Corbett 1991) to formalize the interaction between gender and [±human] feature in PNT_{GE}.

In comparison with other PNT varieties, PNT_{GE} shows more consistent use of the *-es/-as* inflectional suffixes in case syncretism, based on the animacy distinction, thus reflecting a decline in grammatical gender use. On the other hand, the impact of the gendered language (Russian) has resulted in neutralization of the use of neuter nouns by incorporating a large number of feminine loans in the RL. The structural innovations, such as the precondition for establishing a default gender value and the occurrence of DSM with feminine nouns, were introduced indirectly through lexical borrowings.

In sum, the influence of the contact languages stimulated different processes: on the one hand, the impact of Turkish and to a lesser degree of Georgian (both genderless) alongside the language-internal factor (the neuterization tendency) resulted in a decline of the use of grammatical gender by accelerating the animacy feature. On the other hand, the influence of Russian (a gendered language) reduced the tendency of gender loss through the incorporation of a large number of feminine loan nouns in the RL.

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Abbreviations

Acronyms: AMG = Asia Minor Greek; DOM = differential object marking; DP = determiner phrase; DSM = differential subject marking; ELI = embedded language islands; GEO = Georgian; IC = inflectional class; PNT = Pontic Greek; PNT_{GE} = Pontic Greek spoken by the Pontic Greek community of Georgia; RL = recipient language; RUS = Russian; SL = source language; SMG = Standard Modern Greek; TUR = Turkish. **Glosses:** 1, 2, 3 = 1st, 2nd, 3rd person; ACC = accusative; CL = clitics; DEF = definite; F = feminine; FUT = future; GEN = genitive; IMP = imperative; INDEF = indefinite; INFL = inflection; IPFV = imperfective; LOC = locative; M = masculine; N = neuter; NGEN = non-genitive; NEG = negation; NOM = nominative; PFV = perfective; PL = plural; POSS = possessive; PST = past; SBJV = subjunctive; SG = singular.

Notes

1 In Table 1, all the examples for IC1, IC2 and IC3 are [+human].

2 No feminine gender nouns with the ending *-os* have been found in the corpus, therefore, when talking about IC1 in PNT_{GE}, I refer just to masculine nouns.

3 It is worth mentioning that in the understudied variety, some examples have been found with double gender formation in the case of Russian masculine loans with *-a* ending (*dedushka* 'grandfather', *pradedushka* 'great grandfather'), where meaning and form conflict. These examples in PNT_{GE} are used either in the masculine (semantically driven gender assignment) or in the feminine (phonologically driven gender priority). Prima facie, it gives the impression that the phonological factor sometimes overrides semantic triggering; however, the number of such examples is small and may result merely from low language competence of several speakers.

4 Some of the examples in this section have been collected by the author with native speakers targeting the relevant DSM structures.

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