F=PL syncretism and default gender in Shughni[*]

Daniar Kasenov[1], Alexandr Sergienko[1], Artem Badeev[1,2]
[1]National Research University Higher School of Economics, [2]Institute for Linguistics Studies RAS

This paper discusses an F=PL syncretism in Shughni. In Shughni, intransitive verbs have syncretic forms in past and perfect tenses when agreeing with a feminine singular, feminine plural, or masculine plural subject. The form when agreeing with a masculine singular subject is different. Unlike other languages with such syncretism, the default gender in Shughni is masculine. The paper suggests an analysis in the spirit of Distributed Morphology and discusses the problems that Shughni raises for more restrictive morphosyntactic theories, such as Nanosyntax.

Keywords: syncretism, grammatical gender, morphology, Shughni

Синкретизм F=PL и дефолтный род в шугнанском языке[*]

Д. Е. Касенов[1], А.А. Сергиенко[1], А.О. Бадеев[1,2]
[1]Национальный исследовательский университет «Высшая школа экономики», [2]ИЯз РАН

Эта статья обсуждает F=PL синкретизм в шугнанском, непереходные глаголы в котором проявляют синкретизм в формах прошедшего времени и перфекта, согласуясь с субъектом женского рода единственного числа, женского рода множественного числа, и мужского рода множественного числа, при том, что форма мужского рода единственного числа иная. В статье показывается, что, в отличие от других языков с подобным синкретизмом, в шугнанском дефолтный грамматический род – мужской. В статье предлагается анализ в духе распределенной морфологии, а также обсуждается, почему данные шугнанского языка проблематичны для более рестриктивных теорий морфосинтаксиса, например, наносинтаксиса.

Ключевые слова: синкретизм, грамматический род, морфология, шугнанский

1 Introduction

Syncretism is loosely defined as the co-occurrence of the same morphological form in distinct paradigm cells. Recent research on the syntax-morphology interface has been devoted to exporing syncretism patterns in realization of features of the same type (case [Caha 2009]; adjectival degree [Bobaljik 2012]; pronominal paradigms [Middleton 2020]). Syncretisms that cut across features of different types are less prominent in the literature. Such a syncretism is discussed in this paper.

We deal with the F.SG = M/F.PL syncretism in verbal paradigms of Shughni, an Iranian language with ca. 100K speakers in Tajikistan and Afghanistan [Dodykhudoeva, Edelman 2009]. With its two-gender system, three out of four paradigm cells of verbal agreement in past and perfect are occupied by the same form, leaving the supposedly less marked cell (masculine singular) out.

This paper attempts to provide an analysis of this pattern in the framework of Distributed Morphology, which is characterized by its syntax-all-the-way-down approach to morphology: all morphologically complex words are built by syntax as the only structure building module of the grammar [Halle, Marantz 1993]. Additionally, we review the problems raised by the Shughni pattern for more restrictive theories on the market, such as Nanosyntax. The Shughni data comes from some of the authors' own fieldwork and from existing online resources for Shughni, such as https://pamiri.online [Makarov et al. 2022].

The paper is structured as follows. Firstly, we discuss the data of Shughni verbal agreement in section 2. Then, section 3 is devoted to reviewing a similar syncretism in Sidaama and its analysis by [Kramer, Teferra 2019]. Section 4 shows why Kramer and Teferra's analysis is inapplicable to Shughni and presents our Impoverishment-based analysis. Section 5 discusses the data in light of highly restrictive syntax-morphology theories, such as Nanosyntax.[1] Section 6 concludes.

2 Shughni data

Shughni has a two-gender system with gender being overtly marked on some nouns and adjectives, past and perfect stems of several intransitive verbs and demonstrative pronouns. All Shughni intransitive verbs in past and perfect tense show the following syncretism: they have the same forms for feminine singular, masculine and feminine plural subjects, but a distinct form for masculine singular subject, as shown in examples (1-4) with nouns 'man' and 'woman'. Example (1) features the past tense masculine singular verbal form *sut* of the verb *sitow* 'to go', while examples (2-4) feature the form elsewhere past tense form *sat* of the *sitow* 'to go' (we use *sitow* for exposition).

(1)   Masculine singular subject (past tense)

Čorik   ar   bozor   sut
man   to   bazaar go.PST.M
'A man went to the bazaar'

(2)   Feminine singular subject (past tense)

Y̌inik   ar   bozor sat
woman   to   bazaar go.PST.F
'A woman went to the bazaar' '

(3)   Masculine plural subject (past tense)

Čorik-en=en   ar   bozor sat
man-PL =3PL   to   bazaar go.PST.PL
'Men went to the bazaar'

(4)   Feminine plural subject (past tense)

Y̌inik-en=en   ar   bozor sat
woman-PL=3PL   to   bazaar go.PST.PL
'Women went to the bazaar'

In the past tense of these verbs there is always a *u/a* alternation conditioned by gender and number of the subject. When the subject is singular and masculine, these verbs have *u* in the verbal form. When the subject is singular and feminine, these verbs have *a* in verbal form. But most importantly, when the subject is plural no matter the gender, these verbs have *a* in the verbal form. The same syncretism may be observed in the perfect tense. As it was in the past tense, the masculine singular is the odd one out. This is shown in examples (5-8), where the masculine singular perfect form of the verb *sitow* 'to go' is *suδǰ*, but all others (masculine plural, feminine singular and plural) are *sic*.

(5)   Masculine singular subject (perfect tense)

Čorik ar   bozor suδǰ
man   to   bazaar go.PF.M
'A man went to the bazaar'

(6)   Feminine singular subject (perfect tense)

Y̌inik   ar   bozor sic
woman   to   bazaar go.PF.F
'A woman went to the bazaar' '

(7)   Masculine plural subject (perfect tense)

Čorik-en=en   ar   bozor sic
man-pl =3pl   to   bazaar go.PF.PL
'Men went to the bazaar'

(8)   Feminine plural subject (perfect tense)

Y̌inik-en=en   ar   bozor sic
woman-pl=3pl   to   bazaar go.PF.PL
'Women went to the bazaar'

The discussed syncretism is summarized in table 1. The puzzle is clear: out of the four paradigm cells the odd one is, surprisingly, the least marked one (since masculine is less marked than feminine and singular is less marked then plural, cf. [Béjar 2000]) has the unique form, while other three share their morphological exponent.

Table 1. Syncretism in past and perfect tenses of intransitive verbs in Shughni

	Past	Perfect
M.SG	-u-	-uδĭ
F.SG	-a-	-ic
M.PL	-a-	-ic
F.PL	-a-	-ic

Diachronically differences between masculine and feminine perfect forms come from the varied old participle suffixes *-ka for masculine and *-čī for feminine. Subsequently they developed into -ĭ, č for masculine and -ʒ, c for feminine. During this diachronic process *-čī caused a>i vowel transformation in feminine perfect verb stem [Rastorgueva 1975: 454]. The u/a alternation is not limited to verbs. Diachronically it can be traced to the Old Iranian noun classes: *-ā-, -a- and class stems as well as *-ū-, -u- stems in umlaut position developed into -a- and -i- umlaut related to the feminine gender in Shughni. In its turn *-ū-, -u- stems in neutral position and roots with -w- sonant merged into Shughni masculine -u- vocalization [Rastorgueva 1975: 73; Sokolova 1967: 25-35, 44-49].

Since the diachronic process was not limited to verbs, it is worth noting that the syncretism discussed in the paper is found (to an extent) in the nominal domain as well. During the authors' fieldwork, some speakers showed a sporadic F=PL syncretism in adjectival declension, as shown in the example (9). However, due to the unsystematic nature of it and the fact that most adjectives that used to vary depending on the phi-features of the noun have completely lost the gender-number distinction in their paradigm [Karamshoev 1978, 1979], we limit our discussion to the verbal syncretism.

(9)   a. ʒulik   stul
       small.M   table(M)
       'A small table.'

       b. ʒalik   ɣac
       small.F   girl(F)
       'A small girl.'

       c. ʒalik   stul-ak-en
       small.F   table-DIM-PL
       'Small tables.'

Next section reviews a similar syncretism in Sidaama language and the theoretical devices employed for its analysis by [Kramer, Teferra 2019].

3   F=PL syncretism in Sidaama

As pointed out in the previous section, Shughni agreement presents an uncommon syncretism: feminine singular is realized by the same form as plural, both masculine and feminine. However, it is not the case that Shughni is unique in this regard. [Kramer, Teferra 2019] discuss data from the Sidaama language, a Highland East Cushitic language spoken in Ethiopia.

Sidaama, just like Shughni, has a two-gender system, like most Afroasiatic languages. Just like Shughni, there are two nominal numbers in Sidaama: singular and plural. And, as was stated earlier in the paper, Sidaama has the same type of syncretism as Shughni does, a F=PL syncretism, where the masculine singular is the odd one out of the four paradigm cells. Consider the agreement affixes in perfect aspect in Sidaama [Kramer, Teferra 2019: 293]. There is our syncretism: masculine singular form is *-í*, while others are *-tú*.

Table 2. F=PL syncretism in Sidaama

	Singular	Plural
Masculine 3rd person	-í	-tú
Feminine 3rd person	-tú	-tú

How does one analyze such a pattern? Now is the time to introduce some theoretical background. Kramer and Teferra use Distributed Morphology (like we do), so let us introduce that. As mentioned in the introduction, Distributed Morphology is a late insertion, syntax-all-the-way-down type of morphological theory [Halle, Marantz 1994]. This means, that syntax combines bundles of abstract features, which get realized (morpho-)phonologically via Vocabulary Insertion (VI) rules. An example of such rule is given below, which states that an agreement node with a 3SG feature set is realized as /-s/ in the context of the T head. This rule (or notational equivalents) is necessarily found in a DMian description of English agreement system.

(10)   Agr[3,SG] ↔ /-s/ __T

The process of realizing syntactic information by matching it with the relevant VI rule is called Spell-Out. Spell-Out is subject to two important conditions: (a) the subset rule: for any feature bundle F={f1, f2, …, fN}, a VI rule may realize it if it references a feature bundle, which is a subset of F, and (b) the specificity condition, which states that when multiple VI rules are candidates for realizing the syntactic structure, the one with most feature is chosen.[2]

The relevant question for us is this: how do we model the situation when there are several feature sets that are realized the same? A straightforward solution would be to postulate different VI rules,

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[2] This formulation raises question of, for example, situation when an [a,b,c] feature bundle needs to be realizes and the Vocabulary has two rules, one of which references [a,b] and another [b,c]. We leave the theoretical discussion aside, however. The reader is referred to the numerous literature on the Distributed Morphology and theoretical discussions of it.

which result in the same morphophonological string being exponent of different feature sets (accidental homophony, in terms of [Bobaljik, Sauerland 2018]). This option can be unsatisfactory in two ways. Firstly, it may just be redundant. For example, Russian adjectives have gender distinction in singular, but not in plural [cite]: for adjective *golub-oj* 'blue', you have four nominative forms (*golub-oj* 'blue.M.SG', *golub-ajans* 'blue.F.SG', *golub-oje* 'blue.N.SG', *golub-yje* 'blue.PL') While one could postulate three distinct VI rules for [M,PL], [F,PL] and [N, PL] feature sets, a single VI rule, which references the [PL] feature only is to be preferred for general Occam-related reasons. Making a single rule match different feature sets by making the rule less specified is called, well, underspecification.

Secondly, it may not live up to the explanatory standards. A great example is the 1PL=3PL syncretism in German verbal agreement [Bobaljik 2002]. Both regular and irregular German verbs have syncretic verbal forms in first and third person plural. While the regular verbs could have been analysed by two distinct VI ruled for *-en* affix, the irregular forms of *sein* cast doubt on an adequacy of such solution, since there would need to be two independent sets of VI rules that just so happen to both encode the 1PL=3PL syncretism. (Of course, one could attempt to derive the forms of the verb 'to be' morphophonologically, but, to our knowledge, someone is yet to succeed).

Table 3. Verbal agreement in German.

	trink-en 'to drink'	*sein* 'to be'
1PL	*trink-en*	*sind*
2PL	*trink-t*	*seid*
3PL	*trink-en*	*sind*

However, the German case is a problem for the underspecification approach as well, since there is no feature set shared by first and third person in the exclusion of the second person. In Bobaljik's analysis, another DM tenet plays a role: language-specific post-syntactic morphological operations that may delete features, copy them, etc. Particularly, the operation we're looking for is the impoverishment operation, which is used to neutralize feature opposition, it deletes a feature in a context. For German case above, an analysis can be given that employs two VI rules and a single Impoverishment rule.

(11)   German agreement

   a. Impoverishment rule: [1/3] -> NULL __[PL]

   b. VI rules:

   (i) Agr[2,PL] ↔ -t __T

   (ii) Agr[PL] ↔ -en __T

So, impoverishment rules are a common tool to model syncretism of various kinds. And impoverishment is exactly what Kramer and Teferra employ in their analysis of Sidaama. However, the usual feature-deleting Impoverishment will not suffice. Since Sidaama a three-way syncretism, we have to make [F,PL] [F,SG] and [M,PL] match the same VI rule. Deleting only PL will require two independent VI rules for [F,SG] and [M/F,PL]. Because of this, Kramer and Teferra

employ a special type of Impoverishment, Obliteration [Arregi, Nevins 2007; Calabrese 2011], which deletes the entire node. For Sidaama, Kramer and Teferra employ the Obliteration rule in (12).

(12)   Agr[PL] -> NULL __Asp[PFV][3]   (adapted from [Kramer, Teferra 2019: 310], ex.38)

The reader might wonder about the fact that this seems to predict the same pattern as obliteration of [PL]. Not quite, however. The main point of Obliteration is that, unlike Impoverishment, it deletes the whole feature set. So, while putative PL-impoverishment would transform [M/F, PL] to [PL], Obliteration in (12) transforms it to nil.

However, if Kramer and Teferra assume that the F.SG/F.PL/M.PL form gets realized via a VI rule that applies to an empty feature set, their solution predicts that, for purposes of agreement, the form will be the default one. We will not review the evidence, but it does appear to be so in Sidaama.

Clearly, the prospects of applying analysis of [Kramer, Teferra 2019] to Shughni depend on whether this prediction is borne out for Shughni, whether the F.SG/F.PL/M.PL form is the default one. The next section shows that it is not the case in Shughni and presents an alternative analysis.

4   Analysis of Shughni data
4.1   Masculine is the default gender in Shughni

Given the similarities in their grammar and the fact that both languages exhibit the same type of syncretism, it might be tempting to apply the analysis of [Kramer, Teferra 2019] to the Shughni examples. However, there is an important difference. Recall that Kramer and Teferra's analysis crucially depends on the syncretic form being the default one wrt. agreement.

Shughni, however, does not behave so. Examples (13-15) present our evidence for the masculine singular form being the default gender in Shughni. Example (13) shows that the nominal with unknown gender (like an indefinite pronouns) behaves as a masculine singular nominal. Example (14) shows that a necessarily ungendered pronoun (which refers to a proposition) looks like a masculine singular pronoun. Example (15) shows that sentential subjects control masculine singular agreement.

(13)   Ar   čay   ca   tar   mu   komnata   vuδǰ/   *vic
        INDEF who   COMPL EQ   1SG.O room   be.PF.M   be.PF.F
        'Someone was in my room'

(14)   Fuk-aθ   di   fam-en.
        all-ADV   D2.M.SG.O know-3PL
        'Everyone knows it.'

(15)   paxta δīvd   γal   tajor   na-su-δǰ
        cotton pick.INF   still   end   NEG-become-PF.M
        'The picking of cotton is not finished yet' (Karamshoev 1963: 254)

The examples above show that the feminine singular form cannot be considered the default one. Thus, analysis in line of [Kramer, Teferra 2019] where the VI rule that inserts the F.SG form

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[3] It is not the whole rule given by Kramer and Teferra. However, for our purposes, this mini-exposition suffices.

matches an empty feature set does not work for Shughni. An alternative is needed, which we will present in the next subsection.

4.2   Analysis of Shughni data

Our analysis requires two assumptions, which are counterintuitive but diachronically motivated, as we will argue. The first assumption is the featural encoding of the two-gender system of Shughni. Namely, we suggest a two-feature encoding of two genders, presented in (16). While the animate feature seems to be redundant, it is important due to its role in our second assumption, the Impoverishment rule in (17), which states that the animate feature is deleted in the context of a masculine singular Agr node. The relevant VI rules are given in (18). This is our analysis, basically. The rest of the subsection is devoted to defending it. We will present an argument for the redundant [+ANIM] feature and Impoverishment being inevitable given the data and then will motivate both assumptions diachronically.

(16)   Features behind Shughni genders

        a.   Feminine gender = [+ANIM, +FEM]

        b.   Masculine gender = [+ANIM, –FEM]

(17)   Impoverishment rule in Shughni: [+ANIM] -> NULL __Agr[–FEM, SG]

(18)   a. Past tense VI rules
        (i)   Agr[+ANIM] <-> /-a-/ __T[PST]
        (ii)   Agr <-> /-u-/ __T[PST]

        b. Perfect tense VI rules
        (i)   Agr[+ANIM] <-> /-c-/ __T[PF]
        (ii)   Agr <-> /-dj-/ __T[PF]

We start with arguing for the VI rules in (18) first. The masculine form is realized as the default option to capture the fact that the masculine gender is, in fact, the default in Shughni's morphological system. The rules that insert the F.SG/F.PL/M.PL form reference only the [+ANIM] feature in order to match the three paradigm cells at once. The M.SG feature set, while having [+ANIM] in the course of syntactic derivation, lacks [+ANIM] due to the impoverishment rule.

Now is the time to discuss the motivations behind the redundant [+ANIM] feature. As shown above, it works, but if there is an alternative analysis without it, it is clearly to be preferred. However, we think that it is inevitable. Assume that you have two binary features that encode the four-cell paradigm of gender-number agreement. There is no way for a VI rule to match three cells out of four without matching the fourth one. Due to the subset principle, such a VI rule would need to be the intersection of feature sets of those three cells. However, with two binary features, an intersection of three feature sets will always be the empty set. Thus, a three-cell VI rule will always be a matching candidate for realizing the features of the fourth cell. In DM, the only way to avoid the VI rule from realizing the fourth cell is to introduce another VI rule that will be specified for the fourth cell. However, this solution is inapplicable to Shughni since the fourth cell (M.SG) is the default one and cannot be encoded by a more specific rule. The steps (a-e) in (19) present the same argument in a more concise fashion.

(19)   a. Two features: A and B

b. Four paradigm cells: [–A, –B], [+A, –B], [–A,+B], [+A,+B]

c. Take any three of the cells, there will be no feature shared by all three. Take, for example, [–A,–B], [+A,–B], [–A,+B]. There is no common feature.

d. Thus, a three-cell-realizing VI rule will match the fourth one, [+A,+B]

e. The only way to avoid that is to introduce a VI rule that references [+A,+B]

The argument in (19) shows that a two-feature solution is not feasible due to the combinatorics of features and the fact that M.SG is the default option in Shughni. Therefore, a third feature is needed no matter how you name it. The naming choice of ours is not arbitrary, though. Since Shughni is Iranian, it had a three-gender system earlier in its diarchonic life. However, by the middle Iranian period the neuter gender was completely blended with the masculine [Rastorgueva 1975:42]. Thus, we suggest that the two-feature gender system we postulate for Shughni is due to the three-gender system of Old Iranian. The impoverishment rule in (17) represents the 'blending' of neuter and masculine.

One could wonder about the implications of our analysis wrt. language acquisition (this issue was brought to us by Stepan Mikhailov, p.c.). How would a child know that a two-gender system should be encoded by two binary features instead of one? We believe that the argument in (19), which rests on basic DM assumptions about feature calculus and exponent insertion, is what causes a second gender feature to be postulated by the Shughni learner. However, this is more of a speculation, which needs to be supported by additional Shughni data and by computational modelling as well (see [Kodner 2022] for an argument in favor of acquisition modelling influencing morphological theory).

To summarize, we have presented an analysis of Shughni verbal agreement syncretism, which rests on two assumptions: there are two gender-encoding features in Shughni grammar and the M.SG feature set gets impoverished to act as a default. However, one could raise an issue with use of Impoverishment in our analysis and argue that Impoverishment is a mere reformulation of the problem in a technical jargon. This can be used as an argument against the DM architecture, so the next section will be devoted to discussion of problems raised by the Shughni data for more restrictive theories of morphosyntax. For clarity, we will assume Nanosyntax [Starke 2009 *et seq.*]

5   Nanosyntax and Shughni data

Nanosyntax is a theory of morphology that, like Distributed Morphology, assumes late insertion of phonological material and syntax-all-the-way-down (all comples words are built by syntax). However, it goes even further and assumes that the feature bundles (which *somehow* come from the lexicon, see [Boeckx 2014] for a sharp critique) do not exist, and syntax always operates on individual features. More relevant for our discussion is the core property of Nanosyntax – it dispenses with the postsyntactic morphological computation on features. All morphological patterns are thought to arise from Spell-Out mechanism. Nanosyntax assumes that syntactic phrases are input to the spellout algorithm (Phrasal Spellout). Phrasal spell-out works by matching built syntactic structures (S-trees) to lexically stored trees, which are matched with a morphophonological string (L-trees). Additionally, Nanosyntax uses movement to create constituents that consist solely of certain features (to spell-out certain feature sets as affixes) (Spellout-driven Movement).

Since there are no postsyntactic operations on features, there are only two ways to derive syncretism in Nanosyntax: underspecification and accidental homophony. Underspecification in Nanosyntax work via a principle, similar to DM's subset principle, the superset principle: an L-tree may lexicalise an S-tree which is its substructure. This is a rather strong constraint on non-accidental syncretism: for example, feature sets [F1,F2,F3] and [F1,F3] cannot be syncretic, if they form the following hierarchy of projections: [F1 [F2 [F3]]]. Since [F1 [F3]] is not a subconstituent of [F1 [F2 [F3]]], they cannot be syncretic. The fact that feature bundles in Nanosyntax are **structured** constrains possible morphological system in a rather strict fashion.

To argue against a putative Nanosyntactic analysis of Shughni data, let us make precise assumptions about how nominal features are structured. Existing Nanosyntactic work (such as [Caha 2020]) assumes that phi-features are structured like in (20), with person features being higher than number features and number features higher than gender features. We only work with privative features in this section, because binary and attribute-value systems are impossible to formulate in Nanosyntax.

(20) Structure of phi-features (as in [Caha 2021; Starke 2021])
     SPKR > PART > Π > PL > # > FEM > ANIM > REF

Under this phi-feature hierarchy the discussed syncretism cannot be non-accidental. Feature composition of M.PL is the same as F.PL, except for the FEM projection in the middle. Thus, feature structure for M.PL is not a subconstituent of F.PL making the syncretism impossible. A workaround would be to argue that the gender and number features are not spelled out together in a single affix. However, such decomposition does not appear to be right for the Shughni data since we see non-concatenative morphology in past tense.

However, we could accept different assumptions about the position of gender in the nominal structure. It is common view in the literature that the gender features may occupy different syntactic positions [Steriopolo, Wiltschko 2010; Pesetsky 2013 *a.m.o.*]. Thus, it may be that we need to work with one of the structures below (we limit ourselves to relation between gender and number, since only it is relevant). Structure in (21a) represents a gender>number ordering, while structures in (21b-c) represent possible orderings where number is sandwiched in between of masculine and feminine genders.

(21) Alternative phi-feature structures

     a.   FEM>ANIM >PL> #

     b.   FEM>PL>#>ANIM

     c.   MASC>PL>#>FEM

Structure in (21a) will not work because the F.SG is not a proper subconstituent of F.PL, it misses a PL node in the middle, which makes a non-accidental syncretism impossible. Same problem with (21b), F.SG is represented as [FEM [# [ANIM]]], which misses a PL node in between of FEM and #, which (again) makes non-accidental syncretism impossible. (21c) is problematic due to the relation between M.PL and F.PL. Masculine plural will lack a FEM node down below, which is the reason why F.PL is not properly contained in the structure for M.PL, making non-accidental syncretism impossible. We conclude that no matter how you cut it, it will be hard to model Shughni syncretism using Nanosyntax. Maybe new technical developments of the model (like movement-containing

trees; [Caha, Taraldsen Medová 2022], citing an unpublished ms. by Michal Starke) will be able to handle it. But as it stands now, we are skeptical of it.

The Shughni syncretism is so hard for models like Nanosyntax due to this syncretism involving features of different classes, which do not stand in any entailment relation. The gender feature terminals are independent of number, which causes the structures to lack containment, which is necessary for a non-accidental analysis of the syncretism. This is not necessarily unwanted, given the complicated nature of this syncretism and its connections to diachronic processes. However, we still stand by our analysis provided in the previous section.

6   Conclusion

This paper has been concerned with a simple question: how does one model a syncretism like the one Shughni exhibits? We have shown that Shughni syncretism is unlike similar ones reported in the literature and have provided an analysis in the Distributed Morphology framework. Additionally, we have discussed the problems that syncretism like this posits for more restrictive morphosyntactic theories, such as Nanosyntax.

Abbreviations

1,2,3 – first, second, third person; ANIM – animate; D1,2,3 – demonstrative; INDEF – indefinite; M,F,N – masculine, feminine, neuter; NEG – negation; O – object; PF(V) – perfect tense; PL – plural; PST – past tense; SG – singular;

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Contact information
Daniar Kasenov
NRU HSE Laboratory of Formal Models in Linguistics, Research assistant
e-mail: antidanyar@protonmail.com ; mortypines@gmail.com
phone number: +7 (925) 624 93 62

Alexander Sergienko
NRU HSE School of Linguistics
MA student
e-mail: alser99@yandex.ru
phone number: +79096710834

Artem Badeev
NRU HSE; Institute for Linguistic Studies RAS
Research assistant
e-mail: badeev.artem@live.com
phone number: +79056737160