

paradigms assembled in Deal (2010a,b). Here, I set the record straight regarding the paradigm of verbal agreement and the existence of restrictions like (4). In so doing, I aim to lay the descriptive groundwork for an explanation of why the restrictions come out as they do.

In the background of this investigation are certain methodological matters that deserve attention before we begin. Why have agreement restrictions like (4) not been noted in the modern literature (Aoki 1970, 1994; Crook 1999; Rude 1985; Velten 1943)? Why are they not in evidence in the paradigms presented in Deal (2010a,b)? One notable generalization about the modern descriptive literature on Nez Perce verbal agreement is the prevalence of what we might call ‘morpheme-based’ description, rather than ‘paradigm-based’ description. That is, rather than presenting a paradigm for (say) agreement with plural objects, modern descriptions have generally concentrated on properties of particular affixes, such as *nees-* (O.PL) (seen in the examples above as predictable variant *naac-*). This prefix been characterized as follows:

- plurality of object, i.e., action affecting several people or things (Velten 1943:280).
- indicating the plurality of the object (Aoki 1970:108).
- (plural object prefix); used when the object is plural (Aoki 1994:478).
- A plural direct object is regularly indicated by the prefix *nees-*. This plural marker is also neutral to person (Rude 1985:38).
- Verbs indicate the number of neither a singular subject nor a singular object, but they do indicate the plurality of a direct object with the prefix *nees-*. [...] *Nees* is purely number agreement and not person agreement (Crook 1999:125).

This style of presentation is no doubt motivated by the ease with which agreement affixes may be segmented.² Yet it turns out that that the basic description of *nees-* as a plural object marker is not complete. Object plurality is a necessary but not sufficient condition for the use of *nees-*. In assembling full paradigms for the Nez Perce verb in Deal (2010a,b), I assumed not only the correctness, but also the completeness, of previous morpheme-based descriptions, and aimed to present those descriptions in paradigmatic form. But because the morpheme-based descriptions were incomplete, information was unintentionally added by moving from one style of description to another.

Further complicating the picture is the fact that consultants do sometimes accept and produce forms which violate agreement restrictions. Examples (5), for

²For instance, Crook (1999:123) writes that “prefixal inflection involves much less suppletion than is found in suffixal inflection. With one exception, we can treat the different categories of prefixal inflection separately without considering them as part of a morphologically interdependent complex”.

instance, violate restriction (4). Examples of this type were taken into consideration in assembling the earlier paradigms.

- (5) a. 'Imee 'eetx 'e-pe-nees-hex-nu' pro.
 2PL.NOM 2PL.CLITIC 3OBJ-S.PL-O.PL-see-FUT PRO.3PL
 'You will see them.' (Deal 2010b:97)
- b. Pro 'e-pe-nees-hex-n-e pro.
 PRO.1PL 3OBJ-S.PL-O.PL-see-P-REM.PAST PRO.3PL
 'We saw them.' (Rude 1985:39)

These data points contrast with the data point in (3b). What is the nature of this variability? Is it true grammatical optionality? Is it variation between dialects or idiolects, variation conditioned by the verb, or some other type of conditioned variation? Or does it simply reflect noise in fieldwork data, of the sort that may result from miscommunications with consultants or simply performance errors (due, perhaps, to the cognitively taxing nature of certain elicitation sessions)? In the absence of evidence bearing on these questions, there is a clear attraction to treating (3b) as the exceptional case. It is (3b), rather than (5), that violates an otherwise simple generalization about the distribution of *nees-*: *nees-* appears if and only if the object is plural. But it turns out that once repeated, controlled elicitation is carried out, it is (5) whose status becomes clearly exceptional. Consultants who occasionally produce or accept forms like (5) stop producing and accepting those forms in tasks of systematic paradigm elicitation. Only forms like (3b) are produced and accepted. That suggests that the status of (5) may be just be 'noise'. To put it slightly differently, (3b) deserves explanation in terms of a theory of agreement; (5) deserves explanation by means of a theory of performance or, perhaps, simply a close study of the particulars of an elicitation session. This conclusion becomes clear only through systematic elicitation of multiple paradigms – a technique which has not been discussed in the previous literature on Nez Perce.

In sum, the paradigms in Deal (2010a,b) were based on two assumptions that proved faulty: first, that the standard modern morpheme-by-morpheme descriptions have been not only correct, but also complete; and second, that examples like (5) represent the grammar of Nez Perce, whereas examples like (3b) do not. I hope these remarks make it clear why I take the paradigms presented in this paper to replace those I provided in earlier work, rather than to complement them.

In the rest of this paper, I present my case for an updated view of the verbal agreement system. The next section introduces the basics of the system, drawing on Aoki (1970, 1994); Crook (1999); Rude (1985); Velten (1943), as well as the results of systematic paradigm elicitation. Section 3 then presents the full agreement paradigm and discusses the elicitation methodology behind it. At this point it is possible to state a number of agreement restrictions. Section 4 concludes by discussing several analytical options for the agreement system. Finally, two full verbal paradigms are provided as an appendix.

2 Basics of the agreement system

Nez Perce verb agreement involves three prefix positions and two suffix positions. These positions are bolded in the schematic structure in (6).

(6) *Schematic structure of the verb*

person – **S #** – **O #** – causative – root – applicatives – aspect/mood – **S #** – **space** – tense

We begin with the person marking position. Observe that while there are separate positions for subject and object number marking in (6), there is only one position for person marking. Three morphemes that index 3rd persons are possible in this position: *hi-* for a 3rd person subject, *'e(w)-* for a 3rd person object,³ and portmanteau *pee-* for a 3rd person subject along with a 3rd person object. (We will see that the distribution of *pee-* and *'e(w)-* is subject to additional restrictions.)

(7) a. Angel-nim **hi**-cewcew-téetu *pro*.
Angel-ERG 3SUBJ-call-HAB.PRES PRO.1 SG

'Angel calls me.'

b. *Pro* *'e*-cewcew-téetu Angel-ne.
PRO.1 SG 3OBJ-call-HAB.PRES Angel-ACC

'I call Angel.'

c. Angel-nim **pee**-cewcew-téetu Bessie-na.
Angel-ERG 3/3-call-HAB.PRES Bessie-ACC

'Angel calls Bessie.'

Modern descriptions have generally held that there is no special (non-reflexive) person inflection for 1st and 2nd person.⁴ As Rude (1985:30) writes, "the semantic contrast is between 1st and 2nd person on one hand and 3rd person on the other in a participant versus non-participant deictic system." All acknowledge, however, the existence of two other types of affixes which apparently occupy the same prefix position as *hi-/'e(w)-/pee-*. One is the reflexive, which contains specialized forms for all person-number combinations (with the exception of 2PL and 3PL, which are syncretic).⁵ The other, more crucial for our purposes here, is the reciprocal, which is an invariant prefix *pii-*. Contrast reciprocal (8a) with non-reciprocal (8b):

³The *'ew-* allomorph appears when a glottal segment follows.

⁴The exception is Velten (1943), who mistakes the initial vowel of certain verb stems for a 1st/2nd person agreement prefix.

⁵See Rude (1985:40) for the paradigm of these affixes, and Deal (2010b) for discussion of their status as detransitivizing derivational morphemes.

- (8) a. Caan kaa Meeli pii-suk-n-e.
 John.NOM and Mary.NOM RECIP-recognize-P-REM.PAST
 ‘John and Mary recognized each other.’
- b. *Pro* ’e-sukí-ce ko-nyá.
 PRO.1SG 3OBJ-recognize-IMPERF DEM-ACC
 ‘I recognize that person.’

We will see that the *pii-* prefix has acquired a significant, non-reciprocal use as part of the person agreement system.

There are two positions in (6) associated with subject number. Only one of these positions may be used in a given word; the choice depends on aspect/mood. In the perfect/perfective⁶ and the future, prefix *pe-* is used to index a plural subject. The examples below demonstrate for perfect/perfective. (These examples include a verb root triggering vowel harmony; ’*ew-* and *pe-* accordingly surface as ’*aw-* and *pa-*.)

- (9) a. *Pro* ’aw’yáaǵna Matt-ne cepéletp’et-pe.
 (’*ew-*’yáaǵ-n-e)
 PRO.1SG 3OBJ-find-P-REM.PAST Matt-ACC picture-LOC
 ‘I found Matt in the picture.’
- b. *Pro* ’apa’yáaǵna Matt-ne cepéletp’et-pe.
 (’*e-pe-*’yáaǵ-n-e)
 PRO.1PL 3OBJ-S.PL-find-P-REM.PAST Matt-ACC picture-LOC
 ‘We found Matt in the picture.’

The imperfective, habitual, and imperative each use a special suffix for subject plural, appearing immediately after the aspect/mood suffix. The examples below demonstrate this for the (present) habitual, (10), and the imperfective, (11).⁷

- (10) a. *Pro* ’e-cewcew-téetu Angel-ne.
 PRO.1SG 3OBJ-call-HAB.PRES Angel-ACC
 ‘I call Angel.’
- b. *Pro* ’e-cewcew-tée-’nix Angel-ne.
 PRO.1PL 3OBJ-call-HAB.PRES-S.PL Angel-ACC
 ‘We call Angel.’

⁶This is the aspectual category described as ‘P aspect’ in Deal (2010b), and glossed as ‘P’ in examples.

⁷See Deal (2010b) for discussion of the present habitual aspect versus past habitual aspect.

- (11) a. *Pro* 'e-'pewi-se Angel-ne.
 PRO.1SG 3OBJ-look.for-IMPERF Angel-ACC
 'I am looking for Angel.'
- b. *Pro* 'e-'pewi-s-**iix** Angel-ne.
 PRO.1PL 3OBJ-look.for-IMPERF-S.PL Angel-ACC
 'We are looking for Angel.'

Only plural number is marked here. Evidence that singular number is not marked comes from animacy effects, as reported in Deal (2015b).⁸ Only [+ANIMATE] arguments may control plural agreement in Nez Perce. Inanimate plural arguments occur with the same verb forms as are used for singulars; these forms must therefore be neutral with respect to number. The examples below demonstrate this for the copula, though the effect appears to hold across all verbs. Observe that the animate subjects control the plural agreement suffix *-iix* in (12a–b), but that the inanimate subject in (12c) does not. The verb form for an inanimate plural subject in (12c) is the same as for an animate singular subject in (12d).

- (12) a. 'Émti **hi-w-s-iix** pílep-t há-ham.
 outside 3SUBJ-be-PRES-S.PL four-SUF PL-man.NOM
 'Four men are outside.'
- b. Lep-ít pícpic **hi-w-s-iix** 'iníit-pe.
 two-SUF cat.NOM 3SUBJ-be-PRES-S.PL house-LOC
 'Two cats are in the house.'
- c. Lep-ít cepéepy'uxtin' **híi-we-s** 'iníit-pe.
 two-SUF pie.NOM 3SUBJ-be-PRES house-LOC
 'Two pies are in the house.'
- d. Harold **híi-we-s** Clarkston-pa.
 Harold.NOM 3SUBJ-be-PRES Clarkson-LOC
 'Harold is in Clarkston.'

Object number is marked by the prefix *nees-/neec-*; the latter allomorph appears before a glottal segment. (With vowel harmony, these affixes become *naas-/naac-*.)

⁸See Deal (2015b) for a fuller discussion of gender/animacy effects in Nez Perce. These effects are not discussed in the prior literature.

- (13) a. *Pro* 'e-cewcew-téetu Angel-ne.
 PRO.1SG 3OBJ-call-HAB.PRES Angel-ACC
 'I call Angel.'
- b. *Pro* 'e-nees-cewcew-téetu Angel kaa Tatlo-na.
 PRO.1SG 3OBJ-call-HAB.PRES Angel.NOM and Tatlo-ACC
 'I call Angel and Tatlo.'

Once again, singular number is not marked. There is again an animacy effect on the arguments that may condition plural agreement; only animates may control this agreement. See Deal (2015b) for examples and discussion.

A final aspect of verb morphology which bears on the agreement system is space marking. Space markers *-m* 'cislocative' and *-ki* 'translocative' appear between aspect/mood suffixes (followed by a subject number suffix, if applicable) and tense suffixes. These morphemes typically indicate location near or toward the speaker (cislocative) or away from the speaker (translocative), and are studied in this usage in Deal (2009).

- (14) a. Héenek'u *pro* **hi**-kóo-qa-m-a.
 again PRO.3SG 3SUBJ-go-HAB-CIS-REM.PAST
 'Again he would come.' (Aoki 1979:68)
- b. 'Iskit **hi**-ku-séen-ki.
 trail.NOM 3SUBJ-go-IMPERF-TRANS
 'The trail goes that way (away from the speaker).' (Aoki 1994:243)

Rude (1985:49) notes that "often the existence of a 1st person direct object is reinforced by the cislocative". In keeping with this observation, we will see that the cislocative (in connection with the reciprocal) has acquired a role as part of the agreement system.

3 Agreement restrictions in systematic paradigm elicitation

Elicitation of person-number paradigms for four transitive verbs was carried out in the summers of 2012 and 2013. Data was collected for all non-reflexive cells in a paradigm varying both number and person for both subject and object. Thus, 28 paradigm cells were collected per verb. The verbs were 'iyaaq 'find', *hexte* 'go see, visit'⁹, 'ipewi 'look for', and *cewcewi* 'call on the phone'.¹⁰ All arguments were definite and human-referring (generally, pronouns, proper names, or coordinations thereof). Four aspect/mood categories were used: perfect/perfective, future, imperfective and present habitual. (The first two of these categories take

⁹The verb root here is *heki* 'see' plus suffix *-te* 'go to V'.

¹⁰This verb originally meant 'whisper'.

prefixal subject number agreement; the second two take suffixal subject number agreement.) Data was elicited from two native speakers, who worked together throughout the elicitation task. As each form was elicited, it was written on a whiteboard, and verbally confirmed with the speakers. Two of the paradigms (for *'iyaaq* 'find', perfect/perfective aspect, and *cewcewi* 'call', present habitual aspect) were then typed up and reviewed an additional time with the two speakers, to catch any remaining errors.

I present the data in Tables 1 and 2 in schematic form; in the appendix, I present the full paradigms for *'iyaaq* 'find' (perfect/perfective aspect) and *cewcewi* 'call' (present habitual aspect). To aid the discussion, I have assigned a number to each paradigm cell in Tables 1 and 2. The (a) form in each cell represents the findings for verb forms where subject number is expressed as a prefix (in this study, perfect/perfective and future). The (b) form represents the findings for verb forms where subject number is expressed as a suffix (in this study, imperfective and present habitual). In the (b) forms, I exemplify with imperfective except in lines 2b and 6b, for reasons to be discussed in the next paragraph. The suffix *-se* is the general form of the imperfective; *-s-iix* represents imperfective aspect plus plural subject number. In lines 2b and 6b, I show the present habitual, where the general form is *-teetu*, and *-tee-'nix* represents aspect plus plural subject number. (See (10).)

The data collected in this elicitation task was highly consistent. Of the 112 forms collected, only 3 (2.7%) departed from the schematic paradigm I present below. A first case concerned form 2b (2PL on 1SG). The consensus form given was expected for 2SG on 1SG; however, one of the two speakers also provided the expected (2PL on 1SG) form. A second case concerned form 6b (2PL on 1PL); the consensus form given was for 2PL on 1SG. This occurred immediately after the error just discussed; there may have been confusion about which cell was in question. The third and last case concerned form 28a, 3pl/3pl (3PL on 3PL); the consensus form given was for 3PL on 3SG, which had just been elicited. In each of these three cases, the form provided for one of the four paradigms contrasted with those found in the three other paradigms. I therefore assume that these were errors. (Notably, none of these errors were in the 'find' or 'call' paradigms submitted to speakers for a second round of review and correction. It is very possible that, had these forms been additionally reviewed in this way, they would have been corrected.) The errors concerning cells 2b and 6b were found in the paradigm using imperfective aspect. That is why, in Table 1, I exemplify these cells using present habitual aspect instead.¹¹

¹¹I do not switch entirely to present habitual due to a morphological interaction between this aspect and the cislocative, which partially obscures a relevant pattern. See the discussion around (19).

Table 1: Results of systematic paradigm elicitation, collapsed [morphemes]

	1sg O	1pl O	2sg O	2pl O	3sg O	3pl O
1s S	—	—	9a. 0- 9b. 0-●-se	13a. 0- 13b. 0-●-se	17a. 'e- 17b. 'e-●-se	23a. 'e-nees- 23b. 'e-nees-●-se
1p S	—	—	10a. pe- 10b. -s-iix	14a. pe- 14b. -s-iix	18a. 'e-pe- 18b. 'e-●-s-iix	24a. 'e-pe- 24b. 'e-nees-●-s-iix
2s S	1a. (pfi)-●-m 1b. (pfi)-●-se-m	5a. nees-●-m 5b. nees-●-se-m	—	—	19a. 'e- 19b. 'e-●-se	25a. 'e-nees- 25b. 'e-nees-●-se
2p S	2a. pe-●-m 2b. -tee-'nix	6a. pe-nees-●-m 6b. nees-●-tee-'nix	—	—	20a. 'e-pe- 20b. 'e-●-s-iix	26a. 'e-pe- 26b. 'e-nees-●-s-iix
3s S	3a. hi- 3b. hi-●-se	7a. hi-nees- 7b. hi-nees-●-se	11a. hi- 11b. hi-●-se	15a. hi- 15b. hi-●-se	21a. pee- 21b. pee-●-se	27a. hi-nees- 27b. hi-nees-●-se
3p S	4a. hi-pe- 4b. hi-●-s-iix	8a. hi-pe-nees- 8b. hi-nees-●-s-iix	12a. hi-pe- 12b. hi-●-s-iix	16a. hi-pe- 16b. hi-●-s-iix	22a. ** 22b. pee-●-s-iix	28a. hi-nees- 28b. hi-nees-●-se

Notes on both tables: The position of the verb stem is indicated with a solid dot (●). Tense inflection is not shown. Cells with cislocative are green; cells with a plural object but no plural object agreement are red; cells with a plural subject but no plural subject agreement are blue.

Table 2: Results of systematic paradigm elicitation, collapsed [glosses]

	1sg O	1pl O	2sg O	2pl O	3sg O	3pl O
1s S	—	—	9a. 0- 9b. 0-●	13a. 0- 13b. 0-●	17a. 3O- 17b. 3O-●	23a. 3O-O.PL- 23b. 3O-O.PL-●
1p S	—	—	10a. S.PL- 10b. -S.PL	14a. S.PL- 14b. -S.PL	18a. 3O-S.PL- 18b. 3O-●-S.PL	24a. 3O-S.PL- 24b. 3O-O.PL-●-S.PL
2s S	1a. (REC)-●-CIS 1b. (REC)-●-CIS	5a. O.PL-●-CIS 5b. O.PL-●-CIS	—	—	19a. 3O- 19b. 3O-●	25a. 3O-O.PL- 25b. 3O-O.PL-●
2p S	2a. S.PL-●-CIS 2b. -S.PL	6a. S.PL-O.PL-●-CIS 6b. O.PL-●-S.PL	—	—	20a. 3O-S.PL- 20b. 3O-●-S.PL	26a. 3O-S.PL- 26b. 3O-O.PL-●-S.PL
3s S	3a. 3S- 3b. 3S-●	7a. 3S-O.PL- 7b. 3S-O.PL-●	11a. 3S- 11b. 3S-●	15a. 3S- 15b. 3S-●	21a. 3/3- 21b. 3/3-●	27a. 3S-O.PL- 27b. 3S-O.PL-●
3p S	4a. 3S-S.PL- 4b. 3S-●-S.PL	8a. 3S-S.PL-O.PL- 8b. 3S-O.PL-●-S.PL	12a. 3S-S.PL- 12b. 3S-●-S.PL	16a. 3S-S.PL- 16b. 3S-●-S.PL	22a. ** 22b. 3/3-●-S.PL	28a. 3S-O.PL- 28b. 3S-O.PL-●

Notes on Table 2: Morphemes are glossed here according to the following conventions:

3/3 3rd person subject and 3rd person object portmanteau prefix

3O 3rd person object prefix

3S 3rd person subject prefix

CIS morpheme typically described as the cislocative

O.PL plural object prefix

REC morpheme typically described as the reciprocal

S.PL plural subject marker

Let us now consider the findings themselves. We see in Tables 1 and 2 that, as a baseline, all plural arguments agree in number and all 3rd persons agree in person. Four agreement restrictions can be picked out as departures from this baseline. (Those involving plural objects that do not agree in plural are marked in red; those involving plural subjects that do not agree in plural are marked in blue.)

First, there is never plural object agreement with a second person object, (15).

(15) *No plural agreement with a 2nd person object:*

If the object has features [ADDR, PL], [PL] from the object cannot be indexed on the verb. (Forms 13–16.)

Second, as discussed above, there is a limitation on plural object agreement for plural 3rd person objects when the subject is a plural participant. Notably, this restriction is specific to aspectual/modal categories with prefixal subject agreement. Observe that *nees-* is absent in the (a) examples in cells 24 and 26, but not the (b) examples. The (b) examples have no agreement restriction: all plural arguments agree plural, whether via prefix *nees-* (for the object) or suffix *-iix* (for the subject). The restriction in (4) is accordingly refined as (16).

(16) *No plural agreement with a 3rd person object when the subject is 1pl or 2pl and the subject plural marker is a prefix:*

If the object has features [-PART, PL], and the subject has features [+PART, PL], and the aspect/mood is one that forces a subject number prefix, then [PL] from the object cannot be indexed on the verb. (Forms 24a, 26a.)

Third, there is no person agreement with a 3rd person plural object when the subject is 3rd person, (17). This is one agreement restriction that *has* been noticed in the previous literature, namely in Rude (1985:39), and is represented correctly in the paradigms of Deal (2010a,b).

(17) *No person agreement with a 3rd person plural object when the subject is 3rd person:*

If the object has features [-PART, PL] and the subject has feature [-PART], [-PART] from the object cannot be indexed on the verb. (Forms 27–28.)

Fourth and finally, there is no plural subject agreement of any kind when both the subject and the object are third person plural, (18). In form 28a, prefix *pe-* is absent, and in form 28b, imperfective aspect appears in the non-plural form.

(18) *No plural subject agreement when both the subject and the object are third person plural:*

If the object has features [-PART, PL] and the subject has feature [-PART, PL], [PL] from the subject cannot be indexed on the verb. (Forms 28.)

To summarize, there are two circumstances when plural objects do not agree in number: when the object is second person (forms 13–16), and when the object is third person, the subject is a plural participant, and subject plural marking is a prefix (forms 24a, 26a). There is one circumstance when plural subjects do not agree in number: when both the object and the subject are 3rd person plural. And there is one circumstance when 3rd person arguments do not agree in person: when both the subject and the object are third person, and the object is plural.

One notable fact about these restrictions, excepting (15), is that they depend on features from both the subject and the object. Object features have a role to play in determining subject agreement; so do subject features in determining object agreement. Two further instances of this type of interaction are seen in cells 1–2 and 5–6 (that is, when the subject is 2nd person and the object is 1st person). First, the cislocative appears across these cells, excepting 2b and 6b. (Cells with cislocative are colored green.) The absence of the cislocative in 2b and 6b is predictable: the plural form of present habitual aspect, unlike imperfective and perfect/perfective, is simply not morphologically compatible with space marking affixes (Rude 1985:67).¹² What we see overall is (19):

- (19) The cislocative appears wherever morphologically possible when the subject is 2nd person and the object is 1st person. (Forms 1–2, 5–6.)

It seems quite unlikely that this distribution follows from the spatial meaning of the cislocative – that is, that speakers interpret the action as being spatially located near the speaker, or directed toward the speaker, in all and only 2nd person on 1st person scenarios. More likely is that the cislocative has developed a use which is not a space marker but a 2-on-1 marker, a usage which may ultimately be understood as a type of inverse. Clearly, this role for the cislocative is not an agreement restriction, understood in general terms as a constraint on when the unambiguous agreement affixes may be used. Rather, it is an *agreement extension*: a morpheme with an additional, non-agreement-based use playing a role in the agreement system.

A second agreement extension concerns the reciprocal prefix *pii-*, which appears in the agreement paradigm optionally when the subject is 2nd person singular and the object is 1st person singular. In paradigm elicitations, this morpheme appeared in exactly 50% of the relevant forms. Of the four paradigms elicited, *pii-* was present in cell 1 in one case and absent in another case; in the remaining two cases, consultants provided both a form with *pii-* and a form without it. Consultants did not provide *pii-* in any other cell of the paradigm. This suggests that *pii-* appears in cell 1 not due to a reciprocal interpretation, but because this prefix has acquired a use as a 2SG on 1SG marker. It remains optional in this usage, however.¹³

¹²The *singular* form of the present habitual does morphologically allow the cislocative, and the cislocative accordingly appears in 2SG/1SG and 2SG/1PL forms. See the paradigm in the appendix.

¹³Rude observes that the reciprocal is optional in 2SG-on-1SG imperatives, and remarks that

In example (22a), imperfective aspect appears in addition to future. This example was drawn from a paradigm otherwise in the simple future. In example (22b), imperfective aspect appears instead of the perfect/perfective aspect otherwise used in the paradigm. In both instances, subject number is expressed as would be expected for the imperfective aspect. The modification of aspect/mood marking allows all features to be expressed on the verb without the morpheme combination *pee-pe-* ‘3/3-S.pl’.

An initially plausible way to think about these modifications is in terms of agreement extensions: the imperfective is recruited to express the 3PL/3SG feature combination, much as the reciprocal is recruited to express 2SG/1SG. The problem for this account is that imperfective aspect is not required in the 3pl/3sg feature combination *per se*; in the habitual paradigm, for instance, there is no modification of the aspect/mood value in the 3PL/3SG paradigm cell.

- (23) ke kaa *pee-cewcew-tée-’nix* Angel-ne
 C then 3/3-call-HAB.PRES-S.PL Angel-ACC
 ‘when they call Angel’

Another potential approach for forms like (22b) would be to see the apparent imperfective as a special allomorph of perfect/perfective, in some way conditioned by the 3PL/3SG feature complex. But this approach struggles on (22a), where the future suffix remains but the imperfective suffix is added. What these failed views have in common is that they attempt to treat the forms in (22) as normal members of the paradigms in which they were elicited—as representing, that is, what is semantically the simple future or semantically the perfect/perfective. A remaining alternative is to reject this assumption: 3PL/3SG feature combinations are simply ineffable in the perfect/perfective and simple future. Speakers provide the forms in (22) as “next best” alternatives, expressing similar meanings. In reflection of this conclusion, I provide no form in cell 22a.

4 Conclusions and analytical prospects

This paper has aimed to end where a theoretical project can begin. The theoretical questions should now be clear: *Why* is the Nez Perce verbal agreement paradigm as it is? *Why* are there agreement restrictions/extensions at all, and *why* in particular *these* restrictions/extensions? What does this tell us about the syntax of agreement, on one hand, and its morphology, on the other? While I will not be able to properly answer these questions here, I will conclude by pointing to several of what I see as the most interesting prospects for future analysis.

One initial question to ask about agreement restrictions is whether they are syntactic or morphological in nature. Consider, for instance, the restriction we see in forms 28:

(24) *No plural subject agreement when both the subject and the object are third person plural:*

If the object has features [-PART, PL] and the subject has feature [-PART, PL], [PL] from the subject cannot be indexed on the verb.

A syntactic account of this restriction would propose a straightforward mapping between the features realized by agreement morphemes and the features transferred by the operation Agree. If [PL] from the subject cannot be indexed on the verb, then [PL] from the subject does not participate in Agree. What must be explained is why Agree should be restricted in this way. A morphological account, on the other hand, would locate the restriction not in which features are transferred by Agree, but in what happens to transferred features at the PF interface. If [PL] from the subject cannot be indexed on the verb, that suggests that this feature might be deleted in the morphology (via an impoverishment rule) or might simply remain unexponed for some other morphological reason. The absence of exponence is what requires an explanation.

One type of factor suggestive of a syntactic account is the repeated restriction on plural agreement for argument A in the context of plural agreement for argument B. A syntactic account can make sense of why it is the feature [PL] (rather than some other feature) that interferes with agreement in [PL] by reference to a context of intervention. The central constraint, on this type of view, is that a probe P may not agree with a lower [PL] feature across a higher one:

(25) [P [I: [PL] [G: [PL] [...]]]]
 {----- XXX -----}

(26) Agree in feature bundle [F] is possible between probe P and goal G only if there is no I such that P c-commands I and I c-commands G and I bears any feature in [F].

On an intervention approach to agreement restrictions, sometimes [PL] on the subject intervenes for [PL] on the object (e.g. (16)), but sometimes [PL] on the object intervenes for [PL] on the subject (e.g. (18)). The analytical challenge lies in ensuring that subjects and objects occupy appropriate structural positions for this type of variation in the setup for intervention.

A further, related implication of the restrictions and extensions described in this paper concerns the question of how many syntactic loci of agreement (i.e. agreeing functional heads) are involved in the Nez Perce clause. The basic facts of agreement, as in Section 2, might be taken to suggest the involvement of three distinct syntactic loci, each associated with one morphological prefix position (person agreement, subject number agreement, object number agreement). Such a view would be in line with proposals by Sigurðsson and Holmberg (2008) and Preminger (2011), according to which person and number agreement are associated with distinct probing heads in the syntax. Agreement restrictions and extensions constitute a challenge for this view because they require access to both person and number information, generally from both the subject and the object. By the same

token, these facts also challenge more standard views of agreement, which take object and subject agreement to be associated with distinct syntactic loci (v and T, respectively; see e.g. Deal 2010a). If more than one syntactic locus is involved in the agreement system, some mechanism must ensure that the features available in any one locus are determined by the full ϕ -specification of both subject and object. Of course, the need for such a mechanism is obviated if a single syntactic head is implicated in verb agreement in Nez Perce. On this type of view, rules of fission are required to ensure that separate morphemes may be inserted.

A Appendix: sample paradigms

A.1 'iyaaq 'find', perfect/perfective aspect, remote past tense

For this elicitation speakers were asked to imagine that they or others were looking at a portrait of a large group, searching for one or more individuals.

Linguistic notes: this paradigm features both singular and plural 2nd person clitic pronouns, both by themselves and as clitic-doubles of full pronouns or coordinated expressions (see (10a), (13a)). These are discussed in Deal (2015a) and Deal (To appear c). This paradigm also shows two options for case-marking in coordinations: case-markers may appear on both coordinates ('balanced coordination'), as in (14a), or just on the final one ('unbalanced coordination' – the term coming from Johannessen 1998), as in (13a). This pattern is discussed in Deal (To appear c); variation between the two options is apparently free. Argument omission (*pro*-drop) is very common in Nez Perce and may be seen in numerous examples of this paradigm (e.g. (1a), (3a)). Here, unlike in the text, I do not provide *pro* arguments in the examples. Some arguments are explicitly marked as optional because speakers volunteered this information when the data was elicited. No conclusion about optionality should be drawn regarding those elements not explicitly marked as optional here.

- (1a) 'Ee pfi-'yaax-ni-m-a cepéletp'et-pe.
 2SG.CLITIC RECIP-find-P-CIS-REM.PAST picture-LOC

2sg/1sg: 'You found me in the picture.'

- (2a) 'Eetx pa-'yaaax-ni-m-a cepéletp'et-pe.
 2PL.CLITIC S.PL-find-P-CIS-REM.PAST picture-LOC

2pl/1sg: 'You guys found me in the picture.'

- (3a) Jim-nim hi-'yaaax-n-a cepéletp'et-pe.
 Jim-ERG 3SUBJ-find-P-REM.PAST picture-LOC

3sg/1sg: 'Jim found me in the picture.'

(4a) Matt kaa George-nim hi-pa-'yááĥ-n-a
 Matt.NOM and George-ERG 3SUBJ-S.PL-find-P-REM.PAST
 ('iin-e) cepéletp'et-pe.
 (1SG-ACC) picture-LOC

3pl/1sg: 'Matt and George found me in the picture.'

(5a) 'Ee náac-'yaĥ-ni-m-a ('iin kaa Matt-ne)
 2SG.CLITIC O.PL-find-P-CIS-REM.PAST (1SG.NOM and Matt-ACC)
 cepéletp'et-pe.
 picture-LOC

2sg/1pl: 'You found us (me and Matt) in the picture.'

(6a) 'Eetx pa-náac-'yaĥ-ni-m-a cepéletp'et-pe.
 2PL.CLITIC S.PL-O.PL-find-P-CIS-REM.PAST picture-LOC

2pl/1pl: 'You guys found us in the picture.'

(7a) Jim-nim hi-náac-'yaĥ-n-a ('iin kaa Matt-ne)
 Jim-ERG 3SUBJ-O.PL-find-P-REM.PAST (1SG.NOM and Matt-ACC)
 cepéletp'et-pe.
 picture-LOC

3sg/1pl: 'Jim found us (me and Matt) in the picture.'

(8a) Matt kaa George-nim (nuun-e)
 Matt.NOM and George-ERG (1PL-ACC)
 hi-pa-náac-'yaĥ-n-a cepéletp'et-pe.
 3SUBJ-S.PL-O.PL-find-P-REM.PAST picture-LOC

3pl/1pl: 'Matt and George found us (me and someone else) in the picture.'

(9a) 'Ee 'iyááĥ-n-a cepéletp'et-pe.
 2SG.CLITIC find-P-REM.PAST picture-LOC

1sg/2sg: 'I found you in the picture.'

(10a) 'Ee 'im-ené pa-'yááĥ-n-a cepéletp'et-pe.
 2SG.CLITIC 2SG-ACC S.PL-find-P-REM.PAST picture-LOC

1pl/2sg: 'We found you in the picture.'

(11a) Jim-nim 'ee hi-'yááĥ-n-a cepéletp'et-pe.
 Jim-ERG 2SG.CLITIC 3SUBJ-find-P-REM.PAST picture-LOC

3sg/2sg: 'Jim found you in the picture.'

- (12a) Matt kaa George-nim 'ee
 Matt.NOM and George-ERG 2SG.CLITIC
 hi-pa-'yáaâ-n-a cepéletp'et-pe.
 3SUBJ-S.PL-find-P-REM.PAST picture-LOC
3pl/2sg: 'Matt and George found you in the picture.'
- (13a) 'Eetx 'iyáaâ-n-a ('iim kaa Matt-ne)
 2PL.CLITIC find-P-REM.PAST (2SG.NOM and Matt-ACC)
 cepéletp'et-pe.
 picture-LOC
1sg/2pl: 'I found you_{pl} (you_{sg} and Matt) in the picture.'
- (14a) 'Eetx pa-'yáaâ-n-a 'im-ené kaa Matt-ne
 2PL.CLITIC S.PL-find-P-REM.PAST 2SG-ACC and Matt-ACC
 cepéletp'et-pe.
 picture-LOC
1pl/2pl: 'We found you and Matt in the picture.'
- (15a) Jim-nim 'ee hi-'yáaâ-n-a ('iim kaa
 Jim-ERG 2SG.CLITIC 3SUBJ-find-P-REM.PAST (2SG.NOM and
 Matt-ne) cepéletp'et-pe.¹⁷
 Matt-ACC) picture-LOC
3sg/2pl: 'Jim found you (you_{sg} and Matt) in the picture.'
- (16a) Matt kaa George-nim 'eetx
 Matt.NOM and George-ERG 2PL.CLITIC
 hi-pa-'yáaâ-n-a cepéletp'et-pe.
 3SUBJ-S.PL-find-P-REM.PAST picture-LOC
3pl/2pl: 'Matt and George found you guys in the picture.'
- (17a) 'Aw-'yáaâ-n-a Matt-ne cepéletp'et-pe.
 3OBJ-find-P-REM.PAST Matt-ACC picture-LOC
1sg/3sg: 'I found Matt in the picture.'

¹⁷I suspect that there is an error in this example: the clitic pronoun should be 'eetx '2PL.CLITIC', as in (13a). However, this form was checked with speakers.

- (18a) 'A-pa-'yáaâ-n-a Matt-ne cepéletp'et-pe.
 3OBJ-S.PL-find-P-REM.PAST Matt-ACC picture-LOC
1pl/3sg: 'We found Matt in the picture.'
- (19a) 'Ee 'aw-'yáaâ-n-a Matt-ne cepéletp'et-pe.
 2SG.CLITIC 3OBJ-find-P-REM.PAST Matt-ACC picture-LOC
2sg/3sg: 'You found Matt in the picture.'
- (20a) 'Eetx 'a-pa-'yáaâ-n-a Matt-ne cepéletp'et-pe.
 2PL.CLITIC 3OBJ-S.PL-find-P-REM.PAST Matt-ACC picture-LOC
2pl/3sg: 'You guys found Matt in the picture.'
- (21a) Jim-nim páa-'yaâ-n-a Matt-ne cepéletp'et-pe.
 Jim-ERG 3/3-find-P-REM.PAST Matt-ACC picture-LOC
3sg/3sg: 'Jim found Matt in the picture.'
- (22a) Matt kaa George-nim páa-'yaâ-c-i-na
 Matt.NOM and George-ERG 3/3-find-IMPERF-S.PL-REM.PAST
 Matt-ne cepéletp'et-pe.
 Matt-ACC picture-LOC
3pl/3sg: 'Matt and George found Matt in the picture.'
- (23a) 'A-náac-'yaâ-n-a Matt kaa Jim-ne
 3OBJ-O.PL-find-P-REM.PAST Matt.NOM and Jim-ACC
 cepéletp'et-pe.
 picture-LOC
1sg/3pl: 'I found Matt and Jim in the picture.'
- (24a) 'A-pa-'yáaâ-n-a Matt kaa Jim-ne
 3OBJ-S.PL-find-P-REM.PAST Matt.NOM and Jim-ACC
 cepéletp'et-pe.
 picture-LOC
1pl/3pl: 'We found Matt and Jim in the picture.'
- (25a) 'Ee 'a-náac-'yaâ-n-a Matt kaa Jim-ne
 2SG.CLITIC 3OBJ-O.PL-find-P-REM.PAST Matt.NOM and Jim-ACC
 cepéletp'et-pe.
 picture-LOC
2sg/3pl: 'You found Matt and Jim in the picture.'

(26a) 'Eetx 'a-pa-'yáax̄-n-a Matt kaa Jim-ne
 2PL.CLITIC 3OBJ-S.PL-find-P-REM.PAST Matt.NOM and Jim-ACC
 cepéletp'et-pe.
 picture-LOC

2pl/3pl: 'You guys found Matt and Jim in the picture.'

(27a) Jim-nim hi-náac-'yaḥ̄-n-a Bill kaa Jill-ne
 Jim-ERG 3SUBJ-O.PL-find-P-REM.PAST Bill.NOM and Jill-ACC
 cepéletp'et-pe.
 picture-LOC

3sg/3pl: 'Jim found Bill and Jill in the picture.'

(28a) Bill kaa Jill-nim hi-náac-'yaḥ̄-n-a Jim
 Bill.NOM and Jill-ERG 3SUBJ-O.PL-find-P-REM.PAST Jim.NOM
 kaa Beth-ne cepéletp'et-pe.
 and Beth-ACC picture-LOC

3pl/3pl: 'Bill and Jill found Jim and Beth in the picture.'

A.2 *cewcewi* 'call', present habitual aspect, present tense

Linguistic notes: This paradigm shows *when*-clauses, formed with temporal demonstrative *kaa* and agreeing A' complementizer *ke*. (The status of this element as an A' complementizer is discussed in Deal (To appear a); complementizer agreement is discussed in Deal (To appear b).) Therefore, this set of examples shows a full paradigm both for verb agreement and for complementizer agreement.

Like the previous paradigm, this paradigm features clitic pronouns, both balanced and unbalanced coordinations, and extensive argument omission and optionality. In (28b), the object is a deverbal agentive noun which does not inflect for plural, but which controls plural object agreement. On the absence of plural marking for deverbal agentive nouns, see Deal (2015b).

(1b) ke-m kaa (pii)-cewcew-téetu-m ('iin-e)
 C-2 then RECIP-call-HAB.PRES-CIS 1SG-ACC

2sg/1sg: 'when you call me'

(2b) ke-pe-m kaa ('iin-e) cewcew-tée-'nix
 C-PL-2 then 1SG-ACC call-HAB.PRES-S.PL

2pl/1sg: 'when you guys call me'

- (3b) ke-x kaa Angel-nim hi-cewcew-téetu
 C-1 then Angel-ERG 3SUBJ-call-HAB.PRES
3sg/1sg: ‘when Angel calls me’
- (4b) ke-x kaa Angel-nim kaa Tatlo-nm hi-cewcew-tée-’nix
 C-1 then Angel-ERG and Tatlo-ERG 3SUBJ-call-HAB.PRES-S.PL
3pl/1sg: ‘when Angel and Tatlo call me’
- (5b) ke-m kaa ’ee nees-cewcew-téetu-m
 C-2 then 2SG.CLITIC O.PL-call-HAB.PRES-CIS
2sg/1pl: ‘when you call us’
- (6b) ke-pe-m kaa nees-cewcew-tée-’nix
 C-PL-2 then O.PL-call-HAB.PRES-S.PL
2pl/1pl: ‘when you guys call us’
- (7b) ke-x kaa Angel-nim hi-nees-cewcew-téetu nuun-e
 C-1 then Angel-ERG 3SUBJ-O.PL-call-HAB.PRES 1PL-ACC
3sg/1pl: ‘when Angel calls us’
- (8b) ke-x kaa hi-nees-cewcew-tée-’nix
 C-1 then 3SUBJ-O.PL-call-HAB.PRES-S.PL
3pl/1pl: ‘when they call us’
- (9b) ke-m-ex kaa cewcew-téetu
 C-2-1 then call-HAB.PRES
1sg/2sg: ‘when I call you’
- (10b) ke-pe-m-ex kaa cewcew-tée-’nix
 C-PL-2-1 then call-HAB.PRES-S.PL
1pl/2sg: ‘when we call you (singular)’
- (11b) ke-m kaa Angel-nim hi-cewcew-téetu
 C-2 then Angel-ERG 3SUBJ-call-HAB.PRES
3sg/2sg: ‘when Angel calls you (singular)’

- (12b) ke-pe-m kaa Angel-nim kaa Tatlo-nm
 C-PL-2 then Angel-ERG and Tatlo-ERG
 hi-cewcew-tée-’nix
 3SUBJ-call-HAB.PRES-S.PL
3pl/2sg: ‘when Angel and Tatlo call you (singular)’
- (13b) ke-pe-m-ex kaa cewcew-téetu
 C-PL-2-1 then call-HAB.PRES
1sg/2pl: ‘when I call you guys’
- (14b) ke-pe-m-ex kaa (’eetx) cewcew-tée-’nix
 C-PL-2-1 then 2PL.CLITIC call-HAB.PRES-S.PL
1pl/2pl: ‘when we call you guys’
- (15b) ke-pe-m kaa Angel-nim hi-cewcew-téetu
 C-PL-2 then Angel-ERG 3SUBJ-call-HAB.PRES
3sg/2pl: ‘when Angel calls you guys’
- (16b) ke-pe-m kaa Angel kaa Tatlo-nm
 C-PL-2 then Angel.NOM and Tatlo-ERG
 hi-cewcew-tée-’nix
 3SUBJ-call-HAB.PRES-S.PL
3pl/2pl: ‘when Angel and Tatlo call you guys’
- (17b) ke-x kaa ’e-cewcew-téetu Angel-ne
 C-1 then 3OBJ-call-HAB.PRES Angel-ACC
1sg/3sg: ‘when I call Angel’
- (18b) ke-x kaa ’e-cewcew-tée-’nix Angel-ne
 C-1 then 3OBJ-call-HAB.PRES-S.PL Angel-ACC
1pl/3sg: ‘when we call Angel’
- (19b) ke-m kaa ’e-cewcew-téetu Angel-ne
 C-2 then 3OBJ-call-HAB.PRES Angel-ACC
2sg/3sg: ‘when you call Angel’
- (20b) ke-pe-m kaa ’e-cewcew-tée-’nix Angel-ne
 C-PL-2 then 3OBJ-call-HAB.PRES-S.PL Angel-ACC
2pl/3sg: ‘when you guys call Angel’

- (21b) ke kaa Angel-nim pee-cewcew-téetu Tatlo-na
 C then Angel-ERG 3/3-call-HAB.PRES Tatlo-ACC
3sg/3sg: ‘when Angel calls Tatlo’
- (22b) ke kaa pee-cewcew-tée-’nix Angel-ne
 C then 3/3-call-HAB.PRES-S.PL Angel-ACC
3pl/3sg: ‘when they call Angel’
- (23b) ke-x kaa ’e-nées-cewcew-tetu
 C-1 then 3OBJ-O.PL-call-HAB.PRES
1sg/3pl: ‘when I call them’¹⁸
- (24b) ke-x kaa ’e-nees-cewcew-tée-’nix
 C-1 then 3OBJ-O.PL-call-HAB.PRES-S.PL
1pl/3pl: ‘when we call them’
- (25b) ke-m kaa (’ee) ’e-nees-cewcew-téetu
 C-2 then 2SG.CLITIC 3OBJ-O.PL-call-HAB.PRES
2sg/3pl: ‘when you call them’
- (26b) ke-pe-m kaa ’eetx ’e-nees-cewcew-tée-’nix
 C-PL-2 then 2PL.CLITIC 3OBJ-O.PL-call-HAB.PRES-S.PL
2pl/3pl: ‘when you guys call them’
- (27b) ke kaa Angel-nim hi-nees-cewcew-téetu
 C then Angel-ERG 3SUBJ-O.PL-call-HAB.PRES
3sg/3pl: ‘when Angel calls them’
- (28b) ke kaa Angel kaa Tatlo-nm hi-nees-cewcew-téetu
 C then Angel.NOM and Tatlo-ERG 3SUBJ-O.PL-call-HAB.PRES
 cepelixnixewetúu-ne
 worker-ACC
3pl/3pl: ‘when Angel and Tatlo call the workers’

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