Complete defectivity:
Intransitive argument encoding in transitive clauses

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Defectivity refers to underspecification of nominals with respect to φ-features. While partial defectivity has been proposed as the source of various syntactic properties of certain types of nominals, this paper argues that defectivity may also be complete, i.e. nominals may lack both person *and* number specification. Based on empirical data drawn from Nez Perce, Niuean, and Selayarese, I argue that completely defective nominals are invisible for the case and agreement system, which in effect yields a case and agreement pattern as in intransitive clauses. They are, however, relevant for principles of syntactic locality, which constrain their distribution and their interaction with other nominals.

1. Introduction

Silverstein markedness scales are widely adopted in the typological literature to describe the distinct behavior of certain types of nominals with respect to case marking, verbal agreement, word order, etc. (Hale 1972; Silverstein 1976; Dixon 1994). To illustrate, elements towards the lower end of the definiteness scale (1) are not overtly case-marked in object position in languages such as Hindi and Turkish, while objects having properties high the scale are. Apart from case marking, other properties (e.g., word order) are apparently sensitive to these scales as well.

(1) SILVERSTEIN DEFINITENESS SCALE
    Personal pronoun > Proper noun > Definite > Indefinite Specific > Non-Specific

Within formal approaches to argument encoding it is, however, not clear how scales such as (1) may be implemented and whether they are to be acknowledged as theoretically real entities to begin with. While the influential work of Aissen (1999, 2003) recognizes scales as a theoretical primitive, recent research in the Minimalist Program aims to treat these scales as epiphenomena of independently motivated syntactic principles (see Brown et al. 2004; Richards 2004, 2008a,b; Adger & Harbour 2007; Heck & Richards 2007; Harbour 2008; Wiltschko 2008). One conceivable approach, adopted here, is to assume that the different elements on the scale

(1) with respect to the features they are specified for. In particular, elements low on the scale bear fewer features than elements high on the scale, i.e. they are *defective*. Because of this difference in feature content, these elements interact differently with their syntactic environment, leading to distinct behavior with respect to case marking, agreement and word order. In this view, then, markedness scales are merely a descriptive tool, their apparent influence reducing to independently motivated principles of syntactic computation.

Suppose that this line of research, illustrated in more detail in section 2, is on the right track. The natural question arises as to the limits of the defectivity. Restricting my attention to instances of defectivity of φ-features, previous proposals have identified elements lacking *either* person *or* number features. I will refer to such nominals as *partially defective*. From the point of view of a blind and autonomous syntax embodied in the Minimalist program, nothing seems to exclude in principle the existence of nominals lacking both number and person at the same time, interacting with other elements and syntactic operations in their own way. All else being equal, it would be a suspicious state of affairs if such elements, which I will call *completely defective*, did not exist.

Against this background, the present paper argues that there is indeed evidence for completely defective nominals, thus closing a gap in the typology of defective elements unearthed so far. Based on data from Nez Perce, Niuean, and Selayarese, I will show that the properties of such radically defective nominals provide an account for apparent effects of Silverstein scales without actual reference to such scales.

The paper is structured as follows: Section 2 gives a brief overview of the approach to scale effects as the result of φ-defectivity proposed by Richards (2008a,b). Against this background, section 3 discusses the relevant data used to motivated my claim. Section 4 proposes my analysis for these data in terms of complete defectivity. Finally, section 5 draws the conclusion.

2. *Scale effects as defectivity*

In order to show how apparent effects of markedness scales may be accounted for by defectivity, I will illustrate a recent proposal by Richards (2008a,b). The discussion will identify an *a priori* possible pattern of defectivity that is not made use of in Richard's proposal (or, as far as I know, any other proposal). The question whether this type of defectiveness does indeed exist or not will then serve as the starting point for my own suggestion. My answer will be positive.

Based on the observation that 1st and 2nd person pronouns are inherently definite, and, conversely, that indefinites are always 3rd person, Richards (2008a,b) suggests that a person specification on indefinites is redundant.[1] If language is perfect in the sense of the Strong Minimalist Thesis (as elaborated by Chomsky 2004, 2007, 2008), such redundancy is barred, which in turn entails that indefinites do not contain a syntactic person features. The result are two implications holding between the presence of syntactic person features on the one hand and semantic interpretation on the other: A person feature entails a specific/definite interpretation,

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[1]A reminiscent reasoning for animacy features can be found in Adger & Harbour (2007) and Heck & Richards (2007). I am, in fact, simplifying Richard's proposal, which is concerned not only with definitness but with animacy as well. Since animacy will play no role in what I have to say and in order to streamline the discussion, I am confining my attention to definiteness here.

while a weak interpretation in turn implies the absence of a person specification.[2] For illustration, I will exemplify this system on the basis of definiteness restrictions and word order differences.

2.1.   Application 1: Definiteness restrictions

This section outlines the above system for ditransitives in Àkán (Niger-Congo; Sáàh & Ézé 1997; Haspelmath 2007) and English expletives.

In Àkán, the direct object in ditransitives has to be indefinite, as illustrated in (2a). To account for this fact, Richards (2008a) assumes that in ditransitives a single verbal head (*v*) has to φ-agree with both the direct and the indirect object (see Anagnostopoulou 2003, among many others). A further assumption is that dative nominals contain a syntactic 3rd person feature but no number feature (see Richard's original paper for motivation). While both definite and indefinite direct objects contain a number feature, the crucial difference between the two is that the former, but not the latter, in addition bears a person feature. Given that *v* comprises exactly one person and one number probe, the following interaction (illustrated in (2b)), emerges: Regardless of the definiteness of the direct object, the indirect object agrees with *v* for person, thus rendering the person probe inactive and leaving only a number probe. If the direct object is definite, its person feature cannot be licensed via Agree, thus leading to a crash of the derivation. Given that indefinite nominals do not contain a person feature, no problem arises if the direct object is indefinite. Its number feature may be checked by the number probe on *v*.

(2) *Àkán*

   a. Ámá màà mè sìká   (*nó)
      Ama gave 1SG money   the
      'Ama gave me (*the) money.'   [Richards 2008a:147f.]

A parallel account is proposed by Richards (2008a,b) for English expletive constructions. As is well known, the associate of *there* has to be indefinite (Milsark 1974; Barwise & Cooper 1981; see (3a)). Assuming *there* to be base-generated in Spec,*v*P (Richards & Biberauer 2005; Richards 2007; Deal 2009) and comprises a default 3rd person feature, T may agree with the expletive *and* its associate only if the latter is not specified for person (see (3b)). As only person-less nominals lead to a converging derivation, the indefiniteness restriction is accounted for.

(3) a. There arrived a / *the man.

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[2]Note that this proposal is not tantamount to the view that 3rd person elements generally lack a person feature (Kayne 2000; Anagnostopoulou 2003, 2005; Rezac 2003; Sigurðsson 2003). Under the view adopted here 3rd person nominals may have a person features, namely if they receive a strong interpretation.

2.2. Application 2: Movement asymmetries

Apart from different interaction of definite and indefinite nominals with verbal φ-probes, φ-defectivity may lead to differences in nominal movement. As is well-known, a nominal may receive a strong or weak interpretation depending on its syntactic position; witness the contrast in (4) and (5). In (4a) and (5a), the nominal has moved to a higher position. In the perspective taken here, this movement is possible only if the nominal is specific. If it is interpreted weak, it remains in situ (as the (b) sentences show).

(4) GERMAN
    a. Er hat *ein Buch* oft   *t* gelesen
       he has a   book often read
       'There's a book that he often read.'
    b. Er hat oft   *ein Buch* gelesen
       he has often a   book read
       'He has often read a (non-specific) book.'

(5) MANDARIN CHINESE
    a. *Kèren* lái-le   *t*
       guest come-PERF
       '(The) guest came.'
    b. Lái-le   *kèren*
       come-PERF guest
       'There came (some) guests.'

These movement asymmetries follow from featural defectivity under the assumption that the EPP-property in German and Chinese is associated with a person probe (cf. (6)). EPP-triggered movement thus only takes place if a nominal enters into a person agree relation with the relevant probe. Non-specific nominals, lacking a person feature, remain in a low position.[3] The result is an optional EPP, affecting only those nominals that contain a person feature (i.e. are specific/definite).

(6) OPTIONAL EPP
    [∗PERSON∗]$_{EPP}$

2.3. Partial and complete defectivity

Richards (2008a,b) makes crucial use of defectivity, i.e. the assumption that nominals may lack certain φ-features. While his account is applied to various other phenomena in addition to the two mentioned here, it suffices for our present purposes to note that the typology of defective elements encountered so far include only instances of partial defectivity – nominals that lack some, but not all, φ-features (see (7)), revealing a *prima facie* peculiar gap: As person and number specifications can be separately missing, one naturally is led to expect nominals lacking both features simultaneously, thereby giving rise to complete defectivity. This option has, however, not been employed so far, leaving the gap in (7) unexplained.[4]

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[3] It follows, of course, that the person probe cannot be valued if there is no goal containing a person feature. To salvage the derivation, Richards (2008a,b) assumes that person probes (and only person probes) may receive a default valuation. This move also accounts for the fact that the verb in English expletive constructions is morphologically marked for a person feature (as in (3a)). This person agreement does *not* stem from the indefinite nominal, but rather is the result of default valuation.

[4] Here and throughout, I am abstracting away from gender. As soon as gender is taken into account, the *a priori* expected patterns of defectivity become considerably more diverse. I leave this option for future research.

(7) *Attested person/number specifications*

| | | PERSON | |
		yes	*no*
NUMBER	*yes*	1st, 2nd, 3rd definite	indefinite
	no	datives, expletives	**?**

In the remainder of this paper, I will argue that there is indeed empirical evidence to assume the existence of completely defective nominals, viz. nominals lacking both person and number features. The recognition of such nominals closes the gap identified above and lends further support for defectivity as the source of distinct syntactic and morphological behavior.

3. Empirical evidence

This section outlines the empirical evidence that my proposal is based on. In a nutshell, I will identify a unified pattern holding in the three non-related languages Nez Perce, Niuean, and Selayarese. This recurring pattern finds a straightforward explanation in terms of complete defectiveness of nominals.

3.1. Nez Perce

Nez Perce, a Penutian language also known as Nuumiipuutímt, has received considerable attention from both typologically and theoretically inclined linguists. Descriptive work includes Aoki (1970), Rude (1985, 1986, 1988, 1991, 1992), and Crook (1999); formal treatments of Nez Perce are Woolford (1997), Carnie & Cash Cash (2006), and Deal (2007, 2010). I will proceed by giving an overview of the argument encoding pattern in transitive and intransitive clauses. For very helpful additional discussion of the issues raised here the reader is referred to Deal (2010).

3.1.1. Intransitive clauses

In intransitive clauses the subject is not overtly case-marked. The verb agrees with the subject in number in person, each feature associated with its own morpheme. The relevant morphemes are given in (8); examples are provided in (9).

(8) a. person agreement: 1/2: ∅-   b. number agreement: SG: ∅-
                       3: *hi-*   PL: *pe-*

(9) a. ∅-tuqíse
      'I/you smoke.'
   b. *hi*-tuqíse
      'S/he smokes.'   [Cash Cash 2004:28]
   c. *hi-pe*-kúuye
      'They went.'   [Rude 1985:37]

   d. *hi-pa*-k'oomay-na   mamáy'ac-∅
      3SUBJ-PL-be.sick-PERF children
      'The children were sick.'   [Deal 2010:74]

3.1.2. *Transitive clauses*

In transitive clauses the subject and object are overtly marked for case: The subject bears the 'ergative' marker *-nim*, the object receives 'objective' case marking (*-ne*). The verb agrees with both subject and object for person and number. Person agreement is expressed by a portmanteau marker, while number of subject and object are realized separately. Plurality of the subject is marked with *pe-*, plural objects trigger the prefix *nées-*. Incidentally, two of the four person markers also occur in intransitive clauses, as does the plural subject marker on the verb (*pe-*). The verbal agreement prefixes in transitive clauses thus comprise those in intransitive clauses. (10) gives an overview; (11) provides examples.

(10) *Verbal person prefixes (transitive and intransitive clauses)*

	SUBJECT	OBJECT
/∅-/	not 3rd	no object, or object not 3rd
/'e-/	not 3rd	3rd
/hi-/	3rd	no object, or object not 3rd SG
/pee-/	3rd SG	3rd SG

(11) a. *'e*-qícqce
    'I/you take care of him/her.'
  b. *pée*-qicqce
    'S/he takes care of him/her.'
                [Cash Cash 2004:28]
  c. *hi-náas*-himay-liwak-sa
    3SG-PL_OBJ-suspect-wrongly-IMPERF
    'He is falsely accusing them.'
          [Deal & O'Connor 2004:10]

  d. *'e-pe-nées*-hex-ne
    1/2>3-PL_SUBJ-PL_OBJ-see-PAST
    'We see them.'   [Rude 1985:39]
  e. pit''íin-*im páa-*'yax̂-na
    girl-ERG 3SG>3SG-find-PERF
    picpíc-*ne*
    cat-OBJV
    'The girl found the cat.' [Deal 2010:75]

3.1.3. *The 'pseudo-antipassive'*

The crucial piece of evidence for the present discussion is that transitive clauses may also appear in a second form, which I will call 'PSEUDO-ANTIPASSIVE' (PAP; a term going back to Woolford 1997). The construction has the properties listed in (12).

(12) a. Subject and object are not morphologically case-marked.
  b. The verb agrees solely with the subject (for number and person), employing the same markers as in intransitive clauses.
  c. Semantically, the object is obligatorily interpreted as a weak indefinite (Rude 1985; Crook 1999; Carnie & Cash Cash 2006; Deal 2010).
  d. The object may be syntactically complex.

To ease comparison between 'normal' transitive clauses and the PAP construction, consider (13).

(13) a. 'ipí-nm   pée-qn'íi-see   qeqíit-ne
      she-ERG 3>3-dig-INC edible.root-OBJV
      'She is digging the qeqiit.'
   b. 'ipí-∅   hii-qn'íi-see   qeqíit-∅
      she   3-dig-INC   edible.root
      'She is digging qeqiit.'   [Crook 1999:238]

In (13a) the object is definite. Concomitantly, the case and agreement pattern is that of canonical transitive clauses, with the subject and object receiving overt case marking (-*nm* and -*ne*, respectively), and the verb agreeing with both arguments (cf. the portmanteau prefix *pée-*). By contrast, (13b) instantiates the PAP: Subject and object are not morphologically case-marked and the verb only agrees with the subject (cf. the intransitive subject agreement marker *hii-*). Semantically, the object receives an existential, weak interpretation.

   Another example is (14). As the contrast in (14a) attests, a proper name in object position is compatible with a canonical transitive clause but not with the PAP construction, as proper names cannot be interpreted as weak indefinites. Names are, however, compatible with the PAP once they are interpreted as non-referential, as in (14b).[5] Notice also that (14b) shows that the object of the PAP construction may be syntactically complex.

(14) a. *Context:* We're organizing a ballgame and picking players for our teams.
       (i)   nuun   'e-wewluq-siix   Harold-ne   poX̂pok'líit-ki
             1PL 3OBJ-want-IMPERF.PL Harold-OBJ ballgame-INSTR
             'We want Harold for the ballgame.'
       (ii) #nuun wewluq-siix   Harold poX̂pok'líit-ki
             1PL   want-IMPERF.PL Harold ballgame-INSTR
             Intended: 'We want Harold for the ballgame.'   [Deal 2010:86]
   b. kísmis-pe   sapátk'ayn wewluq-siix   Meli kaa Coseph
      christmas-LOC show   want-IMPERF.PL Mary and Joseph
      'For the Christmas show we want a Mary and a Joseph.'   [Deal 2010:86]

The implication between the construction involved and the interpretation assigned to the direct object is mono-directional rather than bidirectional. While PAP objects are always interpreted as weak indefinites, objects of canonical transitive clauses may receive either interpretation. We have already seen a strong interpretation in (13a), while (15) demonstrates that case-marked objects may be in principle interpreted weak.

(15) sik'ém-nim kúnk'u pée-wewluq-se   timaaníi-ne
     horse-ERG   always 3>3-want-IMPERF apple-OBJV
     'The horse always wants an apple.'   [Deal 2010:75]

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[5]Incidentally, (14b) also makes it clear that it is the subject, and not the object, that controls the single person agreement slot on the verb in the PAP construction. As stated in (8) above, a 1st or 2nd person subject triggers a zero prefix, whereas a 3rd subject leads to the exponent *hi-*. In (14b) the verb does not bear an overt prefix (as opposed to (13b)), making it clear that it is the 1st person subject and not the 3rd person object that is relevant. Furthermore, in (14b) plural agreement with the subject is instantiated by a portmanteau suffix also marking aspect and overwriting the plural prefix *pe-* otherwise expected. This is a regular phenomenon in Nez Perce and not restricted to the PAP.

In sum, the empirical generalization seems to be that a certain class of nominals is 'invisible' as far as argument encoding is concerned and uniformly mapped unto a weak reading. Various analyses appear feasible, mostly because important questions cannot be answered on the basis of the Nez Perce data alone. Thus, we have seen that both subject and object in the PAP are not morphologically case-marked. One may account for this by assuming that these elements receive a special syntactic case which happens to receive zero exponence (as in, e.g., Woolford 1997). Alternatively, this pattern may be analysed as the complete absence of syntactic case marking. Equally conceivable is a mixture of these approaches, treating zero marking as morphological on one argument and syntactic on the other argument. To tease these possibilities apart, a language is needed that instantiates the same general pattern as Nez Perce but, importantly, does not comprise a morphological zero marker. Such a language would allow us to differentiate between morphological default marking and the complete absence of syntactic case marking. The discussion of Niuean in the next section aims to show exactly this. To foreshadow the conclusion, I will argue that the object does not receive a syntactic case to begin with. The subject, on the other hand, is marked just as in intransitive clauses, which happens to be null in Nez Perce.

A second question concerns the locus of the defectivity. We have seen that the object in the PAP does not contribute to verbal agreement. One may conclude either that the object is fully furnished with φ-features but for some reason fails to enter into an Agree relation with the verb or, alternatively, that the object itself is deficient. These two possibilities may be teased apart by observing whether the object itself may be marked for φ-features or not. As, recall, the object is obligatorily indefinite, no pronoun may be inserted into the object position for independent reasons. That leaves number. Under the defective Agree analysis, the object, containing a full set of φ-features, may in principle bear a plural marker. The alternative analysis (φ-defective objects) predicts plural marking to be impossible on the object, as it does not contain the relevant features to begin with. *Prima facie* evidence for the latter analysis comes from (16). Here the object of the PAP is semantically plural but does not bear an overt plural marker (despite the gloss, taken over from the original source).

(16) wéete-ex hip-o'qa tìm'áanit?
      q-1   eat-CND apples
      'May I eat the apples?'   [Crook 1999:214]

Upon closer scrutiny, however, it turns out that plural marking on nominals in Nez Perce is restricted to specific human objects and emphasized inanimates. This restriction holds regardless of whether they appear in the PAP construction or not.[6] There is thus an independent factor restricting overt plural marking on nominals. (16) may be plausibly attributed to this factor, entailing nothing about the feature status of the object. In sum, while (16) is fully compatible with a treatment of the object as φ-deficient, it does not provide strong evidence against alternative approaches. Again, to distinguish empirically between these alternatives, a language is called for

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[6]Thus, even object nominals that trigger plural agreement on the verb may remain unmarked for number themselves. Consider (i):

(i) Háama-nm hi-néec-'wi-ye   wewúkiye-ne
     man-ERG   3SUBJ-PL_OBJ-shoot-ASP elk-OBJV
     'The man shot the elk (pl).'   [Rude 1988:552]

that shows *obligatory* number marking on nominals. Niuean instantiates an appropiate test case, providing evidence for the view that the object is indeed featurally defective.

3.2. Niuean

In this section I argue that the Polynesian language Niuean (Seiter 1980; Massam 2000, 2001) exhibits the same alternation in transitive clauses as Nez Perce. The different morphological properties of Niuean allow us to distinguish between several conceivable analyses for the Nez Perce data. The important properties of Niuean are that it (i) does not have a zero case marker and, (ii) obligatorily marks plural nominals.

3.2.1. Canonical argument encoding

Niuean has no verbal agreement[7] and an ergative case system. The case markers depend on the nature of the nominal they are attached to (see (17)) Importantly, there is no zero case marker[8] Examples of transitive and intransitive clauses are given in (18).

(17) *Niuean case markers*

	ERGATIVE	ABSOLUTIVE
proper nouns / pronouns	*e*	*a*
common nouns	*he*	*e*

(18) a. Ne   tohitohi a   Sione
       PAST writing ABS Sione
       'Sione was writing.'
    b. Ko e tele e   Sione a   Sefa
       PRES kick ERG Sione ABS Sefa
       'Sione is kicking Sefa.'

   c. Ne   kai he pusi ia   e   moa
      PAST eat ERG cat that ABS chicken
      'That cat ate the chicken.'

      [Massam 2001:155]

3.2.2. 'Pseudo noun incorporation'

In addition to the case marking pattern outlined above, transitive clauses may also appear in second form, called 'PSEUDO NOUN INCORPORATION' (PNI) by Massam (2001).[9] This construction has the properties in (19):

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[7] This statement is not entirely correct. An idiosyncratic class of verbs agrees with some argument (some with the subject, others with the object). See Seiter (1980) and Legate (2008) for discussion.

[8] This generalization holds for all case markers in Niuean in addition to those in (17). See Seiter (1980:37) for a comprehensive list.

[9] Seiter (1980) analyses the construction as an instance of noun incorporation, a view challenged by Massam (2001), who provides convincing evidence against an incorporation analysis.

(19) a. The object bears no case marker, the subject, in turn, is marked with the absolute markers *a* or *e*.

    b. The word order changes from VSO to VOS.

    c. Semantically, the object is obligatorily interpreted as a weak indefinite.

    d. The object may not bear plural marking.

    e. The object may in principle contain syntactic structure.

To compare canonical transitive clauses with PNI, consider the pairs in (20) and (21). The canonical clause in (20a) exhibits case marking of subject and object, VSO order and a definite interpretation of the object. In the PNI in (20b), by contrast, the object does not receive case marking and the subject is marked as absolute. Furthermore, the word order is VOS and the object is interpreted weak. (21a) shows that the object of a canonical transitive may receive overt plural marking, in contrast with the PNI in (21b), where the object does not bear overt plural marking.

(20) a. Ne inu e Sione e kofe
      PAST drink ERG Sione ABS coffee
      'Sione drank the coffee.'

    b. Ne inu kofe a Sione
      PAST drink coffee ABS Sione
      'Sione drank coffee.'   [Massam 2000:98]

(21) a. Kua tā he tama e tau fakatino
      PERF draw ERG child ABS PL picture
      'The child has been drawing pictures.'

    b. Kua tā fakatino e tama
      PERF draw picture ABS child
      'The child has been drawing pictures/doing art-work.'   [Seiter 1980:70]

That the object in a PNI construction may comprise more than one syntactic head – thus rendering implausible an analysis in terms of incorporation – is shown in (22). Massam (2001:160) further shows that the object may even contain functional morphemes.

(22) Ne inu *kofe kono* a Mele
     PAST drink coffee bitter ABS Mele
     'Mary drank bitter coffee.'   [Massam 2001:158]

3.2.3. Comparison to Nez Perce: The overarching pattern

Reassassing Nez Perce from the point of view of the Niuean patterns opens up the possibility of a unified treatment. The overarching property of both systems is that certain transitive clauses exhibit case and agreement patterns just like in intransitive clauses. The object is systematically ignored as far as case and agreement is concerned and invariably interpreted as a weak indefinite. These similarities suggest a unified approach, a possibility that I will pursue here (also see Carnie & Cash Cash 2006 for the same conclusion).

    Suppose that the Nez Perce PAP and Niuean PNI are indeed the result of a uniform mechanism. As this mechanism interacts with different syntactic and morphological properties in Nez Perce and Niuean, combining the empirical generalizations from both languages allows us to narrow down the analytic possibilities. In particular, Niuean helps to answer the questions left unresolved

in section 3.1. First, given that subject and object receive no overt case marking in the Nez Perce PAP, it is *a priori* unclear whether this is a syntactically relevant fact or a mere morphological zero marker. To resolve this issue, recall from (17) that Niuean does not have a zero case marker. In the PNI construction the object is nevertheless not marked for case. There is no warrant to assume that a special zero case exponent, occurring solely in this construction, is at stake here. The absence of overt marking on objects thus strongly suggests that these objects do not receive a syntactic case feature. Subjects, by contrast, are marked with the absolutive, just as in intransitive clauses. By the reasoning above, this characterization carries over to Nez Perce. We thus conclude that the object of the PAP is not marked for case syntactically, whereas the subject receives the same case as in intransitive clauses, which in Nez Perce happens to be realized by a zero exponent (cf. the noun *mamáy'ac* 'children' in (9d)).

The second question left open for Nez Perce concerns number marking of the object in the PAP. Recall that the object may not control number agreement on the verb. All else being equal, this may be taken to show that either the object does not contain a number feature to begin with or, alternatively, that the object does contain a number specification but for some reason fails to enter an Agree relation with the verb. To distinguish between these possibilities, it is relevant whether the object itself may bear a number marker. For Nez Perce, the empirical data is inconclusive (recall the discussion on page 8). Again, Niuean allows to decide this issue. As shown in (21), the object of canonical clauses bears the marker *tau* if plural, but systematically fails to do so in the PNI construction. As there is no independent principle of 'plural drop' in Niuean, this property as plausibly associated with the PNI. The observation (from Niuean) that the object in the construction at hand may not be marked for number, taken together with the fact (from Nez Perce) that it may furthermore not control number agreement on the verb is straightforwardly captured if the object does not contain a number specification to begin with.

To conclude, combining the empirical evidence from Niuean and Nez Perce reveals the following two generalizations: First, in the construction under considerations the subject is case-marked just as in intransitive clauses; the object is not case-marked at all. Second, the object does not contain a number specification.

3.3.   Selayarese

The last language to be discussed is Selayarese (Austronesian; Basri & Finer 1987; Finer 1997, 1999; Basri 1999; Béjar 1999). I will argue that it exhibits a further instantiation of the pattern identified in Nez Perce and Niuean. Selayarese is primarily relevant because it exemplifies the third logical possibility of argument encoding: While Nez Perce has case marking and verbal agreement, Niuean only marks case. Selayarese only has verbal agreement.

3.3.1.   Canonical argument encoding

In contrast to Nez Perce and Niuean, Selayarese does not employ an overt case system, but only verbal agreement with both subject and object, using the exponents in (23). In intransitive clauses, the subject controls suffix person agreement on the verb. The verbal prefix position is

filled with a dummy 'INTRANSITIVE' marker, as exemplified in (24). In transitive clauses, on the other hand, the object controls suffix agreement on the verb. The pattern of φ-agreement is hence ergative, as the transitive object controls the same type of agreement as the intransitive subject. The verbal prefix position is filled by subject agreement, which hence takes the place of the 'intransitive' prefix. Agreement in transitive clauses is illustrated in (25).

(23) *Verbal agreement markers in Selayarese*

	1SG	1PL.EXCL	1PL.INCL/ 2HON	2FAM	3
ERGATIVE	*ku-*	*to-*	*ri-*	*mu-*	*la-*
ABSOLUTIVE	*-a*	*-kaŋ*	*-ki*	*-ko*	*-i*

(24) a. al-lari-a
　　 INTR-run-1SG
　　 'I ran.'
　 b. aʔ-lampa-i
　　 INTR-leave-3
　　 'S/he left.'　　　　[Basri 1999:238]

c. ak-kelong-ko
　 INTR-sing-2FAM
　 'You sang.'　　　　[Finer 1997:680]

(25) a. ku-alle-i　doeʔ-iɲjo
　　 1SG-take-3 money-DEF
　　 'I took the money.'
　 b. la-ʔalle-i doeʔ-iɲjo　i　　Baso?
　　 3-take-3　money-DEF PERS Baso?
　　 'Baso? took the money.'[10]

c. la-keoʔ-a i　　Baso?
　 3-call-1SG PERS Baso?
　 'Baso? called me.'
d. ku-keoʔ-ko
　 1SG-call-2FAM
　 'I called you.'　　　　[Finer 1997:679]

3.3.2.　Indefinite objects

Transitive clauses in Selayarese in addition to the forms in (25) can also appear in a second form (which does not have a specific name in Selayarese), associated with the properties in (26). For illustration, compare the transitive clause pairs in (27) and (28), respectively.

(26) a. The object does not induce agreement on the verb.
　 b. The subject triggers suffix agreement.
　 c. The verbal prefix position is filled by the 'intransitive' marker.
　 d. The object is interpreted as indefinite.

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[10] *i* in, e.g., (25b) appears before human proper nouns. It is not a case marker as it marks subjects and objects alike, as shown in (i):

(i) ku-isseʔ-i　kuko la-jaɲjang-i i　　Ali i　　Baso?
　　1SG-know-3 COMP 3-saw-3　　PERS Ali PERS Baso?
　　'I know that Baso? saw Ali.'　　　　　　　　[Finer 1997:687]

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(27) a. la-halli-i lika-ɲjo   i   Ali
     3-buy-3 banana-DEF PERS Ali
     'Ali bought the bananas.'

  b. a-malli-i   loka   i   Ali
     INTR-buy-3 banana PERS Ali
     'Ali bought bananas.'   [Basri 1999:47]

(28) a. ku-halli-i   palola-ɲjo
     1SG-buy-3 eggplant-DEF
     'I bought the eggplant(s).'

  b. am-malli-a   palola
     INTR-buy-1SG eggplant
     'I bought eggplant(s).'   [Basri 1999:19]

While the canonical transitive clauses in the respective sentences in (a) show verbal agreement with subject and object, in the sentences in (b) the verb only agrees with the subject.

The Selayarese data are amenable to the same generalization as Nez Perce and Niuean. In the construction in (27b) and (28b) the object does not participate in the case and agreement system and the verb correspondingly falls back to the intransitive pattern, showing suffix agreement with the subject and a dummy morpheme in prefix position.

3.4. Section summary

This section has laid out the empirical pattern that my proposal will be based on. We have identified a uniform pattern in three unrelated languages. The hallmark property of this pattern are summarized in (29).

(29) a. The subject controls person and number agreement on the verb in the same form that it does in intransitive clauses.
    b. The object receives no syntactic case marking and does not contribute to verbal agreement. It does not bear number marking, suggesting that it lacks number features altogether. Semantically, the object receives a weak interpretation.

This pattern may be claimed to instantiate the Silverstein markedness scale (1) at work. First, it is noteworthy that the pattern is asymmetrical: In none of the above languages is it possible to reverse the role of subject and object, so that only the object would participate in the case and agreement system, with the subject being ignored and assigned a weak interpretation. Furthermore, in terms of the scale (1), objects are unmarked if non-specific (but, note, not subjects). This hierarchical unmarkedness corresponds to less overall morphological markedness. In the construction at hand there are generally less markers employed than in canonical transitive clauses (no case marker on the object, less verbal agreement markers, less number markers). Thus, a configuration with a canonical (i.e. non-specific) object is correlated with less morphological distinctions. As observed above, the effect is systematically restricted to objects.

This correlation can be taken as evidence for Silverstein scales. As discussed in section 1, these scales state that hierarchical markedness in terms of these scales correlates with morphological markedness, precisely the pattern we find in the three languages at hand.[11]

Suppose, however, that the status of markedness scales is unclear and that it is preferable to account for these patterns by means of independently motivated syntactic principles. In light of the defectivity approach to scale effects sketched in section 2, the question arises whether this

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[11]See Keine (to appear) for an explicit treatment of the phenomenon at hand in terms of markedness scales.

reasoning may be extended to the pattern identified here. The next section argues that it can, once one carries the notion of φ-defectivity one step further. If nominals may not only be partially defective but also completely so, the pattern observed above receives a principled explanation.

4. Analysis

This section puts forth a treatment of the phenomenon described in the previous section in terms of defectivity. I propose that the object in the construction instantiates the missing combination in (7): It lacks both person and number features and is thus completely barred from undergoing φ-Agree. Following recent work in Minimalist syntax, I adopt the view of case and agreement as two reflexes of one and the same Agree operation. It follows that completely defective nominals do no enter into the case system either. The observation that the distribution of such defective nominals is restricted to the object position of transitive clauses follows from *defective intervention*, which is itself derived as the combined effect of the Phrase Impenetrability Condition and the Minimal Link Condition. To the extent that the account is on the right track, then, it provides a further argument that apparent effects of markedness scales may be reduced to featural defectivity and its interaction with independently motivated syntactic principles. I will start this section by laying out the syntactic background assumptions that my analysis is couched in.

4.1. Preliminaries

I adopt the standard assumption that ungrammaticality results from the presence of unvalued features at the end of the derivation. Put differently, a general LEGITIBILITY CONDITION requires the final representation to not contain unvalued features (i.e. case and φ-probes). Valuation of features takes place under AGREE, defined in (30).

(30) AGREE ($\mathbb{P}$[robe],$\mathbb{G}$[oal])   (adapted from Richards 2008b, itself drawing from Chomsky 2000, 2001)
    a. $\mathbb{P}$ c-commands $\mathbb{G}$,
    b. $\mathbb{P}$ and $\mathbb{G}$ are active,
    c. $\mathbb{P}$ matches $\mathbb{G}$ for feature F,
    d. $\mathbb{G}$ is interpretable (=valued) for F.
    $\mathbb{P}$ values and deletes uF on $\mathbb{G}$; $\mathbb{G}$ values and deletes uF on $\mathbb{P}$.

(30b) demands that both the probe and the goal be *active*. By assumption, a syntactic element is active if it contains an unvalued features (Chomsky's 2000, 2001 ACTIVITY CONDITION). As probes are by definition unvalued, probing heads are always active. This does not, however, hold for goals. Confining our attention to φ-Agree, a nominal's φ-features may only value a φ-probe if the nominal contains at least one unvalued (i.e. probing) feature. Chomsky (2000, 2001, 2004) argues that it is the nominal's case feature that implements the Activity Condition on Agree, thereby giving us a rationale for the existence of case features to begin with. Provided that a φ-probe on $\mathbb{P}$ c-commands $\mathbb{G}$ containing valued φ-features and an unvalued case feature (i.e. conditions (30a–d)), φ-Agree then (i) values the φ-probe on $\mathbb{P}$ by copying $\mathbb{G}$'s φ-value onto it,

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and (ii) values $\mathbb{G}$'s case feature depending on the syntactic category of $\mathbb{P}$ (i.e. nominative if T, accusative if v, etc.). Once the case feature on $\mathbb{G}$ is valued, it is rendered inactive and thus does not qualify as an accessible goal for further φ-Agree operations. Thus, under the conception of Agree embodied in (30) case valuation emerges as a by-product, capturing directly the conception of case and agreement as two facets of the same operation (Rouverat & Vergnaud 1980; George & Kornfilt 1981; Schütze 1997; Boeckx 2003).

Concerning the nature of the case feature, I will assume here, for reasons discussed immediately, that it is a diacritic on φ-sets (Richards 2004, 2008a,b). Put differently, case is not associated with nominals *per se* but with their φ-features. It follows that nominals without φ-features also lack an unvalued case feature.[12] Conceptually, this assumption may be justified by appealing to the fact that φ-less nominals definitionally are unable to act as goals to begin with, so there is no need to render them active by the presence of a case feature.

From this system it follows that nominals lacking all φ-content do not participate in any case or φ-agreement interactions as they may neither act as a goal not as a probe of an Agree dependency (see Baker 1988 and Ormazabal & Romero 2007 for similar proposals).

4.2.   *Defective and non-defective nominals*

Against the broad background depicted in the previous section I propose that the three languages under consideration contain the nominal elements in (31). DP_c in (31a) is a non-defective element containing person and number features and a case diacritic. DP_d (31b), on the other hand, is fully defective. It comprises neither person nor number features and, correspondingly, no case diacritic. The subscripts 'c' and 'd' are mnemonic for *complete* and *defective*, respectively.

(31) a. DP_c: $\begin{bmatrix} \text{NUMBER} \\ \text{PERSON} \end{bmatrix}_{u\text{CASE}}$ b. DP_d: $\begin{bmatrix} \\ \end{bmatrix}$

Notice that despite their distinct featural make-up, both types of nominals have the same syntactic category, i.e. both are DPs.[13] This assumption will be crucial for the account of the locality

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[12]I deviate from Chomsky (2000, 2001) here, who treats case features as associated with nominals in general. This assumption would effectively rule out the existence of completely defective nominals. Given that case probes may only be valued by φ-Agree, the case feature of completely defective nominals could never be valued and would thus invariably lead to a legitibility violation. To the extent that the proposal made here is empirically justified, it provides support for the position that case is only indirectly associated with nominals, namely through their φ-features.

[13] I diverge here from the position adopted in Richards (2008a,b), according to which a person feature is situated on D and defective elements, lacking person, are NPs rather than DP. As Richards motivates this assumption conceptually rather than empirically, empirical coverage is not affected by treating defective elements as DPs. Notice, in addition, that treating these nominals as NPs encounters a number of problems. First, carrying a person feature is most plausibly not the only contribution of D. Suppose that D type-shifts predicates (type $\langle e,t \rangle$) to arguments (type $\langle e \rangle$), as standardly assumed. Semantic computation then requires the presence of a D projection regardless of its φ-content. Second, if c-selection plays a role in syntactic structure-building, assigning non-defective elements the status of DPs and defective ones the status of NPs predicts their distribution to be significantly different, with any similarity being a coincidence. This is, however, contrary to fact. Third, given that the nominal *a man* in (3a) is partially defective, Richard's conception is forced to assume that *a* is not a D element, leaving the ungrammaticality of *the a man puzzling (especially when compared to the viability of *the one man*).

considerations in section 4.3. As for the semantic interpretation of these elements, I suggest that (31b), but not (31a), is systematically restricted, along the lines in (32).

(32) DP_d is obligatorily interpreted as a weak indefinite.

(32) has the consequence that while DP_d is mapped unto a weak (viz. existential) interpretation, DP_c may in principle receive any interpretation, be it strong, weak or generic. Although I will not go into the semantic details here, the intuition behind (32) is that defective nominals, in virtue of being defective, may only be interpreted by existential closure (i.e. binding by an existential operator outside of the nominal), giving rise to a weak reading. Non-defective DP's, on the other hand, may be interpreted in any number of ways due to their fully developed feature content. Thus, they may receive a referential interpretation but existential quantification is also an option.[14] Of course, the range of possible interpretations may be restricted by external factors, e.g. whether the nominal is or is not within the range of existential closure. Complete nominals as such are not subject to such restrictions. (32) immediately accounts for the semantic facts found in the three languages at hand. Recall the discussion on page 7. Defective elements (i.e. the object in the PAP/PNI construction) are invariably mapped onto a weak reading. Non-defective nominals, by contrast, detectable by case marking and verbal agreement, may be interpreted either strong (as in (11e)) or weak (as the object in (15)).[15]

While DPs in the three language under discussion may take one of the two forms in (31), the verbal functional domain may employ the varieties of *v* and T in (33). They may be freely combined, the only requirement being that at the end of the derivation no unvalued features remain.[16,17] Alternative conceptions are possible. For reasons discussed below, the only crucial assumption is that T is active in intransitive clauses.

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[14]See Borer (2005:ch.5) for a similar proposal. In her approach, quantifiers and other elements may optionally assign range to $\langle e \rangle_d$ and thereby optionally give rise to a strong or a weak reading.

[15]To appreciate the role of (32), compare it to a different characterization proposed in Richards (2008a,b), which confines the interpretation of *complete* nominals to a definite reading, while not restricting the interpretation of defective ones. First of all, given that the presence of *there* in English forces the associate to be defective (see section 2.1), this fact is, after all, surprising in Richards' system, while (32) captures the observation that only a weak interpretation of these associates is possible. A more general problem concerns the interpretation of preverbal elements in languages with an optional EPP (see (6)), such as Hebrew (Borer 2005). In Hebrew, elements interpreted as weak indefinites must remain post-verbally, suggesting, in Richards' system, that the EPP feature is linked to a person feature. It follows that any preverbal nominal must be complete. As it turns out, such nominals are however ambiguous between a strong reading and a generic one. Given that existential and generic interpretation are brought about by the same mechanism (binding by an outside operator), it is dubious to rule out weak interpretations of complete nominals in principle. If, by contrast, there is no restriction on the interpretation of complete elements (as suggested here) the Hebrew facts follow straightforwardly if preverbal nominals are not within the domain of existential closure and may hence not be interpreted by an existential operator. Third, if only defective but not complete nominals are semantically restricted, there is no need for a mechanism of default valuation to account for the fact that weak indefinites may co-occur with verbal agreement (see footnote 3).

[16]For expository purposes the starred notation in (33) and below designates unvalued, probing features.

[17]Notice that person and number are conceived of here as independent probes. See Sigurðsson & Holmberg (2008) and references cited there for discussion.

(33) *Varieties of v and T*

    a. T_c: $\begin{bmatrix} *\text{PERSON}* \\ *\text{NUMBER}* \end{bmatrix}$ b. T_d: $[*\text{NUMBER}*]$

    c. v_c: $\begin{bmatrix} *\text{PERSON}* \\ *\text{NUMBER}* \end{bmatrix}$ d. v_d: $[*\text{PERSON}*]$

Case valuation, being a by-product of ɸ-Agree, proceeds as follows. Upon entering into ɸ-Agree with, e.g., v_c, a DP's case feature is valued to OBJECTIVE, which, in Nez Perce, is spelt out by the marker *-na*. For concreteness, the case realization is given for Nez Perce in (34).[18]
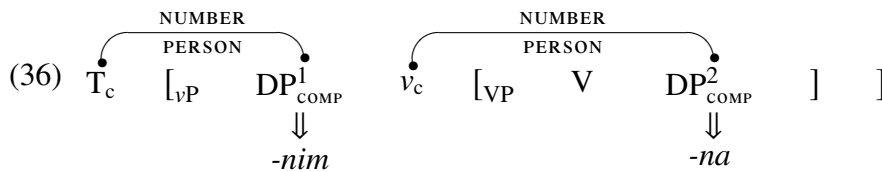
(34) *Case valuation (Nez Perce)*

v_c	→	[OBJECTIVE]	↝ *-na*
T_c	→	[ERGATIVE]	↝ *-nim*
elsewhere	→	[NOMINATIVE]	↝ -∅

The system laid out so far gives rise to a number of converging derivations and blocks various others. Let us begin by considering intransitive clauses. If the sole nominal (regardless of whether it starts out within the VP or *v*P) contains both person and number features, the choice of T_d and v_d in (33) results in a licit derivation, depicted in (35). Both v_d and T_d may enter into ɸ-Agree with DP_c, thereby valuing DP's case to NOMINATIVE. The verb agrees with the nominal in person and number. This derivation results in constructions such as (9). As DP_c is not subject to (32), no inherent semantic restrictions arise.

(35) T_d $[_{vP}$ DP_c v_d V   ]

   ⟸NUMBER⟶ ⟨PERSON⟩

                ⇓

               -∅
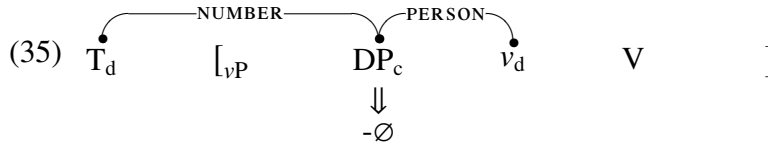
If the clause is transitive, the following options arise: First, both the subject and the object may be ɸ-complete. Under this choice, only selection of T_c and v_c results in a converging derivation. v_c agrees with the object in person and number and the object receives the case feature OBJECTIVE by (34), spelt out as *-na*. The subject undergoes Agree with T_c, its case feature valued as ERGATIVE and spelt out as *-nim*. This derivation is depicted in (36). The verb agrees with both of its arguments. Examples of this derivation in Nez Perce are (11) and (15).

(36) T_c $[_{vP}$ DP^1_{COMP} v_c $[_{VP}$ V DP^2_{COMP}]]

        NUMBER   NUMBER

        PERSON   PERSON

            ⇓   ⇓

         -nim   *-na*

A second viable derivation includes DP_c in subject and DP_d in object position. This derivation gives rise the PAP/PNI construction. DP_d lacking all ɸ-features, it is effectively irrelevant for all

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[18]The system in (34) gives rise to a three-way case system. See Legate (2008) for arguments that Niuean as well has a three-way system underlyingly, but objective and nominative happen to be mapped unto the same morphological exponent. As Selayarese does not show overt case marking, it is fully compatible with (34).

purposes of φ-Agree. Thus, only the choice of the functional heads converging in intransitive clauses leads to successful derivation here. This accounts without further ado for the generalization (29a) that case and agreement in the PAP/PNI is exactly as in intransitive clauses. The concrete derivation is illustrated in (37). The subject agrees with v_d and T_d, its case feature being valued as NOMINATIVE. The verb only agrees with the subject. Since the object does not enter into any φ-Agree operation, it is not syntactically case marked. Furthermore, because it does not comprise a number feature, no number marking occurs. Last, by (32) the object is interpreted as a weak indefinite. The derivation in (37) thus derives all the properties identified for the construction in (29). Examples of this derivation are the PAP cases in (13b) and (14b) and the corresponding constructions in Niuean and Selayarese.

(37) T_d [$_{vP}$ DP_c v_d [$_{VP}$ V DP_d]   ]
NUMBER — PERSON
⇓
-∅
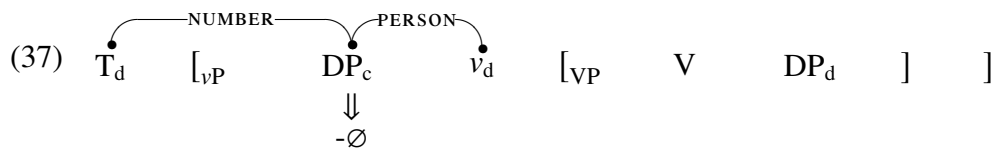
The system laid out so far rules out a number of *a priori* conceivable combinations as invariably doomed to fail. As already suggested above, selection of DP_d in an intransitive clause may not lead to convergence under any selection of functional heads. The same holds for selection of two DP_d in a transitive clause, as none of them may value the φ-probes on v and T.

There is one wrinkle here, however, in that the system allows transitive clauses with DP_d as subject and DP_c as object. This constellation, shown in (38), would give rise to the mirror image of the PAP/PNI: Only the object is relevant for case and agreement, the subject being caseless and interpreted weak. In none of the three languages under discussion does this structure exist. In other words, as noted in section 3.4, the pattern is fundamentally asymmetric. The present account, relying only on the matching of goal and probe features, does not yet capture this asymmetry. The next section argues that the observable asymmetry between subject and object positions follows immediately once further assumptions are made concerning syntactic locality.

(38) *Configuration to be ruled out*

*T_d [$_{vP}$ DP_d v_d [$_{VP}$ V DP_c]   ]
PERSON
NUMBER
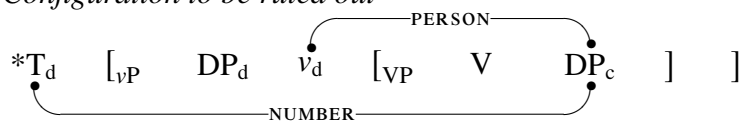
4.3. Locality constraints

The previous section identified a potential problem for the analysis so far: While DP_c in subject and DP_d in object position gives rise to a licit derivation, the opposite pattern should be barred for empirical reasons. The system laid out in the previous section does not accomplish that.

As a starting point, it is worth noting that the configuration in (38) involves Agree between T and the object *over the subject*. This closely resembles instances of DEFECTIVE INTERVENTION, in which a defective (i.e. inactive) element β blocks Agree between α and γ if α c-commands β and β c-commands γ (Chomsky 2000, 2001). The conceptual status of defective intervention is, however, controversial (see, e.g., Richards 2008b for various arguments against it). Not least of

all, it is unclear why it should hold, and why, if it holds, only some elements act as defective interveners (i.e. Agree is not blocked by every intervening syntactic node).

In the remainder of this section I will argue that – at least for the case in (38) – the apparent defective intervention effect can be reduced to the interaction of two independently motivated locality principles: (i) the Phase Impenetrability Condition (PIC), and (ii) the Minimal Link Condition (MLC).

The PIC as proposed by Chomsky (2000) in (39) renders material inside the complement of v inaccessible for syntactic operations as soon as T is merged.

(39) Phase Impenetrability Condition (Chomsky 2000:108)
     In phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

A direct consequence of (39) is that ϕ-Agree between T and the object DP in (38) is ruled out as long as the object remains in its VP-internal base position. This restriction is, of course, independent of the presence of DP_d in subject position. The only way to bring about an Agree relation between the two elements is to move DP_c to the edge of the vP phase. After such movement has taken place, the object would no longer reside in the complement of v and agreement with T would no longer be prohibited by the PIC. It is thus clear that such movement of the object to a specifier of vP would again allow to derive a variant of the structure in (38), an undesired consequence.

In order to constrain edge movement, I will invoke a distinction between *structure-building features* (triggering Merge) and *probing features* (leading to Agree). Both types of features are uninterpretable and must hence be deleted. They differ, however, with respect to the operation capable of deleting them.

(40) a. structure-building feature [●X●] → triggers Merge
     b. probing feature [∗X∗] → triggers Agree

Against the distinction in (40), consider the nature of categorial and ϕ-features. While categorial features are irrelevant for Agree (i.e. verbs do not agree with nominal argument in 'nounhood'), they are clearly relevant for structure building (cf. the notion of *c-selection*: some verbs take sentences but no nominals as arguments, while others merge with nominals but no sentences). Plausibly, then, categorial features are structure-building. ϕ-features on the other hand, are not relevant for Merge (i.e. there are no verbs which only merge with a 2nd person plural object or some such). They are, however, models of agreeing features, as assumed throughout.

This conception of Merge being triggered by categorial features and Agree being sensitive to ϕ-features has the following consequence. Recall from (31) that DP_c and DP_d only differ with respect to their ϕ-content but are identical as far as their categorial label is concerned (also see fn. 13). As Merge by the above reasoning is blind to ϕ-features and only sensitive to categorial features, it follows that DP_c and DP_d are quite simply indistinguishable for Merge.

Suppose further that movement is just *Internal Merge* (Chomsky 2004). Edge movement then emerges as an application of Merge. As a consequence, edge movement is sensitive to categorial features but blind to ϕ-features. As DP_c and DP_d differ only with respect to their ϕ-features, edge

movement may not discriminate between them. As a consequence of this state of affairs, I submit, a higher DP_d blocks movement of DP_c over it, as a violation of the Minimal Link Condition.

To flesh this out in more detail, suppose that edge movement to Spec,vP is triggered by *edge features*, which, following Chomsky (2000, 2001, 2008), can be freely inserted once the phase head v is otherwise inactive, i.e. after it has discharged all of its features (*contra* Müller 2010), as stated in (41). In the case at hand, edge movement of DP_c would be triggered by inserting [●D●].

(41) Condition on edge feature insertion
An edge feature [●X●] may be freely inserted into a phase head once this phase head is otherwise inactive.

Edge movement, as any movement, is subject to the Minimal Link Condition (MLC) in (42). Closeness is defined in (43).

(42) Minimal Link Condition
Movement of an element α with feature X over another element β with the same feature is blocked if the movement is triggered by a structure-building feature [●X●] on γ and β is closer to γ than α.

(43) Closeness
Goal β is closer to probe α than goal γ if a. and b. hold
a. α m-commands[19] both β and γ,
b. β asymmetrically c-commands γ.

The network of assumptions developed in this section blocks movement of DP_c over DP_d to the edge of vP in (38). By (41), the feature triggering edge movement of DP_c in object position can only be inserted after DP_d in subject position has been merged. After this merger, however, DP_d counts as closer to v than DP_c. Because Merge is generally insensitive to φ-features, regardless of which feature is inserted into v to induce edge movement of DP_c, DP_d *always* intervenes, thereby blocking edge movement by (42). Since, as a consequence, DP_c may not be moved out of the VP, the PIC (39) blocks Agree between T. This situation is depicted in (44).

(44) T_d [$_{v}$P DP_d v_d [$_{VP}$ V DP_c]   ]

(PIC)

(MLC)
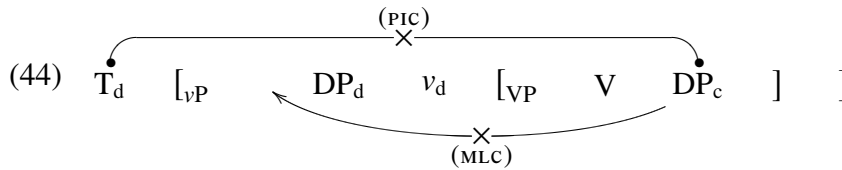
The joint effects of strict locality (PIC), relativized locality (MLC) and the inventory of functional heads in (33) thus yields the result that in any configuration with DP_d in subject position and DP_c in object position, certain features invariably remain unvalued, leading to a crash. This system then accounts for observation that such structures are not attested in the languages at hand. Considerations of syntactic locality thus achieve the result of making the pattern asymmetric.

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[19]The notion of m-command is necessary here to derive the result that a specifier counts as closer to a head than something embedded in its complement. As an alternative, one may assume that a probe projects upon Merge and then c-commands the specifier, or that closeness is measured by *path length*, which has basically the same effect. Both alternatives have been independently suggested.

Recall once again from section 3.4 that the distribution of DP_d is restricted to the object position. This asymmetry between subject and object position follows from the system developed above because objects, but not subjects reside in a different phase then T. Since Agree between T and DP_c is mandatory if the other argument is DP_d, a locality problem arises if DP_c is is object position but not if it the subject. In sum, then, no resort to markedness scales is necessary to properly restrict the distribution of the nominal elements employed here.[20]

From a more general perspective, the account of the apparent defective intervention effect induced by DP_d in subject position is viewed here as the result of the PIC, the MLC and, crucially, categorial identity. In essence, then, the intervention is by no means defective. It arises because Merge is systematically blind to certain features and DP_d is *non*-defective for the features Merge can be sensitive to. Whether this account of defective intervention may be extended to other cases that have been used to motivate the principle remains to be seen. It is not attempted here.

In conclusion, I have made a proposal to derive the asymmetry between subject and object position with respect to the availability of completely defective nominals. The account makes use of independently motivated constraints on locality, viz. the PIC and the MLC. The crucial ingredient of the analysis is that defective and non-defective nominals bear the same syntactic category and are thus indistinguishable for edge movement operations. Consequently, movement of DP_c over DP_d is barred, leading to ungrammaticality if DP_c occupies the object position. By contrast, if a defective nominal is situated in object position, no edge movement is necessary: The object does not need to agree with T, while the complete subject can do so without prior edge movement.

4.4.   *Deriving movement asymmetries*

A final property of complete defective nominals is illustrated by the Niuean data discussed in section 3.2. Depending on whether the object is DP_c or DP_d, the word order varies. This contrast is illustrated, e.g., by the pair in (20). If the object is complete – i.e. if it participates in the case system – the word order is VSO, as seen in (20a). If the object is defective, by contrast, as in (20b), the word order has the form VOS. The observation that defective elements behave differently with respect to movement is not surprising, given the discussion of German and Chinese in section 2.2. To recap, the account proposed by Richards (2008a) to capture such asymmetries lies in associating an EPP-property with a person probe. An element entering into an Agree relation with this person probe is moved into the specifier of the head carrying the person probe. As a consequence, ϕ-complete nominals undergo this movement step, while ϕ-defective ones do not. Incidentally, I take the observation that the elements under discussion here behave

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[20]Apart from the analysis proposed here, various alternatives are conceivable. As Marcel den Dikken (p. c.) points out to me, one might also invoke the PIC as in the main text plus some linearization requirement. Movement of the object to Spec,vP makes object and subject equidistant and hence non-linearizable. This analysis is, however, incompatible with the account for the word order difference in Niuean developed in section 4.4 below. In addition, the analysis makes the prediction that the configuration should converge if the subject or the object subsequently moves to a higher position. As far as I know, this prediction is not borne out.

Another possible approach is to assume that the subject position is outside of the domain of existential closure. As defective nominals may only be interpreted by existentially (cf. (32)), no interpretation can be assigned to them.

just as other elements for which an approach in terms of defectivity has been suggested as general evidence for the claim that these elements instantiate a further pattern of defectivity.

I will demonstrate in this section that Richards's (2008a) account of the word order differences in German and Chinese carries over to Niuean. Suppose that in Niuean the probes of v_c are associated with an EPP-property, as indicated in (45).

$$(45) \quad v_c \begin{bmatrix} *\text{NUMBER}* \\ *\text{PERSON}* \end{bmatrix}_{\text{EPP}}$$

As discussed in detail above, DP_c, but not DP_d, undergoes ϕ-Agree with v_c and is hence moved to a specifier of vP. Suppose, following Massam (2000, 2001), that – at least in Niuean – the verb-initial word order is the result of VP fronting. As a consequence, if the object is DP_c, it moves out of the VP and VP fronting only fronts the verb overtly. This gives rise to the word order VSO, as depicted in (46).[21] If, by contrast, the object is defective, it does not agree with v and is hence unaffected by the EPP.[22] Remaining in VP, DP_d is fronted along with the verb, resulting in the word order VOS. See (47).

(46) a. [$_{vP}$ Subj Obj$_c$ v [$_{VP}$ V $\boxed{\text{Obj}_c}$]]

                    EPP

   b. [$_{VP}$ V ⟨Obj$_c$⟩] [$_{vP}$ Subj Obj$_c$ v $\boxed{[_{VP}\ \text{V}\ ⟨\text{Obj}_c⟩\ ]}$]

                    VP-FRONTING

   c. *Result:*
     [$_{VP}$ V ⟨Obj$_c$⟩] … [$_{vP}$ Subj Obj$_c$ v ⟨[$_{VP}$ V ⟨Obj$_c$⟩] ⟩] = (20a)

(47) a. [$_{VP}$ V Obj$_d$] [$_{vP}$ Subj v $\boxed{[_{VP}\ \text{V}\ \text{Obj}_d\ ]}$]

                  VP-FRONTING

   b. *Result:*
     [$_{VP}$ V Obj$_d$] … [$_{vP}$ Subj v ⟨[$_{VP}$ V Obj$_d$] ⟩] = (20b)

In sum, then, the fact that defective elements interact differently with verbal probes – overtly visible by the distinct argument encoding patterns – may be put to use to derive the fact that they also behave differently with regard to movement. Hence, word order differences follow.

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[21]Notice that in order to obtain the ordering VSO in (46), it is necessary that object movement takes place *before* subject merger. At first glance, this seems to be at odds with the MLC-based blocking of object movement in (44) above, which crucially relies on object movement taking place *after* merging the subject. However, no contradiction arises. Recall that in (44) object movement is triggered by an edge feature and thus has to apply after subject merger (by (41)). By contrast, object movement in (46) is brought about by a base-generated property of v. It merely has to be ensured that ϕ-Agree with the object takes place before merging the subject, e.g., by giving the ϕ-probe priority.

[22]To be precise, the converging structure in this case does not include v_c to begin with, so the issue does not arise in the first place.

5. *Conclusion*

In conclusion, in this paper I have argued that ɸ-defectivity is not restricted to the absence of *either* person *or* number specification but may involve the lack of both features. This assumption, coupled with a series of independently proposed syntactic principles, accounts for the empirical hallmark properties associated with these nominals. As motivated in section 3, these nominals do not trigger verbal agreement and do not receive syntactic case marking. This is accounted for because, lacking ɸ-features and hence a case diacritic, these nominals are irrelevant for ɸ-Agree. The object itself does not bear a number marker, which straightforwardly follows from its lacking a number feature. The obligatorily weak interpretation of these nominals follows from the semantic principle (32). The subject, on the other hand, behaves as in intransitive clauses for case and agreement marking. Under the analysis proposed here, this follows because of the general invisibility of defective nominals for Agree. Only the selection of functional heads converging in intransitive clauses yields a licit result if the object is defective. Another pervasive property associated with these elements is that they are only permissible in object position. In the present system no converging derivation is possible if a defective nominal resides in subject position – either because the number of probes does not match the number of goals to begin with (if, e.g., the object is defective as well), or because the object's ɸ-features are out of reach for T. Lastly, movement asymmetries between complete and defective nominals follow by furnishing verbal ɸ-probes with an EPP-property.

A general property of the analysis suggested here is that it does not make use of markedness scales but rather derives their apparent effects as epiphenomena of feature specifications and narrow syntactic principles. Furthermore, no grammatical function changing operations are at stake. All the properties of the relevant constructions are the result of unusual (completely defective) nominals in otherwise entirely regular transitive clauses.

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