Chapter 1

Eliciting data on (ad)nominal person

Georg F.K. Höhn
Georg-Friedrich-August-University Göttingen

This chapter addresses the syntax and to some extent the morphology of grammatical person in nominals, focusing on so-called adnominal pronoun constructions like *we linguists*. It provides an overview of basic concepts and known points of crosslinguistic variation that can serve as a baseline against which to evaluate new data on related phenomena. Moreover, I discuss some practical aspects of the elicitation of data on nominal person. A model questionnaire is offered at the end of the chapter.

1 Introduction

The topic of person has been very much on the agenda of both descriptive and theoretical linguistic research, however attention on what I will term nominal person here has been more restricted. While a central instance of nominal person, namely pronoun-noun or adnominal pronoun constructions like *we linguists*, has received theoretical attention quite early on (e.g Postal (1969); Delorme & Dougherty (1972); Sommerstein (1972)) the focus has been mostly been on a relatively small number of languages

In grammatical descriptions of languages, expressions of nominal person tend to be rarely featured. A notable exception are the grammars based on Comrie & Smith's (1977) detailed questionnaire, which features the question in (1).[1]

(1) Are constructions of the type pronoun-noun possible where both elements have the same reference, e.g. 'we firemen…'. If so, is this possible with all pronouns or only with some. List those forms for which it is impossible. Comrie & Smith (1977: 40f.)

[1] Grammars on the basis of this questionnaire are currently published in the *Routledge Descriptive Grammars* series.

\lsCollectionPaperCitationText.

However, even descriptions on the basis of these questionnaires tend to offer very limited detail, raising serious difficulties for the investigation of typological patterns and generalisations concerning nominal person. A crucial aim of this chapter is to enable field researchers to develop detailed descriptions of nominal person and to relate their findings to the wider crosslinguistic patterns. This should facilitate an increase in the availability of empirical data on the subject and in turn lead to further development of the typological and theoretical perspectives on nominal person.

The chapter proceeds by presenting some core concepts relevant to the investigation of nominal person in Section 2. Section 3 provides an overview of a number of points of crosslinguistic variation that have been observed for nominal person. Practical issues concerning the elicitation of relevant data are discussed in Section 4. The chapter closes with a summary in Section 5 and a number of exercises in Section 7. The appendix in Section 6 presents a model questionnaire for collecting data on nominal person building on the considerations introduced throughout in this chapter.

2 Core concepts

Grammatical person reflects the relation of the reference set of a nominal expression to the basic discourse roles of the author of an utterance and its addressee(s).[2] A third (non-)role can be identified by complementarity as non-participant, i.e. any entity or individual that is neither author nor addressee of the utterance. The next subsection provides a brief outline of the featural analysis of person, focusing on the approach adopted here. Section 2.2 sketches some assumptions about the structure of the nominal domain and presents the classical pronominal determiner analysis of English adnominal pronoun constructions (APCs). In 2.3, I briefly address appositions and some ways in which they can be distinguished from APCs in languages like English.

2.1 Person features

There is wide consensus that the traditional view of person as a single trivalent feature with the three possible values first, second and third person is insufficient to capture the range of possible combinations of discourse (non-)participants, sketched in Table 1 in terms of Sokolovskaja's (1980) "meta-persons". Simple

[2] Alternatively, these roles are sometimes called speaker and hearer. I adopt the less mode-specific terminology of author/addressee here.

combination of three features based on the notions of speaker, hearer and non-participant (e.g. Postal's (1969) [±I], [±II] and [±III]) could capture the partitions in Table 1 but Bobaljik (2008) argues in detail that such an approach would be overly permissive because of the possible seven distinctions of these features listed in column a of Table 2 only the classes in column b are morphologically distinguished crosslinguistically. The third column in Table 2 provides one approach to formally representing person in terms of two bivalent features: [±spk] indicating whether the speaker is part of the reference set and [±hr] providing the same information on the hearer.

For example, while English *we* can have an inclusive reading (referring to a group including the speaker and the addressee and possibly other people) – as well as an exclusive one (referring to a group including the speaker and at least one other person, but not the addressee), other languages have distinct pronouns for the inclusive and the exclusive, as indicated by the first two rows in Table 2. On the other hand, no language seems to have special forms for true first or second persons that formally distinguish a real (homogenous) plurality of speakers or hearers from a non-homogenous plurality that includes non-speakers or non-addressees in the reference set of the pronoun.[3]

Table 1: The seven meta-persons (Bobaljik 2008: 205, (4))

1+2	speaker(s) and hearer(s); no "others"
1+2+3	speaker(s), hearer(s), and other(s)
1	speaker(s)
1+3	speaker(s) and other(s); hearer(s) excluded
2	hearer(s) only
2+3	hearer(s) and other(s)
3	other(s) only

There are several competing proposals concerning the formal representation of person, but I will not provide a detailed discussion here.[4] For the purposes of this chapter I adopt the system of person features proposed by Nevins (2007;

[3] For further discussion see Bobaljik (2008). See also Frampton (2002) for more arguments against a simple trivalent person feature.

[4] See particularly Harbour (2016) for a recent overview and a detailed proposal involving a different use of the [±auth, ±part] features. See also Harley & Ritter (2002) for a detailed outline of an approach involving feature geometries and Bobaljik (2008); Noyer (1997); Frampton (2002) for different implementations of bibvalent feature systems.

Table 2: Person distinctions (Bobaljik 2008: 206, (5))

a. Possible	b. Attested	c. Binary
1+2 1+2+3	"inclusive"	[+spk, +hr]
1 1+3	"exclusive"	[+spk, −hr]
2 2+3	"second person"	[−spk, +hr]
3	"third person"	[−spk, −hr]

2011), which uses two binary features [±auth] and [±part] to distinguish between the classical first, second and third person. The relevant definitions from Nevins (2007: 288) are provided below in (2) and (3).

(2) [−F]= ¬[+F]
   a. [+auth] = the reference set contains the speaker
   b. [+part] = the reference set contains one of the discourse participants

(3) a. [+auth, +part] = 1st person
   b. [−auth, +part] = 2nd person
   c. [−auth, −part] = 3rd person
   d. [+auth, −part] = logically impossible

As illustrated in Table 1, a system with [±speaker,±hearer] directly captures clusivity, while the system in (3) does not distinguish first person inclusive and exclusive.[5] Nevins (2007) surmises that clusivity does not seem to play a role for the effects like the person case constraint, suggesting that it need not be syntactically encoded in the same way as the basic person features. Building on McGinnis (2005), Nevins (2007: 305) proposes that languages with a clusivity distinction have an additional, unary feature [addr(essee)], which is present whenever the addressee is part of the reference set as sketched in (4).

[5] Harbour (2016) argues for a feature system very similar to that of Nevins (2007) that nevertheless captures this difference. However, that system does not seem to lend itself to the treatment of APCs as explained at the end of this section.

(4) a. [+auth, +part] = 1st person exclusive
b. [+auth, +part][addr] = 1st person exclusive
c. [−auth, +part][addr] = 2nd person
d. [−auth, −part] = 3rd person
e. [−auth, −part][addr] = logically impossible
f. [+auth, −part] = logically impossible

2.2 Nominal structure and person

The most readily recognisable form of person marking in nominal expressions are adnominal pronoun constructions (APCs) like English *we linguists*, where the person specification of an extended nominal projection (*x*nP) is expressed by means of pronouns in construction with a nominal expression.[6] This subsection outlines some basic assumptions regarding the structure of nominal projections and person on the basis of English.

I adopt the general framework of Distributed Morphology (Halle & Marantz 1993; Embick 2010; Bobaljik 2012; Arregi & Nevins 2012) for expository purposes here, meaning that syntactic structure is assumed to extend below the word level and is built up from abstract bundles of syntactic features. What are traditionally known as content words are categoryless roots which need to be syntactically combined with a categoriser (at least n, v, a) in order to form the traditional word classes. Phonological content is only added in the process of vocabulary insertion.[7] Following Panagiotidis (2015), I assume that the coherence of extended projections (van Riemsdijk (1999); Grimshaw (2005)) is based on lexical features at the their core. Consequently, the actual lexical heads are the categorisers, in particular v – carrying the feature [V] – heading verbal projections and n, carrying an [N] feature, as the head of *x*nPs. The internal coherence of an *x*nP is established by uninterpretable [uN] features on all functional heads forming part of the extended projection, which need to agree with the interpretable [N] feature at the core of the *x*nP (and hence cannot be merged with a verbal projection, which would be built around the relationship between an interpretable [V] and uninterpretable [uV] features instead).

[6] The term APC is used here without imposing a particular analysis. It also does not imply that all APCs are subject to the same structural analysis, as will be seen later.

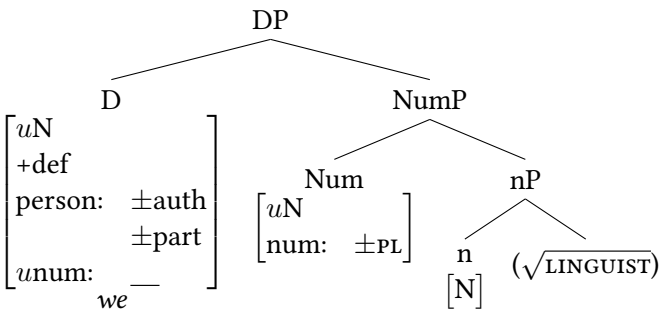
[7] While this choice is relevant for certain details of proposed analyses, the choice of this model is not of much import for distinguishing the empirical phenomena discussed in Section 3, as they can be identified as such independently of that theoretical choice.

Let us now consider English APCs like *we linguists*. The influential pronominal determiner analysis, going back to Postal (1969) and updated by Abney (1987), treats the adnominal pronoun as an instantiation of the functional head D. An argument in favour of this analysis is the observation that adnominal pronouns and the definite article are in complementary distribution in English, as shown in (5).

(5) a. *(*the) we (*the) linguists*
b. *(*the) us (*the) linguists*

On this perspective, English APCs are structurally identical to plain definite nominal expressions like *the linguists*, but simply encode non-third person features on the D head in addition to definiteness, as illustrated in (6). I follow the common assumption that number is represented on a distinct Num head in languages like English Ritter (1991; 1992; 1995).[8] The D head obtains its number specification via agreement with Num.

(6)



The next section clarifies the notion of APCs in English by showing that they differ syntactically from a superficially very similar type of construction.[9]

2.3 Distinguishing APCs

Examples like (7) seem to provide counterarguments to the suggestion in the previous subsection that APCs in English are in complementary distribution with

[8] Note that number marking may represent a modifier instead of a functional head, particularly in languages described as having optional number marking. See Wiltschko (2008); Butler (2012) for detailed discussion.

[9] For a recent rejection of the pronominal determiner analysis see Choi (2014a), which we will briefly pick up in the discussion of articles in APCs in Section 3.4.

the definite article. However, there are good grounds for distinguishing both constructions from regular APCs.

(7) a. *we the people*
b. *we, the linguists*

The construction in (b) is an instance of apposition, and the larger part of this subsection focuses on distinguishing apposition from APCs proper. Before going into details about that though, let us briefly consider the well-known phrase in (a). While I cannot offer an analysis for constructions of this sort, which I refer to as WTP constructions here for simplicity, I am going to point out some data that show their behaviour to be distinct from that APCs.

WTP constructions seem to be ruled out (or at least highly marked) as objects (8a), or as part of prepositional phrases, either as prepositional objects (9a) or as restrictor of a quantifier, even if the quantified phrase functions as the subject (10a). This clearly contrasts with the APCs in the (b) examples, which are all syntactically well-formed.

(8) a. * *The general public admires us the linguists for our humour.*
b. *The general public admires us linguists for our humour.*

(9) a. * *It can be hard to deal with us the linguists.*
b. *It can be hard to deal with us linguists.*

(10) a. * *Most of us the linguists are very agreeable people.*
b. *Most of us linguists are very agreeable people.*

It is not entirely clear what exactly is responsible for the contrast between WTP constructions and APCs illustrated in the minimal pair in (11), but a possible characterisation might be that the WTP construction is not available for contextually restricted sets of referents. The APCs in (b) do not have this problem.

(11) a. * *After the meeting, you the physicists should go to the lab, while we the linguists will go to the pub.*
b. *After the meeting, you physicists should go to the lab, while we linguists will go to the pub.*

Another difference between WTP constructions and APCs that is particular to English concerns the alternation between the nominative and accusative case

form of the pronoun, both of which can be used in APCs functioning as subjects (12b). The WTP construction in (a), however, does not allow the accusative form of the pronoun.

(12) a. * *Us the linguists are eager listeners.*
b. *We/us linguists are eager listeners.*

These contrasts show that the WTP construction has properties distinct from those of basic APCs. The appropriate analysis of WTP constructions remains an open question and to my knowledge there are no worked out proposals currently available in the literature. Importantly, the observations made here with respect to English do not mean that APCs cannot contain definite articles in general. Indeed, instances of such types of APCs in other languages are addressed in Section 3.4.[10] The above line of reasoning may, however, provide a possible starting point for assessing the status of apparently optional definite articles in APCs in other languages.

Let us now turn to apposition. This phenomenon is more likely to complicate the investigation of APCs across a wide range of languages than WTP-constructions, since some form of apposition seems to be crosslinguistically quite widely – if not universally – available. Example (7b) from above is repeated here alongside another example of apposition to a pronoun to show that it is not only the potential presence of a definite article that is at stake here.

(13) a. *we, the linguists*
b. *we, linguists from conviction*

Various arguments for distinguishing pronominal determiner structures from apposition have been made, see among others Pesetsky (1978), Lawrenz (1993) and Roehrs (2005), as well as Höhn (2016) for further references. Note that a distinction is often made between close and loose apposition (Burton-Roberts 1975; Stavrou 1995), as illustrated in (14).[11] I will focus on loose apposition first.

(14) *Burton-Roberts (1975: 391, (1)-(2))*
a. *The poet Burns was born in 1759.*

close

[10] It is unclear whether WTP-constructions have any structural similarity to APCs with definite articles beyond the surface similarity that they include a definite article. In particular, for languages with proper APCs containing definite articles, the constructions discussed above which are not specific to English should generally be available, in contrast to the (a) examples.

[11] For a recent proposal for the syntactic analysis of loose apposition see Heringa (2012).

b. *Sterne, the author of Tristram Shandy, returned to London.*
loose

The most obvious difference between loose apposition and APCs is that loose apposition typically shows a "comma-intonation", i.e. an intonational break intervening between the pronoun and the noun, often represented by commas in writing. Note that this break may be reduced in fast speech, so its presence may not always be obvious.[12] What may serve as a diagnostic, however, is the fact that such an intonational break is not typically available in APCs, at least in languages like English.

If apposition and APCs are syntactically different, we expect them to behave differently in at least some respects. One such difference concerns person restrictions, which will be discussed again in Section 3.6 below. Standard varieties of English disallow third person adnominal pronouns (see also Section 3.6 below), as shown in (15a). Appositions do not display the same restrictions, as shown in (15bc).

(15) a. * *They linguists must object to this proposal.*
b. *They, linguists (with all their heart), must object to this proposal.*
c. *They, (that is) the linguists, must object to this proposal.*

While the pronominal determiner structure in (15a) involves one *x*nP, in the appositive structures the personal pronoun appears to form a distinct *x*nP, establishing independent reference, that is further characterised in terms of the *x*nP containing the lexical noun, *linguists* in the the example above (Stavrou 1995).

Pointing out a further important contrast, Postal (1969: 218) observes that while certain negative contexts disallow appositions, as illustrated by the non-restrictive relative clause in (16a), APCs are not affected by this restriction (16b), suggesting that they are not simply instances of apposition.

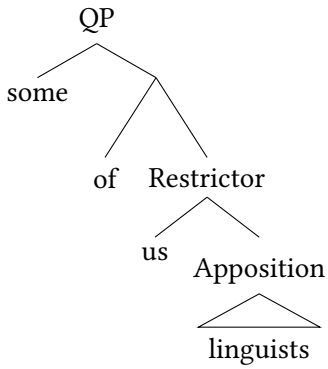
(16) a. * *None of the cars, which were Chevrolets, remained in the country.*
b. *None of you guys are any good.*

Pesetsky (1978: 354) presents a similar diagnostic involving a difference in the behaviour of apposition and APCs in quantified contexts. Before turning to Pesetsky's examples, let me clarify the relevant ambiguities of the attachment site of appositions to quantified expressions as in *some of us, linguists*. The apposition

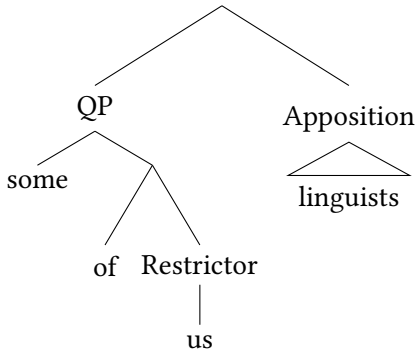
[12] The conventionalised use of commas only provides a very limited level of linguistic evidence, of course, although it can be suggestive.

linguists could either be understood to clarify the *restrictor* of the quantifier, i.e. the set *us* refers to consists of linguists, so the phrase *some of us, linguists* would pick out some people out of a larger group of linguists that the speaker considers herself a part of. We can call this a low attachment because the expression explicated by the apposition is the restrictor, which is structurally low in the quantifier phrase. The alternative reading involves the apposition characterising every individual picked out by the quantifier rather than the restrictor. In the current example, this would pick out a subset of a group of people the speaker considers herself a member of, but while on the low attachment the whole "we"-group was characterised as consisting of linguists, on the high attachment reading only the subest of people picked out by the quantifier are thus characterised. The sketched structures in (17) illustrate the low and high attachment respectively.

(17) a. Low attachment



b. High attachment



A crucial difference between apposition and APCs in this respect is that the

latter only have a low attachment reading. This can be seen in the examples in (18) reproduced from Pesetsky (1978: 354). The premise is that in combinations like *some of us…others of us* the restrictor seems to have to remain consistent, i.e. the "we"-group needs to be identical in both expressions. If *linguists* and *philosophers* are introduced as appositions as in (a), this requirement can still be met because they can receive a coherent high attachment analysis on which there is a larger "we"-group consisting of (at least) two subsets of linguists and philosophers. The APCs in (b), on the other hand, can only receive a low attachment analysis, which leads to an incoherent interpretation where the identity of the restrictor "we"-group illicitly shifts mid-sentence.

(18) a. *Some of us, linguists, think that others of us, philosophers, are crazy.*
b. * *Some of us linguists think that others of us philosophers are crazy.*

Another argument provided by Postal (1969: 219) concerns the fact that APCs cannot always be paraphrased as instances of predication of the property described by the noun over the group denoted by the pronoun. While *you linguists* may in many contexts be paraphrased as *you, who are linguists*, a similar equivalence does not hold for Postal's pair of examples in (19), if the (b) example is judged to be coherent at all.[13]

(19) a. *You troops will embark but the other troops will remain.*
b. *You, who are troops, will embark but the other troops will remain.*

The above discussion was focused on loose apposition, since close apposition of the type *the poet Burns* does not normally contain an intonational break. In that respect, it may therefore appear to more closely resemble APCs. However, there are reasons to distinguish close apposition from APCs as well. One concerns freedom of ordering. While close apposition can in principle be inverted, i.e. we do not only get *the poet Burns*, but also *Burns the poet* (cf. Burton-Roberts (1975)), inversion is ruled out for APCs: *we linguists* cannot become **linguists we*.

Moreover, close apposition cannot be interrupted by adjective modifiers, which have to precede the whole complex instead, as illustrated in (20a). Building on Roehrs (2005), we can observe that in APCs the pattern is the exact reverse. An adjectival modifier must not precede the adnominal pronoun but has to be located between the pronoun and the noun, i.e. just where it is found in regular definite noun phrases, see (20b).

[13] See Sommerstein (1972) and Rauh (2003) for further insightful discussion of this example.

(20) a. *the (famous) [linguist (*famous) Chomsky]*
b. *(*famous) [we/us/you/the (famous) linguists]*

On the basis of these considerations (see also rauh2003,hoehn2015unagr), it seems plausible to reject the idea that English APCs are a type of apposition and adopt the pronominal determiner analysis instead.

Of course, the diagnostics applying to the English data may not in all cases transfer directly, or at all, to other languages, so it is certainly possible that APC-like expressions share properties with apposition in some cases.

3 Observed points of variation

In this section, I sketch different ways in which expressions of nominal person have been observed to vary crosslinguistically along the lines of the list in (21). The discussion draws heavily on Höhn's (2017) study of adnominal person in 92 languages.

(21) Dimensions of variation observed for adnominal person
a. Morphological expression: identical to independent pronoun (APCs), clitic/affixal marking
b. Case effects
c. Relative position: prenominal, postnominal
d. Co-occurrence with definite article
e. Co-occurrence with demonstrative modifiers
f. Person/number restrictions
g. (Un-)agreement patterns

Since these phenomena are known to display variation, systematic data from more languages is highly desirable in order to assess and refine current crosslinguistic generalisations. A central purpose of this section is to put fieldworkers in a position to assess how the data they elicit relate to commonly observed patterns and the predictions of theoretical models and to identify data that might provide crucial insights that are currently missing in the literature.

3.1 Morphological expression

A majority of languages make use of their regular pronouns to express nominal person. These are what I term APCs, of which the English *we linguists* discussed

above is one prominent example. There is, however, a (rarer) alternative construction where nominal person is marked by means of affixal or clitic marking on the nominal expression. Some languages using this strategy are Alamblak, Bilua and Khoekhoe (also known as Nama) as illustrated in (22) with the relevant person markers set in bold.

(22) a. Alamblak (Trans-New Guinea, East Sepik; Bruce 1984: 96, (158))
*yima-**nëm***
person-1PL
'we people'

b. Khoekhoe (Central Khoesan; cited from Höhn 2017: 63, (89) based on Böhm 1985: 133, (27b) with added gloss)
sa *k͡hoe-**ta*** *ké* *nĩ* *ra* *‖'o.*
ART.ADDR person-1PL.INCL.CG TOP? COMPEL PROG die
'We humans have to die.'

c. Bilua (Central Solomons; Obata 2003: 85, (7.35))
enge**=a* *Solomoni=a=ma* *maba* *poso=**ngela
1PL.EXCL =LIG Solomon=LIG=3SG.F person PL.M=1PL.EXCL
'we, Solomon people'

The examples from Bilua and Khoekhoe raise additional questions, since there seem to be two markers of nominal person – one postnominal clitic marker and a prenominal determiner. For Khoekhoe, Haacke (1976; 1977) argues that person (as well as number and gender) are primarily expressed by the postnominal clitic, while the prenominal markers are a type of article agreeing with the person clitic for certain person-related features. Crucially, the prenominal markers are optional and do not reflect the full set of person distinctions the language expresses. In (22b), the prenominal marker *sa* marks reference to a set including the addressee, meaning that this morpheme is not only found in the first person inclusive but also the second person. On this line of reasoning, Khoekhoe uses person(-number-gender) clitics as its primary strategy of marking nominal person, although person marking shows up in more than one position in the *x*nP.

The case is somewhat less clear for Bilua. In (22c), there is a full first person plural pronoun (*enge*) in the *x*nP-initial determiner position, marked by the ligature *-(k)a* also found with demonstratives in determiner position, and also the *x*nP-final first person plural clitic (*ngala*). Obata (2003: 92f.) observes that *x*nPs with non-third person reference need to be marked by the phrase-final marker, as otherwise a third person reference is the default interpretation. This suggests

that the clitics are the primary nominal person marker and indeed examples like (23a) only the final clitic marks nominal person.[14] However, data like (23b) suggest that non-third person *x*nPs may also have a pronoun in determiner position and lack a person clitic.

(23) a. Bilua (Central Solomons; after Obata 2003: 103, (7.116))
enge=ko *visi=**nga***
1PL.EXCL=3SG.F younger.sibling=2SG
'you who are our younger sister'

b. Bilua (Central Solomons; after Obata 2003: 79, (7.10))
***enge**=a* *saidi*
1PL.EXCL =LIG family
'we, family'

The obvious empirical question of what governs the distribution of the two types of person marking in Bilua has to remain open here, but on a typological perspective this suggests that there are languages that can make use of both strategies of nominal person marking. On a descriptive level at least, this pattern differs from the Khoekhoe data discussed before insofar as there is no clear indication that one type of person marking is primary. If that is true, (22c) looks like a rare instance of doubly-marked nominal person.

Another language displaying both strategies of person marking, APCs and person clitics, is Yagaria as illustrated in (24). In contrast to Bilua, Höhn (2017) found no attestions of co-occurrence of the postnominal pronoun (a) and the enclitic person marker (b) in the same expression in the literature – note, of course, that this does not constitute evidence that co-occurrence is indeed impossible.

(24) a. Yagaria (Trans-New Guinea, Gorokan; Renck 1975: 17)
yale ***pagaea*** *gayale hae-d-a-e*
people they pig shoot-PST-3PL-IND
'The people shot the pig.'

b. Yagaria (Trans-New Guinea, Gorokan; Renck 1975: 19)
*Ovu-**da** ma-lo'* *bei-d-u-e*
Ovi-I this-LOC live-PST-1.SG-IND
'I, Ovu, am here.'

[14] The first person plural *enge* is a possessor here, as it is followed by a third person singular clitic (*-ko*) rather than the ligature, cf. Obata (2003: 101f.).

To conclude this section, while languages typically make use of one or the other of two general strategies of nominal person marking, they do not seem to be necessarily mutually exclusive in all languages.

3.2 Case marking or special pronominal forms

For languages that have case marking, the expected and unmarked behaviour is that adnominal pronouns exhibit the case marking assigned to the complete *x*nP. This is illustrated for the German examples in (25), where an APC in subject position, e.g. *wir Linguisten* 'we linguists', obligatorily uses the nominative form of the pronoun and an APC in object position obligatorily marks the pronoun with accusative case, i.e. *uns Linguisten* 'us linguists'.

(25) German (Indoeuropean;)

a. *Wir/ *uns Linguisten lesen viele Bücher.*
we.NOM us.ACC linguists.NOM read.1PL many books
'We linguists read many books.'

b. *Maria verachtet (uns/ *wir)*
Maria disdain.3SG us.ACC we.NOM
Linguisten. (object)
linguists.ACC
'Maria disdains us linguists.'

English allows a somewhat uncommon pattern in this respect, since APCs used as subjects show a relatively free alternation between the nominative and accusative form of the pronoun.[15]

(26) a. We/us linguists are a silly bunch. *(subject)*

b. John praised us/*we linguists. *(object)*

For languages with different sets of personal pronouns, e.g. full and clitic pronouns or regular and emphatic pronouns, another property to track is which (if any) of these sets of pronouns can participate in APCs and whether they behave differently for any of the other properties of nominal person described below.

[15] See Parrott (2009) for an account on the basis of the proposal that accusative is the default case in English, see also McFadden (2004). Parrot suggests that the nominative case forms occurring in such contexts are an artifact of prescriptive grammatical rules overriding the underlying system of modern English.

3.3 Word order

A further typologically relevant property of expressions of nominal person is their word order. One basic variable is the directionality of the person marker with respect to the nominal core of the expression, i.e. one can distinguish prenominal and postnominal person marking. There seems to be a crosslinguistic tendency for APCs to be prenominal and clitic person marking to be postnominal (Höhn 2017). There are, however, also clear attestations of postnominal APCs, see the Amele examples in (27). In this example, the presence of two instances of the third person plural pronoun is particularly instructive, insofar as the ability of using the phrase with the postnominal pronoun in apposition to the third person pronoun strongly suggests that the postnominal pronoun is indeed part of the same *x*nP as the noun *dana* 'man'. This is further corroborated by the fact that Roberts (1987: 210) observes an intonational boundary between the first pronoun and the noun *dana*, but not between the noun and the following pronoun.

(27) Amele (Trans-New Guinea, Madang; Roberts 1987: 210, (282))
*Age, dana (**age**), na qete-ig-a.*
3PL man (3PL) tree cut-3PL-TODPST
'They, the men, chopped down the tree.'

A majority of languages show consistent directionality patterns of person marking. Even in Bilua, which was discussed in Section 3.1 as having both prenominal APC-type person marking and postnominal clitic person marking, each of the strategies is itself consistent in its placement with respect to the head noun.

However, Höhn (2017) also discusses a small number of languages with ambidirectional person marking, i.e. languages where nominal person markers can be found in both prenominal and postnominal position. Two potential instances of pre- and postnominal APCs in Kobon are provided in (28).

(28) Kobon (Trans-New Guinea, Madang; after Davies 1989: 157, (408b)/(409b))
a. ***Kale bɨ** gau rau-bal.*
3PL man there buy-PFV.3PL
'They (plural) bought it.'
b. *Yad **Wanis nɨp** ñɨ-bin.*
1SG Wanis OBJ.3SG give-PFV.3SG
'I gave it to Wanis.'

Note that Höhn (2017) observed merely five languages that might potentially have ambidirectional person marking and for those only limited data is available.

It therefore remains to be seen whether the two word order patterns observed are indeed two variants of the same nominal person construction in all those languages or whether they turn out to be different constructions. For example, the Kobon example in (28a) with a prenominal APC might turn out to involve apposition similar to the prenominal pronoun in (27) from Amele, which happens to be a member of the Madang family as well.

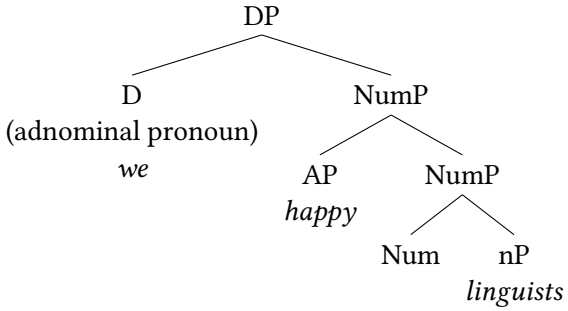
To assess the significance of the word order properties of nominal person in a given language it is instructive to compare the observed patterns to other word order properties of the language. Two relevant parameters are the directionality of demonstrative modifiers, which will be addressed in Section 3.5, and the general head-directionality in the nominal domain.

The head-directionality patterns are particularly relevant for evaluating whether a variant of the pronominal determiner hypothesis can capture the nominal person data in a given language. Postnominal person marking in a consistently head-initial language is unlikely to be adequately analysed as realisation of a (functional) head in the *x*nP and the same holds for prenominal person marking in a otherwise head-final language. One of the most easily accessible indicators of head-directionality in the nominal domain is the location of adpositions relative to the nominal phrase they take as a complement. Assuming that adpositions form part of the extended nominal projection[16] and that they are structurally higher than nominal person, Biberauer, Holmberg & Roberts's (2014) Final-Over-Final-Constraint disallows postpositions taking a structure with an initial person head as their complement, i.e. for languages with prenominal person marking and postpositions the pronominal determiner analysis can be excluded.

While there appears to be a tendency for nominal person marking to occur at the left or right edge of the *x*nP (Höhn 2017: ch. 8), there is very limited crosslinguistic data available concerning the interaction of other parts of *x*nPs with nominal person. One observation can be made, however, with respect to adjectival modifiers, which in many Indoeuropean languages appear to occur between the adnominal pronoun and the nominal core. This is line with the idea that person marking is located in a higher structural position as sketched in (29), taking adjectives to be adjuncts to NumP at least in languages like English.

[16] Note that this is a theoretical assumption which may have exceptions, see Biberauer, Holmberg & Roberts (2014) and Höhn (2017: ch. 3) for discussion.

(29)



However, there are languages where adjectival modifiers seem to be able to precede adnominal pronouns as illustrated for Korean in (30).

(30) Korean (isolate; Choi 2014a: 151, (15))

a. ***Wuli ttokttokhan*** *enehakcatul*
we smart linguists
'We smart linguists'

b. ***Ttokttokhan wuli*** *enehakcatul*
smart we linguists
'We smart linguists'

Whether this possibility is more widely available is currently not known, but it strongly suggests that Korean does not have English-type pronominal determiners.

3.4 Articles

Another point of variation concerns languages with articles, which vary with respect to whether articles are allowed (or required) in expressions of nominal person. In English or standard Italian, the definite article is in complementary distribution with adnominal pronouns, see (31), in line with the pronominal determiner analysis. In this context, APCs are taken to be structurally distinct from appositions like *we, the linguists* as discussed in Section 2.3 above.[17]

(31) a. *They should trust us (*the) linguists.*

[17] While the analysis of English expressions like *we the people* remains unclear, note that their distribution differs from that of plain APCs, cf. the impossibility of this construction in object position in (31a).

b. Standard Italian (Indoeuropean; elicited)
*noi (*i) linguisti*
we ART.PL linguists
'we linguists'

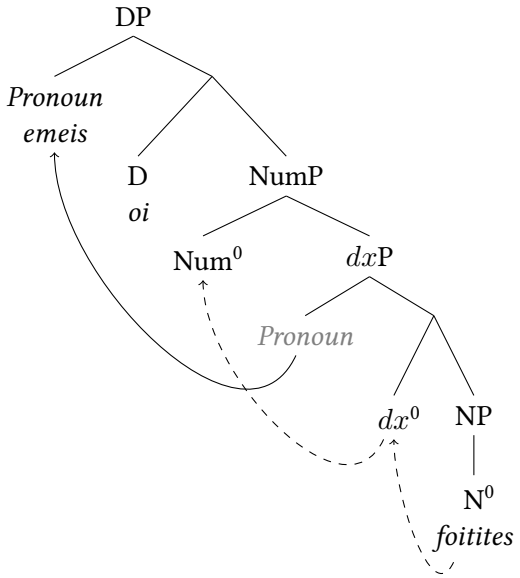
In contrast, there are languages which require an overt definite article in APCs, see (32).

(32) a. Greek (Indoeuropean; personal knowledge)
emeis oi glossologoi
we ART.NOM.PL linguists
'we linguists'

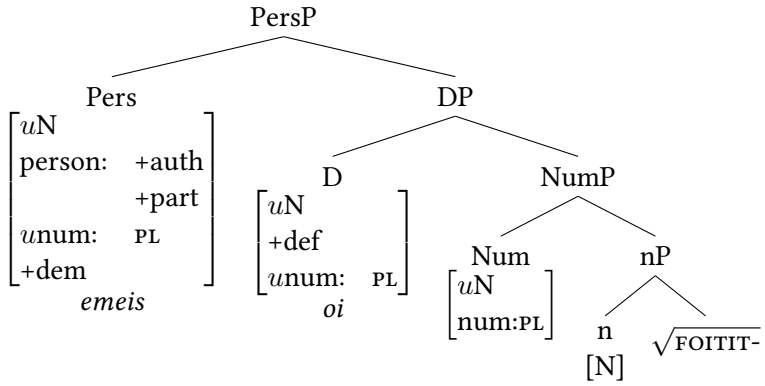
b. Spanish (Indoeuropean; personal knowledge)
nosotros los lingüistas
we ART.PL linguists
'we linguists'

Choi (2014a) suggests that adnominal pronouns are phrases moving from a lower deictic position, Spec,dxP, into Spec,DP as sketched in (33a). The overtness of the definite article differs crosslinguistically. Languages with overt articles in APCs are assumed to allow both the specifier and head of DP to be overt, while in languages like English, where APCs do not admit definite articles, only one or the other position may be realised overtly. The basic *x*nP-structure is identically for both types of languages on this perspective. Höhn (2016), on the other hand, takes the lack of complementary distribution of definite articles and adnominal pronouns to suggests that person and definiteness are encoded in distinct syntactic positions in these languages. While languages excluding definite articles in APCs have the traditional pronominal determiner structure, languages like Greek do not host person on D, but on a higher Pers head as sketched in (33b). This head is also assumed to host demonstratives, reflected by a [±demonstrative] feature, which is postively valued in APCs.

(33) a. Greek *emeis oi foitites* 'we (the) students' after Choi (2014a: 141)



b. Greek *emeis oi foitites* 'we (the) students' after Höhn (2016)



Both authors propose a link between this type of APCs and the ability of apparently not person-marked *x*nPs to trigger non-third person agreement in certain null subject languages as further discussed in Section 3.7.

Some languages may show optional marking of APCs with an article, illustrated for Hausa in (34). The absence of complementary distribution between the article and nominal person also suggests that person and the properties encoded by the article are marked in different syntactic positions, i.e. the pronominal determiner analysis does not apply.

(34) Hausa (Afroasiatic, Chadic; after after Newman 2000: 155 and 371)

a. *sū mutàànê-n* (article)
they men-ART
'they the men'

b. *mū Háusàawā* (no article)
we Hausa
'we Hausa'

Note, however, that true optionality is rare in language and one would typically expect the presence or absence of articles in such cases to be determined by factors outside of the APC itself. Indeed, the article in Hausa has been described as marking previous reference (Newman 2000: 143) instead of the definiteness marking associated with articles in many Indoeuropean languages. The predictions this makes about the distribution of the Hausa article are expected to apply to APCs as well. Whether this is the case is an empirical question, but it would suggest that the articles are not truly optional in Hausa APCs.

3.5 Interaction with demonstratives

Considering the central role of both person and demonstratives in the expression of linguistic deixis, the interaction of demonstratives with nominal person also deserves attention.

There is a wide-spread, often tacit assumption that demonstratives and personal pronouns are members of the same category – see Blake (2001: 416) for an overt statement along those lines. A central argument for this view is their distribution. In many languages nominal person marking and demonstrative modifiers are in complementary distribution, i.e. one *x*nP cannot contain an adnominal pronoun and a demonstrative at the same time as shown in (35) for English.

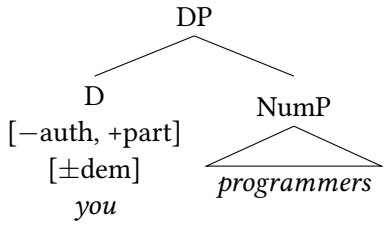
(35) *I admire [$_{xnP}$ (*these/*those) you (*these/*those) programmers].*

This observation, which holds for a large number of languages, suggests that person and demonstrativity features are encoded in the same syntactic position in those languages. One possible implementation as an extension of the pronominal determiner hypothesis is to assume that person and demonstrative features are both located on the D head as sketched in (36).[18] The distinction between the

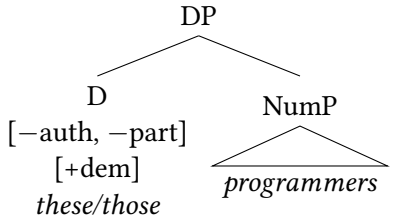
[18] Note that this analysis deviates from the view that demonstratives are specifiers in English and similar languages (Giusti 1997; Cinque 2005). Choi (2014a) proposes an alternative analysis of adnominal pronouns as specifiers, for discussion see Höhn (2017).

proximate and distal demonstratives could be captured by an additional feature on [−participant] heads, e.g. [±distal], which is ignored here.

(36) a.



b.



There are at least two ways in which problems can arise for this approach. The most straightforward challenge is posed by languages where adnominal pronouns and demonstrative modifiers are not in complementary distribution in contrast to (35), i.e. they can co-occur in what Höhn (2017) terms personal pronoun-demonstrative constructions (PPDCs). Similarly, questions arise for the view that pronouns and demonstratives form a distributional class if their canonical positions are consistently different, especially if they are located on opposite sides of the noun.

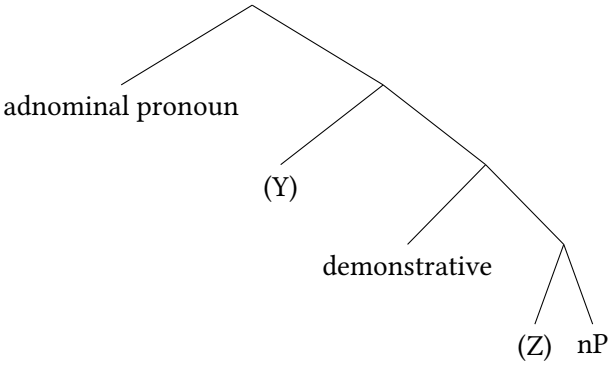
PPDCs as illustrated in (37) provide a strong indication that person is encoded in a distinct position from other deictic or demonstrative features in these languages, which raises additional questions about the structural relationship between those features.

(37) a. Guugu Yimidhirr (Pama-Nyungan; Haviland 1979: 160)
Dhana yinharrin *gunbu dumbiilmbi-ga wudhuurr-bi*
3PL.NOM DEM.PROX.ABS.PL dance.ABS break.RED-PRF night-LOC
'These people would have a dance at night.'

b. Amele (Trans-New Guinea, Madang; Roberts 1987: 217, (315))
Dana i/eu ***age*** *age Hilu dec.*
man this/that 3PL 3PL from
'These/those men are from Hilu.'

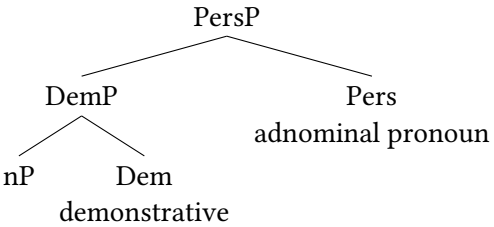
If the adnominal pronoun and the demonstrative are prenominal, their linear order presumably corresponds to their c-command relation independently of the question of whether in a given language they are heads themselves, phrases left-adjoined to nP or phrases in specifier positions of hypothetical covert functional heads, sketched as Y and Z in (38).

(38)



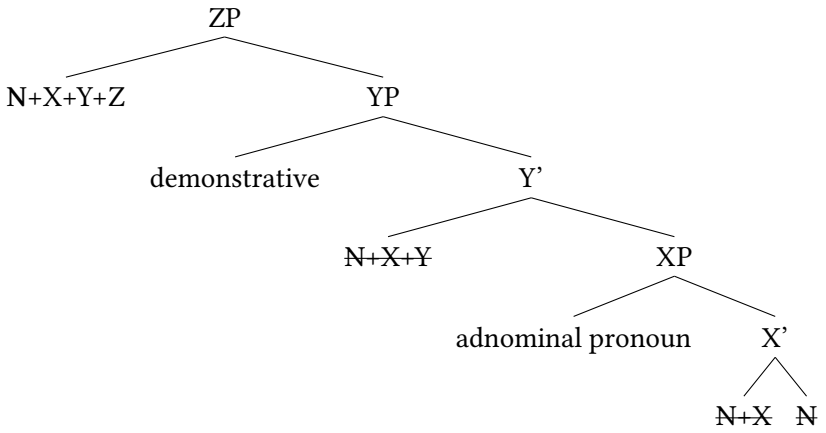
For languages with postnominal pronouns and demonstratives, their nature as heads or phrases becomes more important. If they are heads and the language is generally head-final in the nominal domain, as may be suggested that the language has postpositions, their linear order is the opposite of their c-command relation. For example, if the demonstrative linearly precedes the adnominal pronoun, the latter c-commands the former as sketched in (39).

(39)



There is a theoretical possibility that the linear order of demonstratives and adnominal pronouns corresponds to their c-command relation, namely if there are strong indications that the noun ends up in front of the adnominal pronouns and demonstratives as a result of cyclic head movement to a high head-initial position as sketched in (40). This option requires a very high target position for noun-raising and depends on (at least) the higher layers of the *x*nP being head-initial. Therefore, such a language would be expected to show prepositions rather than postpositions.

(40)



Höhn (2017: ch. 7) argues that the languages with postnominal demonstratives and pronouns in his sample are consistent with the analysis in (39), not least because they all consistently display postpositions as well as other head-final markers in the *x*nP. The Amele example in (37) is a case in point.

Taking the analytical approach sketched here, Höhn (2017: ch. 7) more generally suggests that person is structurally higher than demonstratives when they occur in distinct positions. The single class of exceptions involves cases where lexical nouns cannot be used alongside the personal pronoun and the demonstrative in PPDCs. A relevant example is provided in (41).[19]

(41) Japanese (Japonic; Noguchi 1997: 777)
ano *kanozyo*
DEM.3 she
'that she'

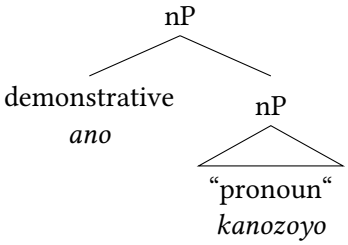
Considering that demonstrative modifiers and adnominal pronouns are consistently prenominal in Japanese, (41) may at first glance seem to involve a structure like (38) with demonstrative features scoping over person and a silent noun (Panagiotidis 2002; 2003). As noted above, however, the currently available data suggest that only PPDCs without overt nominal component display such a pattern.[20]

[19] However, see Furuya (2008) for the suggestion that Japanese PPDCs can contain overt nouns after all and Höhn (2017: 76) for a brief discussion.

[20] Höhn (2017) lists Japanese, Korean and a subset of Mandarin data. The Trans-New Guinea language Usan is the only potential exception, but note that the available data on this language is seriously limited.

However, pronouns in languages like Japanese have been argued to behave like nouns in several respects (Kuroda (1965: 105), Noguchi (1997), Déchaine & Wiltschko (2002)). On this view, the "pronoun" in the PPDC in (41) would be merged in the position of the nominal head, resulting in the same structure as demonstrative modifiers with regular nouns in the language, e.g. as in (42) with the demonstrative as an adjunct, or alternatively as a specifier of some silent functional head.

(42)



It has been suggested that apparent personal pronouns in languages of this type do not carry person features at all (Longobardi 2008), in which case data like (41) would not contradict the claim that person generally scopes over demonstrative features.

The second challenge to the idea that personal pronouns and demonstratives are members of a distributional class arises in languages where they occur in distinct syntactic positions. The impact of such data on the co-categorial status of demonstratives and personal pronouns is less straightforward than evidence for their direct co-occurrence.

On the other hand, a clearly distinct distribution of demonstratives and personal pronouns, for example if with adnominal pronouns consistently occur prenominally and demonstratives in postnominal position, may well warrant the rejection of the hypothesis that they form a syntactic category in a given language. Since that means that the structural basis for their complementary distribution is dropped, such languages are predicted to also display PPDCs. Plausible candidates for such an analysis are several Austronesian languages, which have postnominal demonstrative marking (43a) as well as prenominal APCs (43b) and seem to allow PPDCs (43c).

(43) Tuvaluan (Austronesian; Besnier 2000: 147; 303; 409)

a. *te ttogi teenaa*
the price DEM.2
'that price'

b. *Au ttino poto koo leva ne iloa nee au mea kolaa*
I the+person intelligent PFV know ERG I thing those
faatoaa iloa nee koe ttagata valea.
just know ERG you the+man stupid
'I, an intelligent person, have long known what you, stupid man, are just discovering.'

c. ***Au nei*** *koo fakatokatoka moo te fono a te paalamene.*
I DEM.1 INC prepare BEN the meeting of the parliament
'I am getting ready for the parliamentary session.'

In principle, distinct positions for members of the same category may also be the result of *x*nP-internal movement operations. A prominent account for the syntax of demonstratives holds that they are phrases base-generated in a low specifier position in the *x*nP and undergo movement into a higher position, typically Spec,DP, to derive phrase-initial positions (Brugè 1996; 2002; Giusti 1997; 2002; Choi 2014a). This sort of approach may be able to accommodate data where demonstratives and personal pronouns occur in distinct positions but are still in complementary distribution by arguing that both are base-generated in the same low position, but movement targets only a subset of deictic expressions. For example, if adnominal pronouns occur in a high position, it may be that person features are the relevant movement trigger attracting adnominal pronouns but not demonstratives, which may lack person features if third person corresponds to the absence of person features (Benveniste 1971). Two varieties of Arabic (Gulf and Colloquial Cairene Egyptian Arabic) in Höhn's (2017) sample could be of this type. While they have postnominal demonstratives and prenominal APCs, there is no evidence that they allow PPDCs.[21] The view that the prenominal position of adnominal pronouns and the postnominal position of demonstrative modifiers are structurally related in these varieties is supported by the observation that other varieties of Arabic have both pre- and postnominal demonstratives (Shlonsky 2004), raising the possibility that both positions are still available in principle in Gulf and Cairene Arabic.

A final aspect of person-demonstrative interactions that should be mentioned here concerns the role of "person-oriented" demonstrative systems (Anderson & Keenan 1985).[22] Languages often have different forms or degrees of demonstra-

[21] Note that this remains a conjecture until clear data are provided showing the ungrammaticality of PPDCs in these varieties, due to the well-known problems of obtaining negative evidence.

[22] For more fine-grained discussion of deictic categories in demonstratives see Anderson & Keenan (1985); Diessel (1999); Imai (2003); Lander & Haegeman (2016).

tives which indicate a difference in distance from the deictic centre (typically the speaker), as in English proximal *this* vs. distal *that*. Languages with more than two different degrees of demonstratives may simply add finer distinctions of spatial distance, i.e. the middle degree in a three-degree system may indicate a medium distance from the deictic centre. In person-oriented systems, on the other hand, the middle term indicates proximity to the addressee rather than the speaker, suggesting an interaction between person features and demonstratives (see Harbour 2016: ch. 7 for a formal approach).[23]

In the examples presented in this section, the degree of demonstratives is provided in the gloss. Höhn (2017: ch. 7) discusses data suggesting a tendency for PPDCs in languages with person-oriented demonstrative systems to match the demonstrative degree with the adnominal person features. This is exemplified in the Tuvaluan example (43c) above, where the first person pronoun *au* 'I' is accompanied by the first-degree/proximal demonstrative *nei*. Since mismatches are nonetheless possible, he concludes that these collocations are not due to some form of formal agreement, but more likely "the result of the coalescence of the deictic centre of the demonstrative with the meaning of the pronoun" (Höhn 2017: 269). If a PPDC has second person reference, its referent is also (trivially) proximal to the addresse, promoting a usage of both a second person pronoun and a second-degree demonstrative. However, pragmatic considerations, e.g. possibly affective uses of other demonstrative forms, may override this preference. To my knowledge, no language has so far been shown to require formal agreement in person and demonstrative degree in PPDCs.

3.6 Person/number restrictions

A widely noted property of English pronominal determiners is that they are restricted to certain person/number combinations. In particular, singular pronouns or third person plural pronouns cannot be used as adnominal pronouns see (44). Such restrictions are crosslinguistically variable. Closely related German also disallows adnominal third person pronouns, but allows singular adnominal pronouns as shown in (45a), albeit with certain semantic requirements as discussed by Rauh (2004). Other languages seem to lack the restriction against third person adnominal pronouns as illustrated in (46) for Japanese.

[23] Note that some languages described as person-oriented may actually alternate between a distance- and a person-based reading of the middle-degree term of the demonstrative system. Imai (2003: ch. 4.2) describes this effect for Spanish and Japanese, terming these dual-anchor systems, as opposed to Korean, which he describes as having an addressee-anchor isolated demonstrative system.

(44) a. **I/*you/*she/*he linguist*
b. *we/you/*they linguists*

(45) German (Indoeuropean; personal knowledge)
a. *ich/ du/ *sie/ *er Linguist*
I you.SG she he linguist
b. *wir/ihr/*sie Linguisten*
we you.PL they linguists

(46) Japanese (Japonic; Noguchi 1997: 780, (40))
a. *watasi-tati gengogakusya*
I-PL linguist
'we linguists'
b. *anata-tati ronrigakusya*
you-PL logician
'you logicians'
c. *kare-ra tetugakusya*
he-PL philosopher
*'they philosophers'

The two markedness hierarchies in (47) and (48) capture Höhn's (2017) observation that crosslinguistically singular APCs seem to be more marked than non-singular APCs, and that particpant, i.e. first and second person, APCs are unmarked compared to non-participant (third person) APCs.[24]

(47) non-singular APCs > singular APCs

(48) participant APCs > non-participant (i.e. third person) APCs

There is currently no account for the distribution of the number restriction allowing crosslinguistic predictions for individual languages. A semantic explanation that has been occasionally suggested is that the fact that singular pronouns refer to individuals somehow blocks them from appearing adnominally. Considering that there is a considerable number of languages that do in fact allow singular APCs, a general semantic explanation of this sort seems to be on the wrong track.[25] However, transferred to a pragmatic perspective this line of

[24] Note that the actual patterns may of course turn out to be more complex than suggested by these hierarchies.
[25] See Höhn (2017: ch. 5.3) for further discussion.

thought could at least provide a rationale for the relative markedness of singular APCs if one considers that the identification of the referent(s) of a nominal expression is a possible context of use for plural APCs, which is typically not applicable for singular pronouns. Consequently, the latter have fewer context of use than plural APCs. Rauh's (2004) convincing analysis of restrictions on singular APCs in German works along these lines. This may provide an important clue to understanding the general markedness of singular APCs, but it remains unclear what explains the categorial absence of singular APCs in languages like English or Japanese.

The person restriction can be at least partly explained on the basis of the pronominal determiner analysis. It predicts that languages with definite articles that are in complementary distribution with adnominal pronouns should not have third person APCs because the definite article is essentially an allomorph of third person pronouns used in adnominal positions. On this perspective, languages with third person APCs should either not have definite articles or if they do, adnominal pronouns and articles should be able to co-occur as stated in (49).

(49) Third person-article generalisation:
If a language has third person APCs and distinct definite articles, it has articles in APCs. (Höhn 2017: 90)

It turns out that the majority of languages allowing third person APCs does indeed not have definite articles. For the languages meeting the restriction in (49), the generalisation seems to be largely on the right track, although there are a few potentially problematic cases (for discussion see Höhn (2017: ch. 5.2)).

A hint that the interactions between the markedness hierarchies for number and person in APCs may be more complex than suggested above comes from Scandinavian. In languages like Norwegian and Icelandic, the so-called psychologically distal demonstratives (Johannessen 2008), illustrated in (50), seem to correspond to third person singular APCs.

(50) Norwegian (Indoeuropean, Germanic; Johannessen 2008: 178, (67))
hun gamle lærerinnen vår
she old teacher.DEF ours
'that old teacher of ours'

However, against the background of (48) this would suggest that Norwegian should have singular first and second person APCs as well, contrary to fact – although there are, of course, plural first and second person APCs.

Detailed data on the behaviour of APCs across more languages should provide a way to develop a clearer view on the person and number restrictions and their possible interactions.

3.7 Person agreement and so-called unagreement

In languages with verbal person agreement, APCs and other expressions of nominal person are expected to trigger the corresponding person (and typically also number) agreement on the verb. This is illustrated in (51) for German.

(51) German (Indoeuropean; personal knowledge)
*Ihr Linguisten lest/ *lesen viele Bücher.*
you.PL linguists read.2PL/ read.3PL many books
'You linguists read a lot of books.'

Definite noun phrases are often treated as third person as in the German example in (52).

(52) *Die Linguisten lesen/ *lest viele Bücher.*
the linguists read.3PL/ read.2PL many books
'The linguists read a lot of books.'

However, languages show variation in this respect, i.e. definite expressions are not universally treated as third person. A number of null subject languages have been observed to allow definite nominal arguments – most descriptions focus on subjects – co-occuring with non-third person verbal agreement, as shown in (53) for Modern Greek. On the assumption that definite expressions are by default third person, this looks like a mismatch in person between the subject and the finite verb, accounting for the fact that this phenomenon is commonly known as unagreement (Hurtado 1985).

(53) Greek (Indoeuropean; Höhn 2016: 548, (7))
(Oi odigoi) de tha pioume (oi odigoi) apopse.
DET.NOM.PL drivers NEG FUT drink.1PL tonight
'We drivers won't drink tonight.'

Example (53) also shows that the construction is fine independently of whether the subject *oi odigoi* 'the drivers' is located before or after the verbal complex. Of course, the range of available subject positions depends on general syntactic

properties of the language under discussion. However, the fact that the unagreeing subject can be found postnominally provides an argument against an analysis where the – often clause-initial – subject is actually a left-dislocated topic (along the lines of *The drivers, we won't drink tonight*). This is relevant here because the remaining part of a sentence like (53) after an initial subject *oi odigoi* would indeed be well-formed on its own, since there would be no need for an overt resumptive subject pronoun in a null subject language.

Importantly, not all null subject languages allow unagreement. In Italian, for example, non-APC subjects cannot control non-third person agreement on the verb as illustrated in (54), irrespective of whether there is a definite article in the subject phrase.

(54) Italian (Indoeuropean, Romance; Choi 2014a: 209 and Höhn 2016: 547)

a. * *Linguisti siamo intelligenti.*
linguists are.1PL smart
intended: 'We linguists are smart.'

b. * *Gli studenti lavoriamo molto.*
DET.PL students work.1PL much
intended: 'We students work much.'

By including unagreement in a discussion of nominal person, I adopt the perspective that the subject in (53) actually carries the non-third person features triggering the observable verbal agreement.[26] Two variants of this have been proposed by Choi (2014b,a) and Höhn (2016) based on the shared idea that there is a correlation between the obligatory presence of definite articles in APCs (recall the discussion in Section 3.4) and the availability of unagreement in null subject languages. The formulation Höhn (2016: 560, (37)) provides for this correlation is reproduced in (55).

(55) Null subject languages with definite articles
a. show unagreement if they have a definite article in APCs, and
b. do not show unagreement if they have no definite article in APCs.

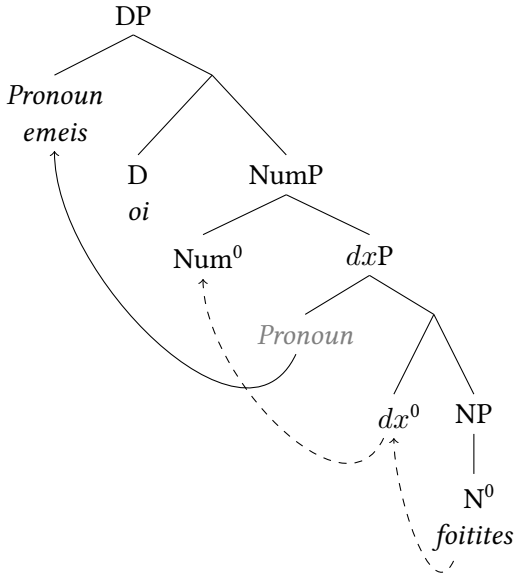
Before sketching the two accounts of unagreement, it should be pointed out that while this correlation between definite articles in APCs and the availability

[26] One recent alternative analysis by Ackema & Neeleman (2013) suggests to explain the phenomenon as an effect of a symmetric, rather than asymmetric agreement mechanism instead. For an overview of different theoretical approaches to unagreement see Höhn (2016).

of unagreement seems to represent a strong tendency, it does not hold without exceptions. Arabic and Romanian are languages that require definite articles in APCs, but do not allow unagreement, while northern and southern Calabrese, two southern Italian dialects, have unagreement but do not use the definite article in APCs (Höhn, Silvestri & Squillaci 2016; 2017).[27]

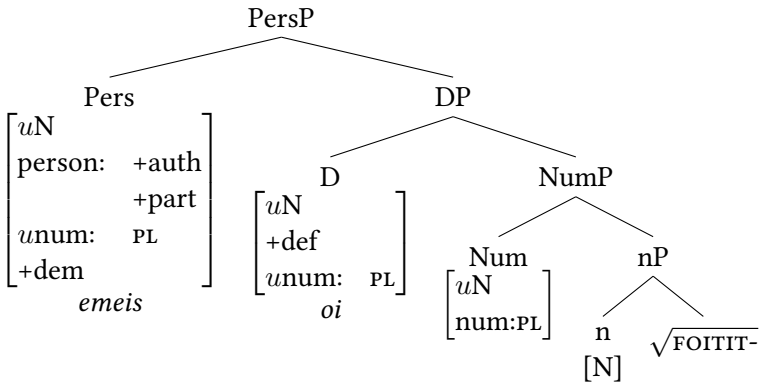
With this in mind, let us return to the two analyses of unagreement. Since both authors relate the properties of unagreement to the structure of APCs, their respective analyses of APCs with overt definite articles are repeated here from Section 3.4.

(56) a. Greek *emeis oi foitites* 'we (the) students' after Choi (2014a: 141)



b. Greek *emeis oi foitites* 'we (the) students' after Höhn (2016)

[27] See Höhn (2017: ch. 6) for data and potential explanations for these exceptions.



Choi (2014a) analyses unagreement as mediated *pro*-drop where the Spec,DP position of (56a) is occupied by a silent *pro* pronoun instead of the overt pronoun found in APCs. *Pro*-drop is mediated on this view because *pro* is not licensed directly by the T head agreeing with the subject *x*nP, but indirectly via the D head which probes and agrees with *pro* in its specifier position and in turn is itself a goal for agreement for the T probe.

Höhn's (2016) analysis, on the other hand, suggests that the Pers head in (56b) is realised as an overt pronoun if and only if it carries a [+demonstrative] feature. Overt pronouns pattern with demonstratives in that respect.[28] Insofar as Greek – like all other unagreement languages described so far – is a consistent null subject language, Höhn suggests that Pers is realised as null if it is non-demonstrative (or non-emphatic). A set of vocabulary items from Höhn (2016: 572) illustrating these considerations is reproduced in (57). Unagreement simply corresponds to contexts where a structure like (56b) with overt material (e.g. a noun) in DP has a [−dem] specification on Pers, resulting in a null realisation of that head.

(57)
	Pers[−dem]	↔	∅
	Pers[+auth,+part,pl,+dem]	↔	*emeis*
	Pers[−auth,−part,pl,masc,+dem]	↔	*aftoi*

The technical differences between the two approaches imply crucially different perspectives on how the crosslinguistic variation of unagreement is explained. In Choi's (2014a) model, the nominal structure in (56a) – or a sufficiently extended version of it – is universal. The crucial difference between languages with and without unagreement is whether or not the D head is overt. On the

[28] In Greek, demonstratives happen to be the only option for overt third person pronouns.

assumption that only an overt D head can act as an intermediate licenser for the *pro* in Spec,DP, languages without an overt D head in APCs cannot have unagreement even if their T head can otherwise license null subjects in Spec,TP. Höhn (2016), on the other hand, suggests that languages with unagreement encode person and definiteness in structurally distinct heads as per (56b), while languages like Italian have the classical pronominal determiner structure with person and definiteness encoded on the same head.

The strong dependence of Choi's (2014a) analysis of unagreement on the presence of an article is problematic due to its prediction that languages without definite articles should not be able to show unagreement. This appears to be true for a language like Turkish, see (58a), but it turns out that Swahili (Höhn 2016: 546) and Georgian (Nash 2017) are languages without definite articles that nonetheless show unagreement as illustrated for Georgian in (58b).

(58) a. Turkish (Turkic; Choi 2014a: 212, (42a))
** Dilbilimciler akıllıyızdır.*
linguists smart.COP.1PL.EPIS
intended: 'We linguists are smart.'

b. Georgian (Kartvelian; Nash 2017: (11))
Ekim-eb-ma v-xat'e-t es.
doctor-PL-ERG 1-draw.AORIST-PL this.NOM
'We doctors drew this.'

Höhn's (2016) take on unagreement has the advantage of being compatible with such cases, albeit partly by virtue of restricting strong claims to languages with articles. Even if one assumes that languages like Georgian might have an independent person head similar to Spanish and Greek, the explanation for the difference between Turkish and Georgian remains an open question.

A further empirical problem with an analysis of unagreement that directly relies on the presence of a phonological overt D head is the observation that quantifiers can occur in unagreement without any article, as illustrated in (59).

(59) Spanish (Indoeuropean, Romance; Ackema & Neeleman 2013: 317, (52b))
Algunos pacientes hemos/habéis llamado a la doctora.
some patients have.1PL/2PL called to the doctor
'Some of us/you patients have called the doctor.

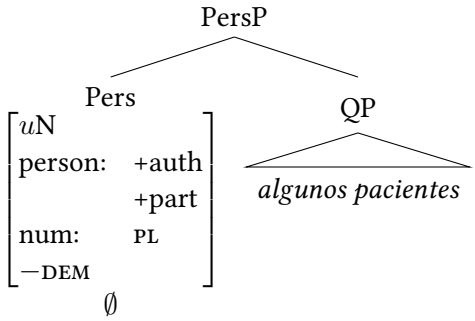
In this example, the quantified subject *algunos pacientes* 'some patients' controls non-third person in spite of the lack of a definite article. On Choi's (2014a)

account such quantificational unagreement should either be ruled out because there is no overt D that could act as an intermediate licenser for pro-drop, or quantificational unagreement would have to be treated as an independent phenomenon. However, this would seem to miss a generalisation, as it seems that quantificational unagreement is available in just those languages that have "plain" unagreement. Italian, which was shown not to have unagreement in (54), does not allow quantificational unagreement either as seen in (60).

(60) Italian (Indoeuropean, Romance; Höhn, Silvestri & Squillaci 2017: 271, (11))
* *Molti giovani non abbiamo lavora.*
many young.people NEG have.1PL work

On Höhn's (2016) view, on the other hand, the availability of quantificational unagreement in languages like Spanish and Greek directly results from the fact that these languages encode person and definiteness on different heads. This allows the null person head to associate with a QP along the lines of (61).

(61)



Höhn accounts for the obligatory non-realisation of the person features in Greek and Spanish-style quantificational unagreement like (59) on the grounds that quantified expressions are never demonstrative, so that the Pers head has to carry a [−dem] feature, resulting in its obligatory silence. This raises an interesting open question as to whether there are any languages that allow an overt pronoun in such constructions. The prediction from this approach is that such pronouns should be [−dem], while the relevant language should show evidence for structurally distinct locations of person and would probably not allow null subjects because otherwise a [−dem] person head would be likely to get a null realisation.

On the structurally-based perspective on the unagreement variation, the absence of quantificational unagreement in Italian is a result of the clustering of

person and definiteness features on the same head D. Whatever blocks the occurrence of definite articles in these quantified phrases, plausibly incompatibility of quantification with definiteness, also blocks the use of pronominal determiners. Consequently, quantified phrases can only be treated as default third person grammatically and the structure in (60) comes out as ungrammatical.

A typological detail worth noting here is that there is crosslinguistic variation concerning which quantifiers are allowed in unagreement. In Spanish, the distributive universal quantifier *cada* 'each' and the negative quantifiers *ninguno* 'no one' are compatible with unagreement, while the Greek universal distributive *kathe* 'each' is only compatible with unagreement in very restricted syntactic contexts and the negative *kanenas* 'no one' does not allow unagreement at all. The contrast between the negative quantifiers in both languages is shown in (62).[29]

(62) a. Spanish (Indoeuropean, Romance; Rivero 2008: 230, (31b))
Ninguno hablamos varios idiomas.
no.one.SG speak.1PL several languages
'No one of us speaks several languages.'

b. Greek (Indoeuropean; personal knowledge)
* *Kanenas de milame diafores glosses.*
no.one.SG NEG speak.1PL various languages
intended: 'No one of us speaks various languages.'

Before turning to another slightly different phenomenon, it should be pointed out that while the correlation between definite articles in APCs and the availability of unagreement formulated in (55) seems to represent a strong tendency, it does not hold without exceptions. Arabic and Romanian are languages that require definite articles in APCs, but do not allow unagreement, while northern and southern Calabrese, two southern Italian dialects, have unagreement but do not use the definite article in APCs (Höhn, Silvestri & Squillaci 2016; 2017).[30]

Before concluding this section, I want to briefly mention another instance of unexpected agreement controllers, namely demonstratives appearing to control non-third person verbal agreement in what might be called "demonstrative unagreement." The Basque example in (63a) involves the proximal/level one ergative demonstrative *honek* (absolutive singular *hau*) heading a relative clause and acting as the subject of the main clause, in which it importantly controls first person

[29] For further discussion see Höhn (2016: 551ff.).
[30] See Höhn (2017: ch. 6) for data and discussion.

singular on the finite auxiliary, rather than the third person one might expect from typical demonstratives. Basque has a person-based three-level demonstrative system (de Rijk 2008: 205) and interestingly the use of the level two demonstrative *horiek* (absolutive singular *hori*) in (63b) is compatible with second person agreement on the auxiliary, although the level three demonstrative (*haiek* 'DEM.3.ERG.PL') appears to also be acceptable to speakers. Crucially, the level one demonstrative *hauek* is ruled out in the context of second person agreement.[31]

(63) Basque (isolate; Höhn 2017: 275ff.)

a. *[saile-ko zuzendari-a naiz-en* ***hon-ek****]$_{DP}$*
department-LNK director-DET.ABS.SG be.1SG.ABS-REL **DEM.1.ERG.SG**
adierazi nahi dut…
declare can 3SG.ABS.AUX.**1SG.ERG**
'This one who I am the departmental director can(1sg) declare (that…)'

b. *Bizikleta asko egi-ten duzue-n {*hauek/*
bicycle much do-IPFV 3SG.ABS.AUX.2PL.ERG.-REL DEM.1.ERG.PL
horiek/ ?haiek} gehiago jan behar duzue.
DEM.2.ERG.PL DEM.3.ERG.PL more eat need 3SG.ABS.AUX.2PL.ERG
'You who cycle a lot need to eat more.'

This interaction between demonstrative level and verbal person agreement opens up at least three potential lines of analysis:

1. The demonstrative itself is able to control verbal agreement.
2. Nominal person is marked on the subject in addition to or independently of the demonstrative, for example by a null morpheme like in regular unagreement.
3. The verbal person marking is actually not agreement, but directly encodes pronominal reference (along the lines of Jelinek 1984 or Borer 1986).

Variant 1 runs into problems when, as appears to be the case in Basque, the third level demonstratives are also compatible with second person agreement. More significantly, all demonstratives appear to be compatible with third person agreement, making an account where demonstrative features directly control verbal agreement unlikely. On approach 2, these cases of "demonstrative unagreement" would essentially be treated as null counterparts to overt PPDCs (cf.

[31] Höhn (2017: ch. 7) provides further discussion of the Basque data and other, similar examples from Pomak and Warlpiri.

Section 3.5), just like regular unagreement has been treated as null counterpart of APCs. This leads to the expectation that languages with this phenomenon should also allow PPDCs. The details of how the third approach would deal with these particular cases would require further qualification, but it seems that approaches 2 and 3 are both in principle feasible, so it may actually be that languages of both types exist. Since demonstrative unagreement has so far only been observed in a very limited number of languages, data on further languages with comparable effects would be highly desirable for the development of a clearer crosslinguistic picture.

4 Practical issues in elicitation

This section sketches some practical advice on the elicitation of data on nominal person. For reasons that are currently unclear, languages appear to differ in how easily accessible APCs and other expressions of nominal person are.

A possible starting point to test for the existence of overt expressions of adnominal person are vocative or exclamative expressions as in (64a). This comes with several caveats, since vocatives may differ from argumental expressions with adnominal person marking in various ways. In English, vocative APCs can appear in the second person singular in contrast to argumental APCs, which are restricted to the plural (cf. Section 3.6). Moreover, vocative APCs may impose stricter restrictions on the types of nominals they can contain, often to emotively marked expressions/epithets, which is why (64b) is only acceptable on an emotively marked reading of *linguist*.

(64) a. *You idiot!*
b. ? *You linguist!*

A simple context showcasing the difference between vocative and argumental APCs in English are answers to constituent questions, which can be answered by an argumental APC (65a), but not by an expression that would be well-formed as a vocative APC (65b). This is obviously expected considering that the answer needs to be construed as an argument, a function which cannot be filled by the vocative expression.

(65) *Who investigates how language works?*
a. *You linguists.*
b. * *You idiot.*

The extent to which vocative expressions of adnominal person do or do not match up with their argumental counterparts in a given language is a research question in its own right. From the current perspective, the most important caveat is certainly that while vocatives may provide a starting point in languages like English, it is equally possible for languages not to use an expression of adnominal person in vocatives. This is the case in Greek, where a vocative cannot be accompanied by an adnominal pronoun (nor by an article), but at best by the particle *re*, see (66).

(66) Greek (Indoeuropean; personal knowledge)

a. * *Esy ilithie!*
you.SG idiot.VOC

b. *Re ilithie!*
PRTCL idiot.VOC
roughly: 'You idiot!'

Against that background, it is important to test the existence and behaviour of argumental adnominal person expressions separately in any case. As mentioned at the outset of this section, not all (speakers of all) languages seem to be equally comfortable with such expressions out of the blue and sometimes you may need offer additional context in order to sharpen consultants' intuitions. In my experience, contrastive contexts like (67) tend to be helpful to this end.

(67) a. CONTEXT: A teacher is discussing with a group of their students who are complaining about their bad marks and how little support they get from that teacher and her colleagues at the school.

b. TEACHER*: We teachers are working hard, but you students are too lazy.*

Generic contexts like in (68) may also help boost the acceptability of adnominal person expressions.

(68) a. CONTEXT: Jenny is discussing the social role of women with her friend Elizabeth.

b. JENNY*: We women have been oppressed for too long.*

In Section 6 I provide a checklist that may be used as a guide when investigating nominal person. Not all questions will be relevant for all languages and it may be that there are aspects of nominal person that are not covered in the checklist. So while the list may provide a template for a questionnaire, users may want to adapt it to the particular language under investigation.

Let me conclude this section with a word of caution. When eliciting data for a language with little available material, it can be very useful to be aware of relevant properties of closely related varieties in order to get an idea of what sort of person-related phenomena one may be likely to encounter. However, it is important to keep in mind that there is variation even between closely related languages, which some properties seem to be particularly prone to. In particular, it appears that the number restrictions of APCs discussed in Section 3.6 is more volatile than the person restrictions. While most Indoeuropean languages where third person pronouns are distinct from demonstratives have a lack of third person APCs in common, languages as closely related as German and English (or Dutch) differ in their treatment of singular APCs, with only the former allowing them. So while it is perfectly acceptable to utilise available data on languages related to the one you are investigating, always be mindful of the fact that there may be unexpected differences.

5 Summary

I have presented an outline of the most common account for adnominal person in English-type languages, the pronominal determiner analysis, and presented some of the arguments for taking adnominal pronoun constructions to be a distinct phenomenon from apposition. The main part of the chapter was concerned with outlining various points of variation observed across languages in the expression and distribution of adnominal person marking. The different aspects discussed are summarised again in (69).

(69) Dimensions of variation observed for adnominal person
   a. Morphological expression: identical to independent pronoun (APCs), clitic/affixal marking
   b. Case effects
   c. Relative position: prenominal, postnominal
   d. Co-occurrence with definite article
   e. Co-occurrence with demonstrative modifiers
   f. Person/number restrictions
   g. (Un-)agreement patterns

This overview has shown several ways in which languages can deviate from what one might expect on the basis of the pronominal determiner analysis. While

the goal of this chapter was not to develop a coherent theory accounting for all data presented, I have at several points sketched possible analyses for the phenomena discussed. I hope this will allow readers to appreciate not only the range of crosslinguistic variation of expressions of nominal person, but also the way that the empirical data inform theoretical considerations.

6 A checklist or model questionnaire

1. **Basic properties of the language**
    a) Do verbs show agreement with any of their arguments (particularly subjects, objects)?
    b) How does the pronominal paradigm work, which categories are distinguished (e.g. person, number, gender)? Are the pronouns morphologically transparent? Are third person pronouns distinct from demonstratives?
    c) Determiners
        i. Does the language have articles (definite, specific, indefinite, generic)?
        ii. Can there be more than one article-like marker within a noun phrase (e.g. poly(in)definiteness)?
        iii. Where do they occur in the noun phrase (initial position, final position, suffixed)?
        iv. Do demonstrative modifiers co-occur with articles in noun phrases (*these the linguists*)?
        v. Do demonstrative modifiers precede or follow the noun they modify?
    d) Does the language have different sets of pronouns (e.g. a *weak*, *strong*, *clitic* distinction, see e.g. Cardinaletti & Starke (1999)) that occur in distinct contexts?
    e) Does the language have prepositions or postpositions or both (if the latter, is one option more common)?
2. **Functions and person-number combinations of adnominal person**
    a) Does the language allow adnominal person in vocatives (e.g. *You idiot!*)? Note if this is possible only with a limited class of nominals. If

such vocatives are possible, which person-number combinations are allowed?

b) Does the language display adnominal person in isolation (e.g. as single-phrase answers to questions: *A: Who won the debate? B: We women*) or in left- or right-dislocated contexts (e.g. *We women, we have a lot work* or *We have a lot of work, we women*)? Test this also with common nouns that might not be fine in the vocative expressions from the previous question. If yes, which person-number combinations are available?

c) Can expressions with adnominal person be used as subjects in the language? Is there any difference with respect to possible person-number combinations to the previous cases?

d) Can expressions with adnominal person be used as objects and as complements of adpositions? Again, are the available person-number combinations the same as before?

3. **Basic properties of nominal person**

a) What is the morphosyntactic nature of the observed adnominal person marking? Is it identical to pronouns (i.e. it could occur also independently) or a dedicated clitic or affix-like marker (cf. Section 3.1)?

b) If adnominal person is expressed by means of pronouns, are there specific restrictions concerning the set (cf. question 1d) or particular (e.g. case) forms of pronouns that can or have to be used in any of the contexts mentioned under question 2 above (cf. Section 3.2)?

c) Which word order properties can be observed, i.e. where does the adnominal person marking occur in nominal expressions, e.g. before or after the nominal, before or after adjectives (cf. Section 3.3)?

d) If the languages has articles (particularly definite ones), do they obligatory or optionally occur in adnominal person constructions or are they ruled out (cf. Section 3.4)?

e) Do any of the properties in this section behave differently between any of the contexts elicited under question 2 above (or possibly in other special contexts)?

4. **Demonstratives and nominal person**

a) Can expressions with overt adnominal person marking contain an adnominal demonstrative as well, i.e. are adnominal person marking

and demonstratives in complementary distribution or do PPDCs (cf. Section 3.5 above) exist?

b) If PPDCs exist, what are the word order properties of the demonstrative and the adnominal person marking?

c) Can they occur in all the contexts that plain adnominal person constructions can occur in (cf. e.g. question 2 above)?

d) If the languages has more than one level of demonstratives, are there any restrictions concerning which person marking they are compatible with?

5. **Unagreement**

a) If the language has verbal agreement (question 1a), is there a possibility of plain noun phrases without overt nominal person marking co-occurring with non-third person verbal agreement, as discussed for unagreement in Section 3.7?

b) Is non-third person agreement possible for quantified noun phrases? Are there restrictions on which quantifiers can occur in unagreement? I suggest testing at least universal (if available both *all* and *each/every*-type), existential (*some*) and negative quantifiers (*no X*) as well as numerals.

c) If there is verbal agreement with more than one argument (e.g. subject and object agreement), is unagreement possible for all co-indexed arguments? It is useful to assume a wide definition of agreement, so instances of clitic doubling should be checked here as well, cf. Höhn (2016: 574ff.).

d) Is unagreement possible in all the same person-number combinations that are attested for overt nominal person marking as tested in question 2?

e) Can an unagreeing noun phrase contain a demonstrative? If so, are there any contextual restrictions? Is there an effect of demonstrative levels (cf. question 4d)?

7 Exercises

1. How does the pronominal determiner analysis account for the lack of third person adnominal pronouns in languages like English?

2. The Basque first person plural pronoun is *gu* (in the absolutive). Furthermore, Western and central varieties of Basque have a marker *-ok* known as the proximal article. What do the data in (70) suggest concerning adnominal person in Basque? (Note that the picture is probably more complex, cf. Höhn (2017: ch. 3) for some discussion.)

(70) a. *euskaldun-ak*
Basque-DET.PL
'the Basques'

b. * *euskaldun gu*
Basque we
intended: 'we Basques'

c. *euskaldun hauek*
Basque DEM.1.PL
'these Basques'

d. *Zor berri-a dugu* ***euskaldun-ok***
debt new-DET.ABS 3SG.ABS.AUX.1PL.ERG Basque-PROXART.PL
Orixe-rekin.
Orixe-COM
'We Basques have a new debt to Orixe.'

(de Rijk 2008: 502, (91a))

3. Which phenomenon discussed in the chapter does the data in (71) illustrate and how is it problematic for the approaches presented here?

(71) Southern Calabrese (Indoeuropean, Romance; Höhn, Silvestri & Squillaci 2017: 276f.)

a. *Nui (*i) figghioli iocamu e carti.*
we the.PL children play.1PL the.PL cards
'We children play cards.'

b. *I figghioli iocamu e carti.*
the.PL children play.1PL the.PL cards
'We children play cards.

c. *Assai figghioli non lavuramu.*
many young.people NEG work.1PL
'Many (of us) young people do not work.'

4. a) How would you interpret the Greek data in (72) against the background of the discussion of (53) above?

   (72) *Emeis oi odigoi de tha {pioume/ *pieite/ *pioune}*
   DEM.PL DET.PL drivers NEG FUT drink.1PL drink.2PL drink.3PL
   apopse.
   tonight
   only: 'We drivers won't drink tonight.'

   b) What does the pattern in the Greek examples in (73) suggest concerning the interaction of person and demonstratives in the language?

   (73) *Aftoi oi odigoi de tha {*pioume/ *pieite/ pioune}*
   DEM.PL DET.PL drivers NEG FUT drink.1PL drink.2PL drink.3PL
   apopse.
   tonight
   only: 'These drivers won't drink tonight.'

5. What do the data in (74) to (76) from Warlpiri (Pama-Nyungan) suggest for the interaction of person and demonstratives in that language? Would you make a tentative prediction about another type of construction that should also be available in the language?

   (74) a. *ŋarka ŋatju*
   man I
   'I man' after Hale 1973: 317

   b. *ŋarka ka-ṇa puḷa-mi*
   man PRS-1SG *shout*-NPST
   'I man am shouting.' Hale 1973: 317, (24a)

   (75) a. *Ngarka njampu ka purlami.*
   man DEM.1 AUX shout
   'This man (near me) is shouting.'

   b. *Ngarka njampu ka-rna purlami.*
   man DEM.1 AUX-1SG shout
   '*I man am shouting.' Lyons 1999: 145; glossing modified

(76) a. *Ngarka yalumpu ka purlami.*
man DEM.2 AUX shout
'That man (near you) is shouting.'
b. *Ngarka yalumpu ka-npa purlami.*
man DEM.2 AUX-2SG shout
'*You man are shouting.' Lyons 1999: 145, (16)

6. While the focus of this chapter is on the (morpho-)syntax of nominal person, it can be fruitful to think about the semantic contribution of person. Consider the tests described by Grubic (this volume) consider what semantic contribution nominal person has in sentences like (77). Is it part of the assertion, a presupposition, a conventional implicature or a conversational implicature? You may want to take into account Nevins's (2007) view on person features as a starting point and consider the structure in (6). You can assume that a definite expression like *the linguists* is interpreted along the lines of 'the uniquely identifiable contextuall salient set of linguists' (for a more formal analysis of the definite article see, e.g., Heim & Kratzer 1998: 73–76).

(77) a. *We linguists arrived late.*
b. *Clara admires you linguists.*
c. *Nobody listens to you linguists.*

For an approach in the literature see Heim (2008) and Höhn (2014).

Abbreviations

Acronyms

*x*nP	extended nominal projection
APC	adnominal pronoun construction
PPDC	personal pronoun-demonstrative construction

Glosses

1	first person; after DEM: level one demonstrative

2	second person; after DEM: level two demonstrative
3	third person; after DEM: level three demonstrative
ABS	absolutive
ACC	accusative
ADDR	addressee
AORIST	aorist
ART	article
AUX	auxiliary
BEN	benefactive
CG	common gender
COMPEL	compellative
COP	copula
DEF	definite
DEM	demonstrative
DET	determiner
EPIS	epistemic
ERG	ergative
EXCL	exclusive person
F	feminine
FUT	future
INC	inchoative
INCL	inclusive person
IND	indicative
IPFV	imperfective

LIG	ligature
LNK	linking morpheme
LOC	locative
M	masculine
NEG	negation
NOM	nominative
OBJ	object
PFV	perfective
PL	plural
PRF	perfect
PROG	progressive
PRTCL	particle
PST	past
RED	reduplication
REL	relativiser
TODPST	today's past
TOP	topic
VOC	vocative

Acknowledgements

References

Abney, Steven. 1987. *The English noun phrase in its sentential aspect.* MIT dissertation.

Ackema, Peter & Ad Neeleman. 2013. Subset controllers in agreement relations. *Morphology* 23. 291–323.

Anderson, Stephen R. & Edward L. Keenan. 1985. Deixis. In Timothy Shopen (ed.), *Language typology and syntactic description. Grammatical categories and the lexicon (Volume III)*, vol. 3, 259–308. Cambridge: Cambridge University Press.

Arregi, Karlos & Andrew Nevins. 2012. *Morphotactics: basque auxiliaries and the structure of spellout*. Dordrecht: Springer.

Benveniste, Emile. 1971. The nature of pronouns. In *Problems in general linguistics*, 217–222. Coral Gables (FL): University of Miami Press.

Besnier, Niko. 2000. *Tuvaluan*. London: Routledge.

Biberauer, Theresa, Anders Holmberg & Ian Roberts. 2014. A syntactic universal and its consequences. *Linguistic Inquiry* 45(2). 169–225.

Blake, Barry J. 2001. The noun phrase in Australian languages. In Jane Simpson, David Nash, Mary Laughren, Peter Austin & Barry Alpher (eds.), *Forty years on. Ken Hale and Australian languages*, 415–425. Canberra: Pacific Linguistics.

Bobaljik, Jonathan David. 2008. Missing persons: a case study in morphological universals. *The Linguistic Review* 25. 203–230.

Bobaljik, Jonathan David. 2012. *Universals in comparative morphology. Suppletion, superlatives, and the structure of words*. Cambridge (MA): MIT Press.

Böhm, Gerhard. 1985. *Khoe-kowap. Einführung in die Sprache der Hottentotten, Nama-Dialekt*. Wien: Afro-pub.

Borer, Hagit. 1986. I-subjects. *Linguistic Inquiry* 17. 375–416.

Bruce, Les. 1984. *The Alamblak language of Papua New Guinea (East Sepik)*. Canberra: The Australian National University.

Brugè, Laura. 1996. Demonstrative movement in Spanish: A comparative approach. *University of Venice Working Papers in Linguistics* 6(1). 1.

Brugè, Laura. 2002. The positions of demonstratives in the extended nominal projection. In Guglielmo Cinque (ed.), *Functional structure in DP and IP: The cartography of syntactic structures*, vol. 1, chap. 2, 15–53. Oxford: Oxford University Press.

Burton-Roberts, Noel. 1975. Nominal apposition. *Foundations of Language* 13. 391–419.

Butler, Lindsay K. 2012. The DP-adjoined plural in Yucatec Maya and the syntax of plural marking. Ms., University of Arizona.

Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: a case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe*, 145–233. Berlin, New York: Mouton de Gruyter.

Choi, Jaehoon. 2014a. *Pronoun-noun constructions and the syntax of DP*. University of Arizona dissertation.

Choi, Jaehoon. 2014b. The locus of person feature and agreement. In Hsin-Lun Huang, Ethan Poola & Amanda Rysling (eds.), *NELS 43: Proceedings of the 43rd meeting of the North East Linguistic Society*, 65–76. Amherst (MA): GLSA.

Cinque, Guglielmo. 2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry* 36. 315–332.

Comrie, Bernard & Norval Smith. 1977. Lingua descriptive studies: questionnaire. *Lingua* 42(1). 1–72.

Davies, John. 1989. *Kobon*. Croom Helm. Reprint of 1981 first edition.

de Rijk, Rudolf P.G. 2008. *Standard Basque: a progressive grammar*. Cambridge (MA): MIT Press.

Déchaine, Rose-Marie & Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33(3). 409–442.

Delorme, Evelyn & Ray C. Dougherty. 1972. Appositive NP constructions. *Foundations of Language* 8. 2–29.

Diessel, Holger. 1999. *Demonstratives. Form, function, and grammaticalization*. Amsterdam: John Benjamins.

Embick, David. 2010. *Localism versus globalism in morphology and phonology*. Cambridge (MA): MIT Press.

Frampton, John. 2002. Syncratism, impoverishment, and the structure of person features. In Mary Andronis, Erin Debenport, Anne Pycha & Keiko Yoshimura (eds.), *Papers from the cls 38-1*, 207–222.

Furuya, Kaori. 2008. DP hypothesis for Japanese "bare" noun phrases. In Łukasz Abramowicz, Stefanie Brody, Toni Cook, Ariel Diertani, Aviad Eilam, Keelan Evanini, Kyle Gorman, Laurel MacKenzie & Joshua Tauberer (eds.), *University of Pennsylvania Working Papers in Linguistics. Proceedings of the 31st Annual Penn Linguistics Colloquium*, vol. 14, 149–162. Philadelphia: University of Pennsylvania.

Giusti, Giuliana. 1997. The categorial status of determiners. In Liliane Haegeman (ed.), *The new comparative syntax*, 95–123. London, New York: Longman.

Giusti, Giuliana. 2002. The functional structure of noun phrases. a bare phrase structure approach. In Guglielmo Cinque (ed.), *Functional structure in DP in IP; the cartography of syntactic structures*, 54–90. Oxford: Oxford University Press.

Grimshaw, Jane. 2005. Extended projection. In *Words and structure*, chap. 1, 1–71. Stanford: CSLI Publications. Revision of the 1991 manuscript.

Haacke, Wilfrid Heinrich Gerhard. 1976. *A Nama grammar: the noun-phrase*. University of Cape Town MA thesis.

Haacke, Wilfrid Heinrich Gerhard. 1977. The so-called "personal pronoun" in Nama. In Anthony Traill (ed.), *Khoisan linguistic studies 3*, 43–62. Johannesburg: African Studies Institute.

Hale, Ken. 1973. Person marking in Warlpiri. In Stephen R. Anderson & Paul Kiparsky (eds.), *Festschrift for Morris Halle*, 308–344. New York: Holt, Rinehart & Winston.

Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The View from Building 20*, 111–176. Cambridge (MA): MIT Press.

Harbour, Daniel. 2016. *Impossible persons*. Cambridge (MA): MIT Press.

Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. English. *Language* 78(3). 482–526.

Haviland, John. 1979. Guugu Yimidhirr. Sketch grammar. In Robert M.W. Dixon & Barry Biake (eds.), *Handbook of Australian languages*, vol. 1, 26–180. The Australian National University.

Heim, Irene. 2008. Features on bound pronouns. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi theory. phi-features across modules and interfaces*, 35–56. Oxford, New York: Oxford University Press.

Heim, Irene & Angelika Kratzer. 1998. *Semantics in generative grammar*. Oxford: Blackwell.

Heringa, Herman. 2012. A multidominance approach to appositional constructions. *Lingua* 122. 554–581.

Höhn, Georg F.K. 2014. The semantics of adnominal pronoun constructions and unagreement. In Ludmila Veselovská & Markéta Janebová (eds.), *Complex visibles out there. Proceedings of the Olomouc linguistics colloquium 2014: Language use and linguistic structure*, 175–191. Olomouc: Palacký University.

Höhn, Georg F.K. 2016. Unagreement is an illusion: apparent person mismatches and nominal structure. *Natural Language and Linguistic Theory* 34(2). 543–592. DOI:10.1007/s11049-015-9311-y

Höhn, Georg F.K. 2017. *Non-possessive person in the nominal domain*. University of Cambridge dissertation. http://ling.auf.net/lingbuzz/003618.

Höhn, Georg F.K., Giuseppina Silvestri & M. Olimpia Squillaci. 2016. Unagreement between Italian and southern Italian dialects. *Rivista di Grammatica Generativa* 38. 137–147.

Höhn, Georg F.K., Giuseppina Silvestri & M. Olimpia Squillaci. 2017. Greek and Romance unagreement in Calabria. *Journal of Greek Linguistics* 17(2). 263–292.

Hurtado, Alfredo. 1985. The unagreement hypothesis. In L. King & C. Maley (eds.), *Selected papers from the thirteenth linguistic symposium on Romance languages*, 187–211. Amsterdam: John Benjamins.

Imai, Shingo. 2003. *Spatial deixis*. State University of New York at Buffalo dissertation.

Jelinek, Eloise. 1984. Empty categories, case and configurationality. *Natural Language and Linguistic Theory* 2. 39–76.

Johannessen, Janne Bondi. 2008. The pronominal psychological demonstrative in Scandinavian: Its syntax, semantics and pragmatics. *Nordic Journal of Linguistics* 31(2). 161–192.

Kuroda, S.-Y. 1965. *Generative grammatical studies in the Japanese language*. MIT dissertation.

Lander, Eric & Liliane Haegeman. 2016. The nanosyntax of spatial deixis. *Studia Linguistica*. 1–66. DOI:10.1111/stul.12061

Lawrenz, Birgit. 1993. *Apposition. Begriffsbestimmung und syntaktischer Status*. Tübingen: Narr.

Longobardi, Guiseppe. 2008. Reference to individuals, person, and the variety of mapping parameters. In Henrik Høeg Müller & Alex Klinge (eds.), *Essays on nominal determination: from morphology to discourse management*, 189–211. Philadelphia, Amsterdam: John Benjamins.

Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.

McFadden, Thomas. 2004. *The position of morphological case in the derivation: a study on the snytax-morphology interface*. University of Pennsylvania dissertation.

McGinnis, Martha. 2005. On markedness asymmetries in person and number. *Language* 81(3). 699–718.

Nash, Léa. 2017. Person split and pronominal asymmetries. In Andrew Lamont & Katerina Tetzloff (eds.), *Nels 47: Proceedings of the forty-seventh annual meeeting of the North East Linguistic Society*, vol. 2, 303–3014. Amherst (MA): GLSA Publications.

Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. English. *Natural Language & Linguistic Theory* 25(2). 273–313.

Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29. 939–971.

Newman, Paul. 2000. *The Hausa language. An encyclopedic reference grammar*. New Haven, London: Yale University Press.

Noguchi, Tohru. 1997. Two types of pronouns and variable binding. *Language* 73. 770–797.

Noyer, Rolf. 1997. *Features, positions and affixes in autonomous morphological structure*. New York: Garland. Revised version of 1992 MIT Doctoral Dissertation.

Obata, Kazuko. 2003. *A grammar of Bilua. A Papuan language of the Solomon Islands* (Pacific Linguistics 540). Canberra: The Australian National University.

Panagiotidis, Phoevos. 2002. *Pronouns, clitics and empty nouns.* Amsterdam: John Benjamins.

Panagiotidis, Phoevos. 2003. Empty nouns. *Natural Language and Linguistic Theory* 21. 381–432.

Panagiotidis, Phoevos. 2015. *Categorial features. A generative theory of word class categories*. Cambridge: Cambridge University Press.

Parrott, Jeffrey K. 2009. Danish vestigial case and the acquisition of vocabulary in distributed morphology. *Biolinguistics* 3(2-3). 270–304.

Pesetsky, David. 1978. Category switching and so-called so-called pronouns. In Donka Farkas, Wesley M. Jacobsen & Karol W. Todrys (eds.), *Chicago linguistic society*, vol. 14, 350–360. Chicago.

Postal, Paul. 1969. On so-called "pronouns" in English. In David A. Reibel & Sanford A. Schane (eds.), *Modern studies in English: Readings in Transformational Grammar*, 201–226. Englewood Cliffs (New Jersey): Prentice Hall.

Rauh, Gisa. 2003. Warum wir Linguisten "euch Linguisten", aber nicht "sie Linguisten" akzeptieren können. Eine personendeiktische Erklärung. *Linguistische Berichte* 196. 390–424.

Rauh, Gisa. 2004. Warum 'Linguist' in 'ich/du Linguist' kein Schimpfwort sein muß. Eine konversationstheoretische Erklärung. *Linguistische Berichte* 197. 77–105.

Renck, G. L. 1975. *A grammar of Yagaria.* Vol. 40 (Pacific Linguistics). Canberra: Australian National University.

Ritter, Elizabeth. 1991. Two functional categories in modern Hebrew noun phrases. In *Perspectives on phrase structure: heads and licensing* (Syntax and Semantics 25), 37–60. New York: Academic Press.

Ritter, Elizabeth. 1992. Cross-linguistic evidence for Number Phrase. *Canadian Journal of Linguistics* 37. 197–218.

Ritter, Elizabeth. 1995. On the syntactic category of pronouns and agreement. *Natural Language and Linguistic Theory* 13. 405–443.

Rivero, María Luisa. 2008. Oblique subjects and person restrictions in Spanish: a morphological approach. In R. D'Alessandro, S. Fischer & G.H. Hrafnbjargarson (eds.), *Agreement restrictions*, 215–250. Berlin: Mouton de Gruyter.

Roberts, John R. 1987. *Amele*. London: Croom Helm.

Roehrs, Dorian. 2005. Pronouns are determiners after all. In Marcel den Dikken & Christina M. Tortora (eds.), *The function of function words and functional categories*, 251–285. Amsterdam: John Benjamins.

Shlonsky, Ur. 2004. The form of Semitic noun phrases. *Lingua* 114. 1465–1526.

Sokolovskaja, N. K. 1980. Nekotorye semantičeskie universalii v sisteme ličnyx mestoimenij. In I. F. Vardu' (ed.), *Teorija i tipologija mestoimenij*, 84–102. Moscow: Nauka.

Sommerstein, Alan H. 1972. On the so-called definite article in English. *Linguistic Inquiry* 3. 197–209.

Stavrou, Melita. 1995. Epexegesis vs. apposition in Modern Greek. In *Scientific bulletin of the School of Philology*, vol. 5, 217–250. Thessaloniki: Aristotle University.

van Riemsdijk, Henk. 1999. Categorial feature magnetism: the endocentricity and distribution of projections. *Journal of Comparative Germanic Linguistics* 2. 1–48.

Wiltschko, Martina. 2008. The syntax of non-inflectional plural marking. *Natural Language & Linguistic Theory* 26. 639–694.