1. Introduction

Traditionally, the grammatical category of person embraces the discourse role of speaker, referred to as the first person, the discourse role of hearer, referred to as the second person and the other, i.e. the non-speaker and non-hearer, referred to as the third person. The vast majority of the languages of the world have a closed set of expressions for the identification of these three discourse roles. The expressions in question, which are commonly called personal pronouns, will be referred to here as person markers or person forms.

The person markers found in languages differ widely in regard to their morphophonological realization, syntactic function, discourse function, internal semantic structure and referential potential. With respect to morpho phonological realization, they may appear as independent words, so called weak forms, clitics, affixes or even only covertly as zero forms. As far as syntactic function is concerned, they may be available for all argument and adjunct functions, for just some subtype of argument functions or even only as single word responses to questions. In terms of discourse function, they may be unrestricted or restricted to say topics or alternatively only to constituents bearing special discourse prominence or emphasis. As for internal semantic structure, they may encode person alone or, more commonly person and number or both of these as well as some subset of the grammatical categories of case, inclusivity, gender and honorificity and less often tense, aspect, mood and polarity. Finally, with regard to referential potential, some person forms are rather unrestricted and can be used even non-specifically, generically and be construed as bound variables, others are necessarily human and/or definite, while yet others have only limited or even no referential potential at all. Since space precludes providing a comprehensive account of the full range of variation exhibited by person markers, in this contribution I will concentrate on variation in morpho phonological form and syntactic function.

The chapter is structured as follows. Section 1 sets the stage for the discussion by taking a closer look at the category person itself and in particular at the status of the third
person as a member of this category. Section 3 provides an overview of the different morpho-phonological realizations of person markers. Section 4 considers how the distinction between independent and dependent person forms relates to what is typically considered to be the primary grammatical function of the two types of forms, namely their role as pronouns and as agreement markers. In section 5 we will have a look at how the different types of person markers are distributed cross-linguistically relative to syntactic function. And finally in section 6 we will consider issues relating to morphological alignment.

2. The category of person and its composition

It is generally recognised that the first and second person differ fundamentally from the third. In the words of Lyons (1977:638) “there is a fundamental, and ineradicably, difference between the first and second person, on the one hand, and the third person on the other”. This difference does not merely lie in the fact that the referents of the first and second person forms are necessarily human and thus literally persons while those of third person forms may refer to human and nonhuman and even inanimate entities (at least in many languages). Rather what distinguishes the two sets of person forms is the deictic nature of the first and second person as compared to the essentially anaphoric character of the third person. Thus each instance of use of the first or second person de facto identifies a unique speaker and a unique hearer corresponding to the utterer and hearer of the utterance featuring the first and second person forms, respectively. By contrast, the referential interpretation of a third person form is dependent not on the extra-linguistic context (who is uttering the utterance to whom) but on the linguistic context of utterance, typically the preceding discourse, less often the following discourse. Accordingly, the discourse roles of speaker and hearer are regularly referred to only by person markers, while reference to a third person can be achieved via any lexical expression. The markers of the first and second person are therefore special in a way that the markers of the third person are not.

The above differences between the first and second person, on the one hand, and the third on the other, have lead many linguists, most notably Benveniste (1971:198, 221), to
proclaim the third person a non-person. As the elimination of the third person from the category person would have radical consequences for the current discussion, let us take a closer look at the desirability of adopting this position.

2.1 Only two persons

For Benveniste the anaphoric, as opposed to deictic, nature of the third person constituted the sole rationale for eliminating the third person from the category person. His followers, however, have sought additional justification for this move in differences in the cross-linguistic distribution of the first and second person as opposed to the third and in differences in their phonological and morpho-syntactic properties. The most important distributional fact relating to the distinction between the speech act participants as opposed to the third person is that while all languages which have grammaticalized the category of person have person markers for the first and second person, many lack such markers for the third person. In such languages demonstratives are used in lieu of third person markers (e.g. Basque, Comanche, Kawaiisu, Lavukaleve, Mapuche, Maricopa, Tiriyo, Yurukare) or, more rarely, full nominal expressions such as `male' or even a zero form, the absence of an overt expression being interpreted as denoting third person. The absence of special markers for the third person in some languages is undoubtedly consistent with the claim that the third person is a non-person. But this fact can also be accommodated within the traditional three-person approach particularly under a prototype view of category structure (Rosch 1978; Lakoff 1987; see va der Auwera and Gast, this volume). If the third person is considered to be a more peripheral member of the category person than the first and the second, we may expect there to be less pressure on languages to develop special forms for the expression of this more peripheral member than for the two central members. And this is indeed so. Nonetheless, most languages do develop special markers for the third person. This inconvenient fact is circumvented by advocates of the two-person by highlighting the distinct properties of the third person as compared to the first and second person forms. As is well known, the first and second person often pattern together with respect to a host of phenomena ranging from phonetic substance and structure, through various types of inflectional properties to morphological
status and order. We see in (1), for example, which is from Jino, a Tibeto-Burman language of China, that the third person clearly differs phonetically from the first and second.

(1) Jino (Hongkai 1996:5)

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<tbody>
<tr>
<td>1SG</td>
<td>ηɔ̀⁴²</td>
<td>1INCL</td>
<td>nu⁵⁵ vu³³</td>
</tr>
<tr>
<td>2SG</td>
<td>nɔ̀⁴²</td>
<td>1EXCL</td>
<td>na⁵⁵ vu³³</td>
</tr>
<tr>
<td>3SG</td>
<td>khɔ̀⁴²</td>
<td>2PL</td>
<td>ni⁵⁵ vu³³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3PL</td>
<td>zo⁴² hma⁵⁵</td>
</tr>
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</table>

Further whereas the plural for the first and second person is formed with the suffix -vu³³, with the third person the suffix -hma⁵⁵ is used. To give another example, in Rumanian the first and second person are differentiated for three cases, the direct, accusative and dative/genitive. The third person, on the other hand, exhibits just a two-way contrast.

(2) Rumanian (Beyrer, Bochmann & Bronsert 1987:108,112)

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<tr>
<td>1SG</td>
<td>eu</td>
<td>mine</td>
<td>mie</td>
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<tr>
<td>2SG</td>
<td>tu</td>
<td>tine</td>
<td>ție</td>
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<tr>
<td>3SG M</td>
<td>el</td>
<td>lui</td>
<td></td>
</tr>
<tr>
<td>3SG F</td>
<td>ea</td>
<td>ei</td>
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</tr>
</tbody>
</table>

Needless to say, each of the type of differences which sets the third person apart from the first and second can be matched by instances in which the three persons are treated in an identical way. A particularly telling example which combines phonetic similarities between the three persons, identical number marking and case marking is that of the person forms in (3) from Suena, a Papuan language of the Binanderean family.

(3) Suena (Wilson 1974: 15-16)
Sets of person markers such as these suggest that any analysis which eliminates the third person from the category of person faces the problem of accounting for the obvious commonalities in form and behaviour that the three persons in so many languages actually do display.

2.2. 2-person vs. 3-person languages

An interesting attempt to reconcile the existence of both asymmetries and symmetries in the forms and properties of first and second person markers as compared to third person markers found cross-linguistically has been recently proposed by Bhat (2004: 132-150). Bhat suggests that the status of the third person may constitute an important typological parameter which may allow us to divide languages into 2-person and 3-person languages. The primary diagnostic for this typology that Bhat proposes is whether the forms of the third person display formal identity or affinity (are synchronically or diachronically related) with the demonstrative. Languages in which this is so are termed 2-person languages, languages in which this is not the case are termed 3-person languages. His investigation of a sample of 225 of the world's languages suggests that both type of
languages are common, with the 2-person languages being somewhat more common than 3-person ones, the relevant figures being 126 (56%) vs. 99 (44%).

While one cannot but sympathise with Bhat in his attempt to breach the stalemate induced by the across the board denial of the personhood of the third person by scholars such as Benveniste, the validity of the typology that he proposes is far from clear. First of all, there are problems with his basic diagnostic, i.e. the relationship between the third person form and the demonstrative. As he himself admits, the identity in form or affinity between the two is much more often partial than complete in that it holds only for one of the demonstratives (often the remote or distal one) or one of the realizations of the third person.\(^1\) Secondly, the proposed correlates of the typology are rather restricted. The main one suggested by Bhat is the presence of gender, which he associates with demonstratives and thus 2-person systems. Although nearly 80% of the languages in his sample which display gender in the third person forms are 2-person ones, gender is a feature of only 62 of the 225 languages in his sample. Finally, it remains to be established whether and to what extent the proposed typology correlates with the presence vs. absence of asymmetries in phonological form and morpho-syntactic properties between the first and second person as compared to the third discussed earlier. Other things being equal, one would expect asymmetries involving the first and second person on the one hand and the third person on the other to be more common in 2-person languages than in 3-person ones. One would also expect statistical differences to exist between 2-person and 3-person languages in relation to asymmetries involving other constellations of the three persons. In particular 2-person languages should not, or only extremely rarely, exhibit an asymmetry involving 1& 3 vs. 2 or 1 vs. 2 & 3.\(^2\) Two instances of the former of the two asymmetries are illustrated in (4) from Zaozou, a Tibeto-Burman Lolish language, in which the plural suffix is \(-pe^{55}\) for first and third person but \(-te^{13}\) for the second.

(4) Zaozou (Bradley 1993:195)

<table>
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<tr>
<th>1SG</th>
<th>2SG</th>
<th>3SG</th>
<th>1EXCL</th>
<th>2EXCL</th>
<th>3PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n)(^{55})</td>
<td>(\eta)(^{31})</td>
<td>(t)(^{35})</td>
<td>(?a^{1})(^{pe^{55}})</td>
<td>(\eta)(^{55})(^{pe^{55}})</td>
<td>(t)(^{35})(^{pe^{55}})</td>
</tr>
</tbody>
</table>
Further it is only the second person that undergoes a stem change in the plural while the first and third persons do not. Interestingly enough, Zaozou qualifies as 2-person languages in terms of Bhat’s typology.

The elaboration of a potential distinction between 2-person and 3-person languages is a considerable advance over the elimination of the third person from the category person altogether. But whether it is the right step is not clear. The traditional view of the category person may prove yet to be the optimal one. Under the traditional view of personhood the category person is comprised of three persons be it of unequal status. The three persons are seen as hierarchically ranked though not uniquely. As has been long recognised, the ranking of the three persons depends on the cross-cutting parameter (see Croft (2003:161)). Typically the first and second person are grouped together and juxtaposed to the third either at the top or bottom of the person hierarchy. But interactions between any combinations of persons may occur.

Since we do not yet know which typology is correct, in the remainder of the discussion all three persons will be considered.

3. Morpho-phonological form

Given the impoverished semantics of person markers and the fact that the range of syntactic and discourse functions that they fulfil cross-linguistically must essentially be the same, the major parameter responsible for the cross-linguistic variation in person markers is morpho-phonological form. In terms of their formal realization person markers may be divided into independent and dependent forms. We will begin the discussion with the former.

3.1 Independent forms

Contrary to what might be expected, what constitutes an independent person form or its terminological equivalents such as free, full, self/standing, cardinal, focal, strong, long, and disjunctive is not uncontroversial. Typically what is meant by an
independent/free/full etc. person form is a person marker which constitutes a separate word and may take primary words stress, such as the English I, me, you, she, they. Word status in turn is associated with properties such as: the ability to be involved in coordination's, the possibility of being deleted under appropriate discourse conditions and the possibility of being modified by another word (see e.g. Zwicky 1985; Dixon & Aikhenvald 2002). Most languages have at least one paradigm of person forms which qualify as independent in the above sense and many languages have several such paradigms.

The languages which have been suggested as lacking independent person forms are of two types. To the first type belong languages such as Thai, Vietnamese and Japanese in which the expressions used to indicate the three persons do not necessarily constitute a closed class and include proper names, kin terms and various relational terms such as ‘master’ or ‘servant’ or ‘hair of the head’ etc. Such languages are often seen as lacking the category person altogether. Under an alternative analysis the languages in question are regarded as having person forms but ones differing in categorial status from those found in most languages in being nouns rather than pronouns or, for those who adopt a scalar approach to morpho-syntactic categories (see e.g. Sugamoto 1989), as belonging to the nominal end of the pronominality scale. The second type of languages which are sometimes seen as lacking independent person forms are languages in which the words used to denote the three persons do not contain person roots. The relevant words consist of a generic pronominal root, typically invariant across all person number categories, with person affixes attached. Etymologically the generic pronominal root is often the word for person, body, self or the verb ‘to be’ or ‘exist’. In most of the languages of the relevant type such as Cayuvava, Gundungurra, Hua, Mundari, Warekena or Warman the generic root and person marker combination function as a semantic unit. There is thus no reason why the languages in question should be treated as lacking independent expression of the category person. Nonetheless, there are some exceptional cases, most notably among the Salishan languages which are less easy to dismiss. For example, the so called emphatic forms in North Straits Salish are very much like predicates with person inflection rather than independent person forms. According to Jelinek (1998) they display various properties of predicates including clause initial
position, the possibility of occurring with clitic subjects and object suffixes and the possibility of appearing with a determiner in a determiner phrase. Crucially, the "emphatic" forms are treated syntactically as third person. We see in (5) that instead of the second person agreement suffix -əwəs we have the -Ø form used for agreement with third persons.

(5) Northern Straits Salish (Jelinek 1998:340)

\[\text{leŋ-t-Ø}=\text{on} \quad \text{cə} \quad \text{nəkw}\]

\[\text{see-TR-3-1SG} \quad \text{DET} \quad \text{be:2SG}\]

`I saw you.’ (Lit. I saw the one that was you.)

North Straits Salish may thus well be a language which is best seen as lacking independent person forms.

3.2 Dependent forms

Dependent person forms, also referred to as reduced, bound, defective, deficient or conjunctive, typically cannot be stressed (though some may receive contrastive stress), are often phonologically reduced relative to the independent forms, and either morphologically dependent on another element in the utterance or at least restricted in distribution relative to the independent forms. In terms of their formal realization dependent person markers may be divided on the basis of their decreasing morphological independence and phonological substance into the four types presented in (6).

(6) weak forms > clitics > affixes > zero.

The term weak form is variously employed in the literature. I use it here in the sense of Bresnan (2001), i.e. for unstressed person markers which are unattached either phonologically or morphologically to any other constituent and which differ from independent forms both phonologically and in terms of syntactic distribution. An example of such forms is given in (7) from the Oceanic language Woleaian. (See also the
examples in (15) further below from Kiribatese.)

(7) Woleaian. (Sohn 1985:150, 151, 145)
   a. (Gaang) i ta weri-Ø
      I 1SG not see-3SG
      `I did not see it.’
   b. (Gaami) gai lag!
      you:PL 2PL go
      `You(pl) go!’
   c. Yaremat laal ye be mas
      man that 3SG FUT die
      `That man will die.’

The use of the term clitic also varies. My use of the term here corresponds by and large to what Zwicky (1985) calls special clitics i.e. forms phonologically attached to a word or stem which are not just reduced full forms but rather separate allomorphs of full forms displaying their own morpho-syntactic and morpho-phonological properties. Clitics are notoriously difficult to distinguish from affixes which are also phonologically attached to a word. Some scholars distinguish the two in terms of the degree of phonological integration of the relevant stem to which the forms are attached. I, however, will take as definitive of the clitic as opposed to affix status of a person form its ability to attach to multiple hosts or, to put it differently, its ability to attach to phrases or syntactic positions as opposed to specific stems. Clitic person markers in the sense described above tend to occur in one of the locations specified in (8), which is taken from Anderson (1993:74).

(8) a. initial clitics (e.g. as in Manubo)
   b. final clitics (e.g. as in Trumai)
      a. second position clitics (e.g. as in Pitjantjatjara)
b. penultimate-position clitics (e.g. as in Danhcarra)
c. pre-head clitics (e.g. as in Bawm)
d. post-head clitics (e.g. as in Chalcatongo Mixtec)

An example of arguably one of the most common clitic positions for argument person markers, namely initial position in the VP is given in (9) from Marubo, a Panoan language spoken in a boarder region between Brazil and Peru.

(9) Marubo (Romankevicius Costa 1998:66)
\[
\begin{align*}
\text{a. } & \text{`Wan-tun an='pani-Ø tu'raš-a-ka (accent!)} \\
& \text{he-ERG 3SG-net-ABS tear-AUX-IM.PAST} \\
& \text{`He has torn the net.'}
\end{align*}
\]

\[
\begin{align*}
\text{b. } & \text{Ia-Ø in=wįša-i-ki} \\
& \text{I:ABS 1SG-write-PRES} \\
& \text{`I am writing.'}
\end{align*}
\]

Note that the clitic may procliticise not only to the verb (9b) but also to the direct object (9a).

In contrast to clitics, affixes attach to stems or words, typically of a given morpho-syntactic category, rather than to locations or phrases. Affixes denoting person span the whole range of possible affixes; they may be prefixes, suffixes, circumfixes and even infixes, though the last are very rare. An example of a person infix is provided in (10) from Au, a Papuan language of the Torricelli phylum, in which infixes are found with three out of five classes of transitive verbs.

(10) Au (Scorza 1985:226)
\[
\begin{align*}
\text{w-įn-w-afǐn weise} \\
\text{3SGF-hunt-3SGF-hunts grasshoppers} \\
\text{`She hunts grasshoppers.'}
\end{align*}
\]
Even rarer than person infixes is person marking via stem suppletion. Such marking of person is exemplified in (11) on the basis of the Mexican language Mazatec (San Jeronimo Tecoatl dialect) in which most verbs have two stems, one used with first person singular and third person subjects and another used with all other subjects.

(11) Mazatec (Agee & Marlett 1987:60-61)

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<tr>
<th>1SG &amp; 3</th>
<th>2SG, 1PL, 2PL</th>
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<tbody>
<tr>
<td>see</td>
<td>kocehe</td>
</tr>
<tr>
<td>talk</td>
<td>cha</td>
</tr>
<tr>
<td>give</td>
<td>cha</td>
</tr>
<tr>
<td>take</td>
<td>?va</td>
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</table>

Yet another type of rare person marking is via tone. While not strictly speaking affixal, it is grouped here with affixal marking as it typically does have a segmental component.

The final type of dependent marking of person is via a zero form, where by zero I mean a phonologically null form open to any person interpretation depending on the context.\(^3\) The relevant type of zero is illustrated in (12) on the basis of Japanese in which zero person forms occur regularly in declarative and interrogative clauses both finite and non-finite, main and subordinate and as subjects and non-subjects.

(12) Japanese (Yamamoto 1999:80)

```
"… asoko ja rokusuppo Ø hanashi mo deki
there at property (we) talk ACC can
nai shi, Ø sangai no ongakukissa
NEG and (I) third:floor CONN music café
o Ø oshie-toita no"
ACC her show-PERF CONN
```

`But it's too noisy to talk there and (I) told (her) about the coffee shop on the third floor instead.' (Yukiko Mishima. Hyaku-man Yen Senbei. English translation by Edward G. Seidensticker)
Dependent person forms, in contrast to independent person forms are not a feature of all or virtually all languages. Nonetheless the statistical data currently available suggests that they are to be found in the vast majority of languages, in around 80%. The indeterminacy which surrounds the issue springs from the fact that most of the statistical data relate solely to overt forms and to realizations of arguments of verbal predicates and not of non-verbal predicates or possessed nouns or adpositions.

The verbal bias is arguably less distorting than the concentration on overt person forms since cross-linguistic investigations such as those of Nichols (1992) and Siewierska (2004) suggest that it is only very rarely that a language exhibits dependent person forms on possessed nouns and/or adpositions but not verbs. Zero forms, on the other hand, are somewhat more difficult to detect, particularly if they are used less persuasively than in a say Japanese.

Most of the languages which lack overt dependent person markers are concentrated in South and South-East Asia, The Caucuses and West Africa. There are also pockets in Western Europe (Swedish, Norwegian, Danish and to a large extent English), Australia (Diyari, Dyirbal, Jiwäili, Margany, Uradhi,Yidiny), North America (the Pomo languages, Wappo, Wikchamni, Yaqui, Zuni) and South America (Bribri, Guaymi, Tunebo (all Chibchan) also Epena Pedee, Shipibo-Conibo, Xokleng). South-East Asia, however, is a hotbed of zero person forms. To what extent such person forms occur in some of the less well-studied languages lacking overt dependent forms remains to be established.

The distinctions between independent and dependent person forms and within the latter, though presented above as discrete, are much better viewed as a continuum. In diachronic terms the reduction in phonological substance and morphological independence, as we proceed from left to right, is typically viewed as defining a grammaticalization cline. This cline also has a functional dimension to which we now turn.

4. Grammatical function
In the broadest terms, person forms are seen to perform two primary grammatical functions. The first is that of pronouns, the second of agreement markers. In their pronominal function person forms are referential expressions, "substitutes" for nouns and are thus expected to realize the same syntactic argument and adjunct functions that lexical categories do. As agreement markers, person forms essentially restate or replicate the person and typically also the number and/or gender features of their controllers but are not referential expressions in their own right. They have an association with core argument functions but are not arguments themselves. The pronominal function is primarily realized by independent person forms though it may also be realized by any of the dependent forms, be it not for all argument and adjunct positions. The agreement function is characteristic of affixes. It may, nonetheless, be also fulfilled by weak forms and clitics, though not zeroes, in the sense of the term used here. Thus both the pronominal and agreement functions of person forms can be realized by the same range of morpho-phonological types, i.e. weak forms, clitics and affixes. It is therefore not altogether surprising that the status of these person forms in individual languages has been the subject of much controversy.

From the point of view of function the pronoun vs. agreement marker distinction is actually much less categorical then is often assumed. In fact many scholars maintain that it is not possible to make a principled distinction between the two. The rationale for the distinction lies rather in more general assumptions about the nature of clause structure. Most current theoretical frameworks assume some version of functional bi-uniqueness which requires each syntactic argument to be expressed only once within a given clause. Accordingly, an independent person form (or a lexical NP) and the corresponding dependent person marker occurring in the same clause cannot both be realizations of the same syntactic argument. One must be an argument and the other an agreement marker. Alternatively, the two may be viewed as not belonging to the same clause, one being a clausal argument, the other an extra-clausal constituent in some type of adjunct or appositional relationship to the clause as a whole or just to the argument in question. The first analysis, which I will refer to as the agreement analysis, is the traditional one posited for clauses such as (13) in well know languages like Polish, Italian or, for that matter, English.
Polish

(13) Ja pójd-ę z tobą

I:NOM go-FUT-1SG with you:INSTR

`I will go with you.'

The first person independent form *ja* is here treated as the realization of the subject argument of the verb which in turn agrees with the subject in person and number. This is evinced on the verb by the suffix -e, the agreement marker. The second analysis, which following its most prominent adherent Jelinek (1984, 1998) I will refer to as the pronominal argument analysis, is posited for clauses such as (14) in so-called head-marking languages such as the Siouan language Lakhota.

Lakhota

(14) Miyé mathó kí Ø-wa-kté

I bear the 3SG-1SG-kill

`I killed the bear.'

In (14) the first person singular affix *wa-* and the third person singular affix Ø- are treated as the realizations of the subject and object arguments respectively and the corresponding independent forms *miye* and *mathós* as being adjuncts comparable to English left-dislocated topics or appositional NPs (e.g. *I, your mother, am telling you*). Significantly despite claims to the contrary, the dependent person forms in the two types of languages need not differ fundamentally from each other. For example, both may have referential value as evidenced by the fact that they may occur without the corresponding free forms. Further at least in some pronominal argument languages third person affixes are not necessarily definite and referential but, just like agreement markers in languages such as Polish can receive a non-specific or generic interpretation (see e.g. Evans 2002).

In contrast to the above, in theories of grammar which do not adhere to the principle of there being only one syntactic argument per semantic referent in a clause, the necessity of making a categorical distinction between pronouns and agreement markers does not
arise. Both the independent and dependent person forms can be treated as the realizations of the same argument. Both may be viewed as person forms with referential value though differing morpho-phonologically and also potentially in other respects. One version of such an analysis, referred to as the double indexation analysis, has been developed by Barlow (1988) and subsequently taken up by Croft (2001:238-9) in his Radical Construction Grammar and also Siewierska & Bakker (2005) in the context of Functional Grammar. The double indexation analysis takes as its point of departure the claim that what are typically considered to be anaphoric relationships between linguistic expressions, be it lexical ones or person forms, are better conceived as involving a co-reference relationship between the form in question and a discourse referent present in a discourse representation. A discourse referent is a conceptual entity the representation of which in discourse is seen to depend on a range of factors: the amount of pragmatic knowledge between the speaker and addressee, the discourse situation, the information load and also morpho-syntactic constraints relevant to the language in question. Crucially, however, a given discourse referent can have multiple indexes within a construction and the respective indexes may offer different perspectives on the referent (express different features). The major advantage of this double indexation analysis over purely morpho-syntactic accounts of agreement is that it does away with the necessity of compartmentalizing languages and/or constructions into agreement and pronominal argument ones. All person forms are seen to refer. This is not to deny that the status of independent and dependent person forms, as well of the various types of dependent person forms in languages may differ. To the contrary. What we are likely to find is that the cross-linguistic differences are far more varied and subtle than those captured by the pronoun vs. agreement marker distinction.

In view of the above, in what follows we will continue to use the terms person marker and person form rather than pronoun or agreement marker.

5. The argument prominence hierarchy

Since person markers are primarily associated with referents who are human, it comes as no surprise that they favour syntactic functions which typically express human roles, i.e.
agents, experiences, recipients, beneficiaries and possessors. At the clause level such roles are characteristic of arguments as opposed to adjuncts, and among the arguments favour subjects over objects in the case of agents, and experiences and objects over obliques in the case of recipients and beneficiaries. As argued by DuBois (1987), and documented in the literature by data from many languages, person markers also clearly favour transitive subjects over intransitive ones. At the NP level person forms are prototypical possessors. While these distributional preferences appear to hold for all types of person markers there are, nonetheless, interesting differences with respect to morphophonological form that are worth considering.

5.1 Argument positions and independent person forms

It has not been the custom to comment on the syntactic function of independent person forms the assumption being that such forms are usually open to the same range of syntactic functions as are lexical categories. Yet though this is indeed often so, it need not be. There are languages in which independent person forms are used only as single word responses to questions. For all other functions dependent forms are used. According to Miller (1963:174), this is the case in Acoma, a Keresan language of New Mexico, which has only two independent person markers, namely šínuné, hínuné `I' and hísuné `you'. In the Arawakan language Wari (Everett & Kern 1997:303), spoken in the Rondonia region of Brazil, there is a full paradigm of independent person markers, but they too are never used as verbal arguments. The first and second person forms occur only as single word responses to questions. The third person forms are used as adnominal emphatics, i.e. similarly to the English reflexive emphatics found in clauses such as *The queen herself will come* or as emphatic left-dislocated topics (with or without an accompanying nominal), in which case they are followed by a relative clause.

In quite a few other languages independent person markers are used at least as arguments of some non-verbal predicates and/or in coordinations. Stassen's (1997) analysis of intransitive predications suggest that of the four classes of intransitive predicates, event, property, class and locational, the most likely to require the subject to be expressed by an independent person form are class and/or locational predicates, the
least likely event predicates. In line with this observation we see that in the Austronesian language Kiribatese an independent person form is used as the subject of a class predicate in (15a), while the subjects of the property predicate in (15b) and an event predicate in (15c) are rendered by weak forms.

(15) Kiribatese (Groves et al. 1985: 104, 106, 86)

a. Ngala te teretitenti
   he the president
   `He is the president.'

b. Kam5 baba
   2SG stupid
   `You are stupid.'

c. E noora-i
   3SG see-1SG
   `He saw me.'

It is of interest to note that, there are no independent person forms in Kiribatese for direct objects. As (15c) suggest they are expressed by person suffixes, as are also complements of prepositions. Other languages which have independent forms for at least some types of subjects but not for objects are: Anejom, Au, Canela Kraho, Gapun, Geez, Malak Malak, Maranguku, Palikur, Salinan and Sumerian. I am not aware of any languages manifesting the converse situation, i.e. the possibility of expressing objects by independent person forms but not subjects. Even in languages in which the normal expression of a subject is by a dependent person marker there tend to be special independent forms which may be used at least with nonverbal predicates or for purposes of emphasis, as in Wari, mentioned above.

5.2 Argument prominence and dependent person forms
Whereas independent person forms are not typically associated with restrictions relating to syntactic function, dependent person forms are. The cross-linguistic distribution of overt dependent person forms conforms to the predicate hierarchy in (16), being most common with predicates and least common with appositions.

(16) predicates > possessed nouns > adpositions

In the vast majority of languages the presence of overt dependent person markers on adpositions entails the presence of such markers on nouns, and the presence of dependent person marking on nouns entails the presence of such marking on predicates. The major class of exceptions to this are languages with overt dependent person marking on possessed nouns but not on predicates such as: Burmese, Kokborok, Meithei, Kayah Li, Koh Lakka, Paiwan, South Eastern Pomo and Yessan Mayo. Considerably less frequent are languages which have dependent person marking on adpositions but not on possessed nouns, such as Bari, Chacobo and Fur. These exceptions do not, however, undermine the hierarchy in (16), as a statistical universal.

Dependent person marking on possessed nouns strongly favours inalienable as opposed to alienable possession. Among inalienable nouns a tendency may be discerned for dependent person markers to favour the semantic classes of nouns on the left of the hierarchy in (17), which is taken from Nichols (1988:572), as compared to those on the right.

(17) The inalienability hierarchy

body parts and/or kinship terms > part-whole > spatial relations > culturally basic possessed items > other

In contrast to dependent person forms on predicates and on possessed nouns, those co-occurring with adpositions have not yet been systematically investigated. Therefore little can be said about the nature of the adpositions or of their complements that favour dependent as opposed to independent person marking.
As has already been suggested above, among predicates overt dependent person forms favour event predicates over property, nominal and class ones and property predicates over the latter two. Recall the use of weak person forms with event and property predicates in Kiribatense but independent person forms with class predicates illustrated earlier in (15).

With event predicates more possibilities of person expression arise. The distribution of dependent person marking including zero forms with event predicates tends to conform to the hierarchy in (18).

(18) subject > object1 > object2 > oblique

The subject in (18) is to be understood as corresponding to the A, Object1 to the P of a monotransitive clause and whatever argument (T or R) of a ditransitive clause that receives the same treatment as the P, Object2 to the other ditransitive object and oblique to any argument associated with a specific semantic role which is not realized by the subject or object functions. Statistical data supporting (18) taken from Siewierska (2004:43) are presented in Table 1.

[Insert Table 1]

The data reveal that the vast majority of languages have some form of dependent person marking for subjects and just over two thirds for object1. In the case of object2, however, there is a drastic reduction of dependent markers and a similar radical reduction for obliques. This suggests that dependent person markers tend to be available just for two of the verb's arguments.

It is not only with respect to cross-linguistic frequency that the distribution of dependent person markers conforms to the hierarchy of argument prominence in (18). With few exceptions the same holds within languages. The availability of dependent person markers for a syntactic function lower on the argument prominence hierarchy entails the availability of dependent person markers for syntactic functions higher on the argument prominence hierarchy. In other words, if a language allows a dependent person
marker, say a clitic, to be used for object2, it also allows some type of dependent person marker, be it zero, affix, clitic or weak form to be used for both object1 and subject.

The major groups of exceptions to this pattern of distribution comes from languages which have bound or clitic forms for object1 but no dependent subject forms. These include: Ani, Barai, Bimoba, Gilyak, Karo-Batak, Noon, Panyjima and Sema. Interestingly enough, in all these languages the dependent object forms are quite restricted. For example, in the Australian language Panyjima (Dench 1991:159) they are found only with the first person patient or recipient/benefactive. In Sema (Sreedhar 1980:81-82), a Tibetan language, they occur only in the first and second person singular. And in the Papuan language Barai (Olson 1975:475-476) the object suffixes occur only with some verbs.

If we order the four types of dependent markers in terms of the increase in phonological substance and/or morphological independence, i.e. with zero on the left hand side and weak form on the right, it is also possible to discern a relationship between argument prominence and the distribution within a language of each of the four types of dependent person markers. In the vast majority of languages (89%), more phonologically reduced and/or morphologically dependent forms are used for arguments higher on the argument prominence hierarchy than those for lower on the hierarchy. Among the languages which exhibit distributions counter to the argument prominence hierarchy, the first group of exceptions involve languages which allow for zero objects but not subjects, as is the case in: Chamorro, Finnish, Kewa, Palauan and Imbabura Quechua. As one would expect, all the languages in question have affixal subjects.

Another distributional pattern which runs counter to the argument prominence hierarchy is the existence of affixal objects but weak forms for subjects. As discussed in Song (1994), this pattern is particularly frequent among the languages of Micronesia. It is found, for example, in Kiribatese (see (15) given earlier), Kusaiean, Ponapean, Tigak, Woleaian and Yapese. And finally there are languages that have affixal objects, but clitic subjects. Such is the case in Burunge, Halkomelem, Kutenai, Mundari, Lower Umpqua and Southeastern Tepehuan.

The strong tendency for dependent person markers to favour syntactic functions high on the argument prominence hierarchy begs for a word of explanation. A promising
account is suggested by the relationship between morpho-syntactic encoding and the
cognitive accessibility of a referent in the memory store of the addressee posited by
various scholars within the functional-cognitive paradigm, and most fully articulated by
Givon (1983) and Ariel (1988, 1990). The notion of cognitive accessibility is associated
with the properties on the left hand side of the hierarchies in (19) as opposed to those on
the right.

(19)  a. Speaker > addressee > non-participant (third person)
     b. Subject > object > other
     c. High physical salience > low physical salience
     d. Topic > nontopic
     e. Human > animate > inanimate
     f. Repeated reference > few previous references > first mention
     g. No intervening/competing referents > many intervening/competing
        referents

Accessibility in turn is viewed as having a direct bearing on formal encoding, the more
accessible the referent, the less coding required. Thus since dependent person markers
involve less encoding than independent ones, the expectation is that they should be
characteristic of syntactic functions which tend to realize highly accessible referents. And
as we have seen, this is indeed so. Dependent person markers are less frequent as one
goes down the argument prominence hierarchy, being most common with subjects and
least common with obliques. Moreover, accessibility also leads us to expect that the more
attenuated of the dependent person markers should favour the syntactic functions which
encode the most accessible referents. Language-internally this means that no more
attenuated dependent person marker should realize an argument higher on the argument
prominence hierarchy than any less attenuated dependent marker. Accordingly, there
should be no languages, for example, with weak subject forms but clitic object ones or
clitic subject forms but bound object ones etc. Again, while there are languages in which
the dependent person markers that they possess are distributed counter to this
expectation, in the overwhelming majority the distribution of dependent person markers is fully in line with accessibility.

6. Morpho-syntactic alignment

The term `alignment' when used in regard to core syntactic arguments denotes how they are organised relative to each other. In the case of intransitive and monotransitive clauses the patterns of identification, which involve the S, A and P, are seen to fall into the following alignment types: neutral, accusative, ergative, active, tripartite and hierarchical (see Primus, this volume). The criteria for the identification of alignment may be morphological, behavioural or semantic. Here we will concentrate on the morphological.

The determination of the patterns of alignment is a pre-requisite to the establishment of grammatical functions in a language, one of the central topics of syntactic research (see Bickel, this volume). In the case of person forms what has aroused most interest are the differences in alignment between independent and dependent person forms and differences relative to person. Both have featured prominently in discussions of possible language types and possible paths of diachronic change both in the typological literature and in the generative.

6.1 Alignment and different types of person forms

In relation to monotransitive alignment, the difference between independent and dependent person forms worthy of comment involve neutral, accusative, ergative and active alignment. Hierarchical alignment is a feature solely of dependent forms and tripartite is too rare to warrant separate discussion.

The most striking difference concerns neutral alignment, which in the case of independent forms means lack of phonological distinctiveness of the forms in question and in the case of dependent ones absence of any forms altogether. My own statistical data (Siewierska 2004:53) suggest that neutral alignment with independent person forms
is at least twice as common as with dependent forms, the relevant figures for the languages in my sample being 43% vs. 19%. This disparity in neutral alignment is in part an artefact of how neutral alignment is defined with the two types of person forms. If one accepts the accessibility explanation for the existence of dependent person markers briefly outlined in section 5.2, the relative infrequency of neutral alignment of dependent forms is hardly surprising. In this context one might rather seek an explanation for the absence rather than the presence of dependent person markers. As for the relatively high incidence of neutral alignment with independent person markers, one line of explanation is that the absence of morphological differentiation may be compensated for by word order. Another line of explanation ties the neutral alignment of independent person forms to their low frequency of use particularly in so-called head-marking languages. If independent person forms are rare, coding for syntactic function is a rather low priority, particularly when corresponding dependent person forms indicate the relevant distinctions. And indeed many of the languages which display neutral alignment of independent person forms are head-marking ones which qualify as exhibiting a preference for dependent as opposed independent person forms. These include: Abkhaz, Ainu, Barbaren Chumash, Lakota, Mohawk, Navajo, Papago, Squamish, Tiwi, Wichita and Yimas. A more theory-specific explanation for the relative frequency of neutral alignment of independent person forms (and also lexical NPs) in head-marking languages tied to the pronominal-argument view of these languages outlined earlier in section 4 attributes the lack of case marking to their extra-clausal or non-argumental status. The claim is that if they are not governed by the verb, they may be expected to lack case marking typical of verbal arguments.

Also considerable is the difference between independent and dependent forms with respect to accusative alignment. Although accusative alignment is dominant with both, it is especially favoured in dependent forms. Of the dependent person markers in my sample, 71% exhibit accusative alignment as compared to 43% of the independent forms. In the functional-typological literature the higher incidence of accusative alignment among dependent than independent person forms is typically seen to be a consequence of the diachronic development of dependent forms. Dependent person forms generally arise from independent ones. If one accepts the accessibility scenario outlined in section 5.2,
then the forms of the A and also S are likely to receive attenuated encoding well before
the forms of the P do. This will automatically produce accusative alignment if the source
forms align accusatively or neutrally. However, even if the independent A and S forms
are distinct, i.e. pattern ergatively, the resulting system will not be ergative but rather
potentially tripartite (with the S and A differing from each other but no dependent form
yet for the P.) In such a system the marking of the A is likely to extend to the S, as has
happened in some dialects of the Dagestanian language Tabasaran (Harris & Campbell
1995:249) or vice verse A. In either case again an accusative system will result.

As suggested by the above, independent and dependent person forms also differ with
respect to ergative alignment which is significantly more common in independent person
forms than in dependent ones. In my sample whereas 11% of the independent person
forms display ergative alignment, only 4% of the dependent forms do. Typically the
ergative alignment of the independent person forms coexists with accusative alignment of
the dependent ones. This pattern is particularly common in Australia where it is found in,
for example, Djaru, Malakmalak, Murinypatya, Ngalakan, Ngandi, Nyangumarta,
Pintupi, Rembarnga, Warmman, Walpiri, Walmathari and Yulbaridja. Languages from
other geographical areas exhibiting the same phenomenon include Byansi, Copainala
Zoque, Hua, Ingush, the Kubachi dialect of Dargva (in certain tenses), Tauya andUna.
This discrepancy in the frequency of ergative alignment with independent and dependent
person forms may be traced to the difficulty of ergative dependent forms arising. As
sketched above, even ergatively aligned independent person forms are unlikely to lead to
ergatively aligned dependent ones, due to the fact that the forms to emerge first will be
the A and S ones and not those for the P and S. In fact the only widely accepted source
of ergative alignment of dependent person forms is via the reanalysis of passive
constructions as ergative in languages with pre-existing accusatively aligned dependent
person markers. Such a reanalysis involves reinterpreting the passive S as a P and the
agent of the passive as a transitive A. The fact that there are languages which display
ergative alignment of dependent person forms suggests that such reanalyses do occur
though the motivation for them remains rather elusive (see Givón 1994). Interestingly,
the dependent marking of the A often shows signs of it having emerged later than the
dependent marking of the S and P. This is what one would expect given that passive agents tend not to be expressed by person forms, let alone dependent person forms.

Contrary to what is often claimed the converse split, i.e. accusative alignment of independent person forms and ergative of dependent is also to be found. However the ergativity of the deponent forms tends to be manifested only with certain person number combinations or in certain tenses or aspects. For instance, in Sumerian (Thomsen 1984:69) the ergative alignment of the bound person forms is found only in the "hermit" conjugation and only in the first and second person. In the third person the alignment is tripartite. Other languages manifesting ergative alignment of at least some dependent person forms and accusative of independent are: Badjiri, Hittite, Munduruku, Narinjari, Sahapatin, and Wangaybuwan. Typically, however, ergatively aligned dependent person forms coexist with neutral (e.g. Abkhaz, Jakaltec, Konjo, Nadëb, Sierra Popoluca) or ergative (e.g. Basque, Cavinena, Makuchi, Pari, Trumai, Yupik) independent ones.

Arguably, the biggest difference between independent and dependent person forms in regard to alignment concerns active alignment. Active alignment with independent person markers is extremely rare. The only such instances that I am aware of are in the Pomo languages of California (Central Pomo and Eastern Pomo), in several dialects of the Kartvelian language Laz and in Batsbi, Imonda, Tsou and Lhasa Tibetan. By contrast, with dependent person markers, active alignment is relatively common. It is especially frequent in North America (e.g. Acoma, Haida, Koasati, Lakhota, Oneida, Tlingit, Wichita, Yuchi) and South America (e.g. Apurina, Ika, Marubo, Warekena, Yagua) but also attested in New Guinea (e.g. Kewa, Naisoi, Yava) and Southeast Asia and Oceania (e.g. Acehnese, Bukiyip, Larike, Semelai). The explanation for this difference in the distribution of active alignment may be seen to lie in the nature of the semantic distinctions which tend to underlie this form of marking. Mithun (1991) has shown that active alignment tends to be dependent on a variety of semantic parameters such as control, instigation, affect, aspect associated with the lexical categorization of verbs. It should therefore be favoured by markers which are bound or otherwise attached to the verb. And this is indeed so. Interestingly enough, the languages which have active alignment with independent person markers do not have dependent ones bound to the verb.
6.2. Alignment and person

Given the central status of the speech act participants within the category of person and the exclusion of the third person either altogether, as advocated by Benveniste, or just in some languages, as hypothesised by Bhat, we may expect the major splits in alignment according to person to involve the 1 & 2 person as compared to the third. And indeed this is so, though it must be emphasised that splits in alignment based purely on person are very much the exception rather than the norm.

The 1 & 2 vs. 3 splits in the main follow the person hierarchy as interpreted by Siverstein (1976), Comrie (1978) and Blake (1987), i.e. the first and second person favour accusative alignment and disfavour ergative. Thus the patterns in (20) are much more common than those in (21).

(20) 1 & 2 3
     a. accusative neutral
     b. accusative ergative
     c. neutral ergative

(21) 1 & 2 3
     a. neutral accusative
     b. ergative accusative
     c. ergative neutral

The first of the patterns in (20) among independent person forms is found in languages such as Huave, Tepehuan and the Tibeto-Burman languages Hani and Zaiwa. In the case of dependent person forms it may be suggestive of an emergent dependent person system. Such is the case in various East Caucasian languages such as Hunzib, the Zakatal' dialect of Avar, the Megeb dialect of Dargva and some of the Lak dialects (see Helmbrecht
1996a). More commonly it involves paradigmatic zeroes for the S, A and P in the third person singular as, for example, in Ika, Nambiquara, Southeastern Tepehuan or in both the third person singular and non-singular as, for example in Kutenai, Kwaza and Walpiri. Pattern (20b) with first and second person exhibiting accusative alignment and third ergative in independent person markers is found in the Australian language Yuwaalaraya and in dependent person markers in Washo and several Salishan languages (e.g. Lillooet Salish, Northern Staits Salish) as well as in another Australian language Ngiyambah. Pattern (20c) occurs in the independent person forms of many East Caucasian languages such as Lak, Godoberi, Tsakhur. In these languages the third person corresponds to the demonstrative. It is also found in the independent forms of Chamling, Washo, Yupik and Greenlandic. The only instances of pattern (20c) with dependent person forms that I am aware of is in the Brazilian language Trumai (Guirardello (1999:256)) in which a person clitic is used for the S and P if there is no corresponding lexical NP or independent person forms present.

Turning to the patterns which counter the expectations of the person hierarchy, all are extremely rare. Pattern (21a) in the case of dependent forms is familiar from English where in the present tense the absence of any dependent forms in the first and second person contrasts with the presence of -s in the third person singular. In independent forms the presence of accusative alignment case solely in the third person occurs in the Chadic language Koh (22) and in Korya Chiini, a Songhay language spoken in Mali.

(22) Koh (Glidden 1985 :240, 242, 250)

a. mi zool ro
   1SG go:F PERF
   `I'm leaving.'

b. mi ddan mbih
   1SG draw water
   `I draw water.'

c. ka koo mi koo
Pattern (21b) in the strict sense with both the first and second person aligned ergatively does not appear to be attested. There are, however, languages in which the first person manifests ergative alignment coupled with traces of accusative alignment in the third person. According to Bickel (2000) this is the case in the Tibeto-Burman Kiranti languages Hayu, Yamphu and Belhare. The split concerns the dependent person markers. The following examples are from Yamphu where the first person SP suffix is -ŋa and the A suffix is -ŋ.

(22) Yamphu (Rutgers 1998: 116)
   a. ram-ʔi-ŋa
      walk-NONPAST-1SG
      'I walk.'
   b. khaŋ-ʔin-ŋa
      see-NONPAST-1SG
      'He sees me.'
   c. khaŋ-ʔin-u-ŋ
      see-NONPAST-3-1SG
      'I see him.'

There is no overt dependent marking of person for a second or third person singular SA but a third person P is marked by ŋ/w as shown in (22c). The last of the above patterns ergative alignment solely in the first and/or second person in conjunction with neutral (or
tripartite) alignment has been attested also in the Tibeto-Burman languages. Jacquesson (2001) cites several such cases among the languages of the Naga group. In Khiamnungan it is the first person that exhibits ergative alignment while the alignment of the second and third person is neutral. In Chang ergativity is manifested in both first and second person, but not in third. And in Konyak, the first person is tripartite, the second ergative.\(^9\)

The other major association between person and alignment is in relation to active alignment. Active alignment favours the first and second person as opposed to the third. Thus quite frequently the first and second person exhibit active alignment while the third is neutral, as in Koasati, Lakhota, Naisoi, Tutelo or Wichita. More rarely the active alignment of the first and second person co-occurs with accusative or ergative in the third, as in Batsbi or Semelai.

No clear associations between person and alignment comparable to that involving accusative and ergative can be discerned in relation to splits involving other combinations of alignments. For instance, combinations of accusative and tripartite alignments or ergative and tripartite may involve the tripartite being displayed by the first and second person the accusative or ergative by the third, or vice versa. This holds both for independent person forms and dependent ones.

References


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1 Of the 126 languages classified by Bhat as 2-person languages only 41% display complete overlap between the 3rd person and the demonstrative.

2 According to Helmbrecht (1996b) asymmetries involving 1 & 3 vs 2 are considerably less frequent than those involving 1 vs. 2 & 3. The same holds for homophonies within person paradigms, a topic discussed at length in Cysouw (2003). Neither homophony should be a feature of 2-person languages.

3 The term zero person marker in the above sense needs to be distinguished both from the use of the term in Chomskyan theory, i.e. for an empty syntactic position accompanying person inflection on the verb in so-called pro-drop or null-subject languages and from a paradigmatic zero, i.e. the zero exponent of a paradigm.
Dahl (2000) argues that the A position indeed favours person markers but particularly of the first and second person and attributes this to animacy rather than an underlyingly ergative organization of discourse. He suggest that the S and P do not pattern together in this respect, the S being much more often realized by person forms than the P.

The independent form of the 2sg is *ngkoe*.

Statistical data in support of the predicate hierarchy are provided by Nichols (1992:85-86) and Siewierska (2004:127-128).

For reasons of space, the discussion will be confined to patterns of monotransitive alignment. Differences in the distribution of person forms relating to ditransitive alignment are discussed in Haspelmath (2005, 2006) and Siewierska (2003; 2004: 57-63, 168).

For a critique of an alternative source of ergative marking suggested by Givón (1994) namely the reanalysis of the inverse, see Siewierska (1998).

Another unusual person split is found in the Amazonian language Nadêb (Martins & Martins 1999:263) in which ergative alignment is found in 2sg, 3sg & 3pl while the 1sg, 1incl, 1exl and 2pl exhibit neutral alignment.