# Locating animacy in the grammar* 

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## 1. Introduction

There are a number of syntactic phenomena which make reference both to person and animacy, including differential object marking and direct-inverse alignment. In typological approaches, this connection between person and animacy is encoded in the Animacy Hierarchy, a continuous scale of categories invoking conversational roles, rationality, and sentience.

## (1) Animacy Hierarchy:

speaker $>$ hearer $>$ human $>$ animate $>$ inanimate
Within syntactic theory, the goal is to derive this relationship between $\varphi$-domains, rather than simply encode it in a primitive ranking. One way of doing this involves identifying a shared grammatical locus for person and animacy features.

It is not uncommon, for instance, to see features like ANIMATE and HUMAN treated as ancestors of person features in a feature geometry (Lochbihler 2013, Oxford 2019, Coon and Keine 2021, cf. Béjar 2003.51 and others).
(2)


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## Maziar Toosarvandani

But why would animacy features colocate with person features, while other $\varphi$-features, such as gender or number, do not?

One explanation might attribute the feature geometric configurations that are possible to Universal Grammar, as Harley and Ritter (2002) do. But, as McGinnis (2005;703-704) observes, any geometry must be accompanied by a semantics for the features it contains, or else it would have no crosslinguistic predictive power. Béjar (2003:47-49) proposes an explicit mapping principle, in which the dominance relation corresponds to semantic entailment. This way of thinking directs us to look at the meanings of person and animacy categories for answering the question above.

This paper explores an interpretive parallel between the two $\varphi$-domains, comparing several languages which encode both person and animacy in their pronoun inventories. I start with Southeastern Sierra Zapotec (Dille'xhunh or Dille'xhonh), whose third person pronouns distinguish four animacy categories: elder humans, non-elder humans, animals, and inanimates ${ }^{1}$ I show that these share a referential profile with local person pronouns (Jespersen 1924:192, Benveniste 1966:232-233, Zwicky 1977). In particular, like first or second plural pronouns, they allow for reference to groups whose members need not meet the description of the corresponding singular pronoun. And, when such heterogenous reference is allowed, the most featurally marked pronoun possible must be used.

Importantly, these interpretive properties characterize only person and animacy, and not (social) gender (Wechsler 2010). To establish the robustness of this generalization, I survey languages from three families (Bantu, Dravidian, and Northeast Caucasian) which encode various animacy distinctions, alongside social gender, in their third person pronoun inventories or verbal inflection. While more data and analysis is needed, the results provide tentative support, if only indirectly, for the conclusion that person and animacy share an interpretive core.

## 2. Pronouns in Southeastern Sierra Zapotec

All Southeastern Sierra Zapotec varieties have four superficially number-neutral third person pronouns. These come in two forms, clitic and strong, as shown in (3) for the Laxopa variety.

[^1](3)

|  | STRONG | CLITIC |  | STRONG | CLITIC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1SG | neda' | $=a^{\prime}$ | 3.EL(DER) | $l e '$ | $=e^{\prime} \sim=n e^{\prime}$ |
| $1 \mathrm{PL} . \mathrm{EXCL}$ | dziu' | $=d z u$ | 3.HU(MAN) | leba' | $=b a '$ |
| 1PL.INCL | netu' | =tu' | 3.AN(IMAL) | leb | $=(e) b$ |
| 2SG | lhe' | $=u^{\prime}$ | 3.IN(ANIMATE) | lenh | $=(e) n h$ |
| 2 PL | $l e ' e$ | =lhe |  |  |  |

(Toosarvandani|2017)
The elder pronoun is used to refer to elderly humans (roughly anyone over the age of 6070), as well as saints, gods, and other divine beings. Other individuals can be included in this class if they hold a senior position in a social hierarchy (e.g., municipal government or the church). All other people are referred to using the (non-elder) human pronoun.

The animal pronoun refers to all other animates (that is, non-human animals), while the inanimate pronoun refers to non-animate living entities (e.g., trees and flowers) and artifacts, as well as to supernatural beings, such as demons.
(4) Da' xiwe' da' lhalle'=nh yixe'.
CL.IN demon CL.IN STAT.roam=3.IN country
'It was a demon that roams the countryside.'
(Long|1993:41, 28)
For this reason, the 'inanimate' category can be thought of as the elsewhere category: it includes entities that do not fit into any of the other animacy categories.

It is easy to come up with an inventory of three animacy features to respresent this four-way distinction (5b), much as two features can capture a three-way person distinction (5a) (Foley and Toosarvandani|2022).


These feature are privative. On a pronoun, their presence will restrict its reference to just those entities meeting their description (e.g., to the speaker of the conversation for SPEAKER or to all the participants in a conversation for PARTICIPANT). The absence of one of these features, on the other hand, restricts the pronoun's reference to those entities that do not satisfy its description (Sauerland|2006, Sichel and Wiltschko|2021).

By themselves, these representations say nothing about how person and animacy features are related to each other. One possibility is that this is in the same way that these

## Maziar Toosarvandani

features are related within a given $\varphi$-domain. That is, at least some animacy features could be ancestors of person features, as in (2) above. Local persons (first and second) would have animacy features, too, though they would be distinguished from third person categories by the presence of PARTICIPANT and SPEAKER. Distinctions within the third person would be made with animacy features.

According to this reasoning, it is not necessarily easy to understand why animacy and person go together for so many grammatical phenomena, while other $\varphi$-categories do not. In many pronoun inventories, animacy distinctions are often encoded alongside social gender, as in English (it vs. she or he). Perhaps for this reason, ANIMATE is included as an ancestor of FEminine and masculine in Harley and Ritter's (2002) original feature geometry.

(Harley and Ritter 2002:486)
If animacy were colocated with gender, as well as with person, we might then expect differential object marking or direct-inverse alignment also to be sensitive to social gender. However, these grammatical phenomena appear to be sensitive to person and animacy alone.

## 3. The shared referential profile of person and animacy

An interpretive parallel between person and animacy may point the way toward a theory of why this is. Local person plural pronouns exhibit two well-known properties:
(7) a. Heterogenous groups:

A pronoun of a given person category can refer to pluralities containing individuals belonging to a different person category (Jespersen 1924; 192, Benveniste| 1966:232-233).
b. Marked reference:

Such mixed groups are referred to using the most featurally marked pronoun: e.g., a group comprising the speaker and others is referred to using the first person pronoun (Zwicky|1977).
The first property reflects the fact that we can refer to a group which includes the speaker and individuals who are not the speaker; similarly, second person plural pronouns, in languages that have them, refer to groups which include the addressee and possibly individuals
who are not even conversational participants. The second property represents the observation that a plural second person (you all) or third person (they) pronoun cannot be used to refer to a group which includes the speaker (similarly for the hearer).

Both these properties are also found with third person pronouns in Zapotec, which encode the four-way animacy distinction described above.

### 3.1 Plural reference in Southeastern Sierra Zapotec

First, a bit of background on plural reference in the language. While local person pronouns expone number, third person pronouns are superficially number neutral in many varieties (including the Laxopa variety, described in (3)). That is, the same third person pronouns that refer to singular individuals can also refer to plural individuals. Number marking for subjects shows up instead on the verb in several morphological guises.

For most verbs in most aspects, third person plural subjects are marked with a verbal prefix $s(e)-(8 \mathrm{z})$. This can also also trigger suppletion of the stem, e.g., for -o 'eat' (8).
a. $\quad$ Be $^{3}-$ se $^{3}{ }^{3}$ chuchj $^{3}=$ chhgwa $^{1}=$ nh $^{3}$, yez $^{3}=$ e $^{\prime}$ nh $^{3}$.

COMP-PL-be.crushed=a.lot=3.IN corn.ear=DEF
'A lot were crushed, of the corn ears.'
(FA, GZYZ098-s, 12)
b. Nha' ${ }^{3}$ t-s-o'0 $=b^{3} \quad \mathrm{bi}^{3}{ }^{3} \mathrm{do}^{\prime 3} \mathrm{ka}^{\prime}{ }^{1}$.
then CONT-PL-eat.PL=3.AN child those
'Then they (animals) were eating those children.' (FSR, SLZ1003-t1, 5)
For a small number of motion verbs, a third person plural subject is marked solely through stem suppletion (9a). Regardless of how plural is realized in other aspects, in the stative aspect a verb takes a special plural prefix zja- (9p).
a. $\quad$ Tsu ${ }^{1} \mathrm{pe}^{1} \mathrm{bil}^{1}=\mathrm{ba}{ }^{\prime 2} \quad$ ts-j-a'ak ${ }^{1}=$ ba $^{\prime 2} \quad \quad \mathrm{La}^{\prime}{ }^{1}$.
two sister=3.HU CONT-AND-go.PL=3.HU Oaxaca
'The two sisters are going to Oaxaca.'
(RM, GZYZ003-s, 29)
b. $\quad \mathrm{Na}^{\prime} \mathrm{a}^{3} \mathbf{z j a}^{3}-$ nhbanh $^{3}=\mathrm{e}^{\text {, }}$.
now PL-be.alive.STAT=3.EL
'They are still alive.'
(FA, GZYZ040-s, 38)
All four animacy categories are compatible with plural marking, as can be seen by looking across the examples in (8-9).

I analyze plural morphology on the verb as agreement with the subject in number. This entails that pronouns are underlyingly specified for number, even if it is not exponed on pronouns.

### 3.2 Marked reference to heterogenous groups in the third person

While third person plural pronouns in Zapotec can refer to homogenous groups, as in (8) above, heterogenous reference is also possible. In (10), an elder pronoun is used to refer to a mixed group of an elder and a non-elder human.

## Maziar Toosarvandani

(10) Context: A woman's new husband decides her child is a bother and tells her to go throw the child away...
a. Nachh gwz=e'e z-ja-cho'on=e'e=bə' de'e then leave.COMP=3.EL STAT-AND-throw.away=3.EL=3.HU thing yoblhə.
again
'Then she left to go throw him away again.'
b. Katə’ be-sə’ə-llinh=e’ to ciuda...
when COMP-PL-arrive=3.EL one city
'When they arrived at a city...' (Butler 1989:387, 33)
This is also true for mixed groups whose members belong to the other animacy categories. There are naturally occurring examples of plural reference to mixed elder-animal groups (11) and mixed non-elder human-animal groups (12).
a. Nha' to benə' lenh to xikw=e'e zj-a'ak=e' gwxhen then one person with one $\mathbf{d o g}=\mathbf{3}$.EL STAT.PL-go.PL=3.EL INF.catch bllinh' уixə'.
deer
'A man and his dog had gone to hunt deer.'
b. Nha' be-so'ə-llinh=e' to ya'adao'...
then COMP-PL-arrive=3.EL one forest
'And they arrived in a forest. . .'
c. Nhach xhikw=e'e=nh gop=əb le'... then $\quad d o g=3 . E L=D E F$ COMP.guard=3.AN 3.EL. . .
'Then his dog guarded him... (Butler 1989:406, 2-5)
(12) Context: A boy is trying get rid of a dearly beloved dog, who is eating his sheep.
a. ...nha' bito bnhelljw=bə'ə=b benh' gwnab leb. and NEG COMP.give $=3 . \mathrm{HU}=3$. An person COMP=ask 3.AN
'. . so he didn't give it to the man who asked for it.'
b. Gwza'ak=lh=bə' $\quad$ agwyej=be' lhill to gwet COMP.leave. $\mathrm{PL}=$ surprisingly=3.HU COMP.go=3. HU house one INF.kill go'on. . .
bull
'Instead [t]he[y] left and [he] went to the home of a butcher of beef...'
(Butler 1989:204, 20)
The animals here are not being anthropomorphized or personified. In both examples, they are still referred to in the singular using the animal pronoun, e.g., (12a) and (11c).

Not just any pronoun refers to these heterogenous groups. For mixed groups of elders and others, it is the elder pronoun, which is the most featurally marked, that must be used.
(13) Context: The donkey escapes from its corral. A boy and his grandfather go to chase it. I ask, 'What are they doing?'
Ts-ja ${ }^{1}-$ se $^{1}-$ naw $^{3}=\mathbf{e}^{\boldsymbol{\prime}} / \boldsymbol{\#}=\mathbf{b a}{ }^{2} \quad$ bur $^{1}=$ e' $^{2} h^{3}$. CONT-AND-PL-follow=3.EL/=3.HU donkey=DEF
'They are chasing the donkey.'
(FSR, SLZ1053, 1:00)
Similarly, with the other mixed groups, the pronoun belonging to the more marked category is used: elder human in (11) and non-elder human in (12).

### 3.3 A featural representation for animacy

This referential profile for third person pronouns in Zapotec must be linked to a grammatical representation for animacy. We saw above that three features can be used to encode the four-way animacy distinction:


This featural representation finds support in resolution patterns for discordant animacy in conjunctions.

There is no verbal agreement in Zapotec, though clitic left dislocation (CLLD) is possible: a fronted DP can be doubled by a clitic pronoun. This involves a step of movement to the left periphery, after the syntactic operations responsible for cliticization, including Agree, have applied (Harizanov|2014, Angelopoulos and Sportiche 2021).

Evidence for movement in CLLD is provided by standard movement diagnostics: it obeys relative clause (16a) and adjunct (16b) islands.

CL.HU male=TOP CONT-AND-speak=3.EL CL.EL male=DEF blhu' id $^{3}=\mathrm{e}^{\text {, }}\left(=\right.$ ba' $\left.^{2}\right) \quad \mathrm{t}_{1}$ lau' $^{3}$ ya'a ${ }^{3} \quad$ ]. show.COMP=3.EL=3.HU in market
'...she will speak with [the man to whom she introduced the boy in the market].'
(FA/RM, GZYZ156, 1:17:07)

## Maziar Toosarvandani

b. $\quad$. $\ldots\left[\mathbf{b i}^{1} \mathbf{z a n}^{3}=\mathbf{a}^{, 3}=\mathbf{n h a}{ }^{3}\right]_{1}$ na' ${ }^{3} \mathrm{e}^{1} \mathrm{duzj}^{3}=\mathrm{e}^{, 1} \quad\left[\right.$ kwents $^{3}$
sister $=\mathbf{1 S G}=\mathbf{T O P}$ now leave.POT=3.EL for
 speak.POT=with=3.EL=3.HU of child of=3.HU=DEF
'... she will go [in order to talk with my sister about her child].'
(FA/RM, GZYZ157, 51:45)
When a conjoined DP is fronted, the $\varphi$-features of the conjuncts must be resolved if they are discordant ${ }_{2}^{2}$ If the dislocated constituent picks out the speaker and some other individual, it is still doubled by a first person clitic. (The same pattern holds for second person as well.)

$$
\begin{align*}
& {\left[\mathbf{B e}^{1} \mathbf{d w}={ }^{\prime} \mathbf{n h}^{3} \text { lhenh }{ }^{3} \text { ne }^{1} \mathbf{d a}^{3}{ }^{3}\right] \text { uxhenh }^{3}=\text { tu' }^{1} / *=\mathbf{b a},^{2} \quad \text { tu }^{3} \text { bel }^{12} .}  \tag{17}\\
& \text { Pedro=DEF with } \mathbf{1 S G} \quad \text { catch.COMP=1PL.EXCL/=3.HU one fish } \\
& \text { 'Pedro and I caught a fish.' } \\
& \text { (FSR, SLZ1053, 32:10) }
\end{align*}
$$

Without getting into an analysis of this resolution process, the surface generalization is that the whole conjunction bears the person features of the most featurally specified conjunct.

The same pattern holds for the resolution of animacy features. This is shown for mixed groups of elder humans and non-elder humans, animals, and things in $18 \mathrm{a}-\mathrm{c}$ ), and it holds for all other combinations of animacy categories as well.

This supports a featural representation for animacy like the one in (14). Just as with person, animacy is resolved in CLLD to the most featurally marked category.

It is hard not to notice that the resolution pattern for person and animacy mirrors the referential restriction on pronouns in (7). At this point, without an explicit theory of how

[^2]animacy and person features are mapped to their interpretations, this is merely a coincidence.

## 4. A difference with gender

Gender does not have the same referential profile as person and animacy, though this is not always easy to show. We can start with a language with a binary gender system. In French, the masculine plural pronoun can refer to a mixed group of males and females, as in (19), as well as to homogenous groups of males. The feminine plural pronoun can only refer to homogenous female groups.
(Le fils et la fille,) ils/*elles sont partis. the.m boy and the.F girl 3PL.M/3PL.F are left.PL.M
'(The boy and the girl,) they left.'
Under one analysis, the feminine pronoun is marked with the feature FEMININE, whose semantics only permits reference to uniformly female groups. The heterogeneity of the 'masculine' pronoun then arises through underspecification: it refer to all other groups, including mixed groups of males and females. This would mean that, unlike with person or animacy, it would be the less marked pronoun that would refer to heterogenous groups.

However, as Sauerland (2006:65) points out, such binary gender systems can also be analyzed in a different way, which makes gender more parallel to person and animacy. The masculine pronoun can be treated as the marked pronoun instead, bearing a MASCULINE feature. The semantics of this feature would then restrict reference of the plural masculine pronoun to any group containing at least one male. The feminine pronoun, which would be unmarked, would refer to its complement, which would only include homogenous groups of females.

Wechsler (2010;339-340) argues that languages with more than two categories show that gender is indeed different from person and animacy. Icelandic, for instance, distinguishes three genders (feminine, masculine, and neuter), which are realized overtly in third person plural pronouns: Par 'they (3PL.F)' refers solely to homogenous female groups, and Peir 'they (3PL.M)' solely to homogenous male groups. Any other group is referred to with the plural neuter pronoun Pau 'they (3PL.N)', including heterogenous groups of females and males.
(20) Sjáðu konu-na og mann-inn. \{Pau, *Peir\} eru see.you woman-the.F.SG and man-the.M.SG they.N.PL they.M.PL be.PL úti.
outside
'Look at the woman and man. They are outside.' (Borvaldsdóttir|2017:10)
In Icelandic, then, neither the masculine nor the feminine pronoun can be unmarked. Each must bear some feature (FEMININE or MASCULINE), whose semantics restricts its reference solely to homogenous groups. And, it is the least marked pronoun, the neuter pronoun, which picks out heterogenous groups.

## Maziar Toosarvandani

The animacy system in Zapotec cannot be analyzed along these lines. If it was like gender, then the most marked third person pronoun with the featural specification in (14) would refer solely to homogenous groups of elder humans. The non-elder human pronoun would, in virtue of being less specified, refer to homogenous groups of non-elder humans and mixed groups of elder and non-elder humans; and the animal pronoun would refer to homogenous groups of animals and mixed groups of humans and animals (which are all animate). The least featurally specified pronoun would refer to all other individuals, including homogenous pluralities of inanimates, as well as mixed groups of inanimates and animates. But this is simply not the interpretation that these third person pronouns have.

## 5. A small cross-linguistic survey of animacy

Other languages encode animacy in the third person, though this is often alongside social gender or noun class. Below, I survey languages from three families-Dravidian, Northeast Caucasian, and Bantu-which distinguish two or more animacy categories in the third person. As in Zapotec, they consistently require agreement to be resolved to the animacy category that is more specified according to the featural representations in (14). This provides indirect support for the proposed analysis of animacy, under the assumption that there is a regular mapping between $\varphi$-features and their meaning (see Section 3.3). In the discusion below, I rely on Corbett's (1991;269-278) analysis of noun class in these languages, which only includes data for how discordant animacy in coordinations is resolved for verb agreement.

### 5.1 Dravidian

In Telegu, singular pronouns realize a three-way strictly semantic opposition combining social gender and animacy: female humans (or what Corbett calls 'rationals'), male humans, and non-humans. In plural pronouns, this is neutralized into a two-way animacy distinction: humans vs. non-humans. This two-way distinction is also realized in verbal agreement.
(21) a. tallii kuuturuu vaccaeru
mother.and daughter.and came.3PL.HU
'Mother and daughter came.'
b. kukkaa pillii vaccaeyi
dog.and cat.and came.3PL.NONHU
'A dog and a cat came.'
(Corbett|1991:271)
For mixed groups of humans and non-humans, Corbett (1991;271) reports that it is 'not uncommon to hear such sentences [like (22)] in colloquial speech,' though alternative formulations using a comitative structure are also possible.
aaviDaa kukkaa vaccaeru
she.and dog.and came.3PL.HU
'She and a dog came.'
(Corbett|1991:271)
The verb shows human agreement, the animacy category which, by hypothesis, is more featurally marked.

A similar situation holds in Tamil, though there is less clarity about whether reference to the mixed group of a human and non-human is possible in the first place.
*raaman-um naay-um va-nt-aayka
Raman-and dog-and come-PAST-3PL.HU
'Raman and the dog came.'
(Corbett [1991:270)
Corbett (1991:270) marks (23) with an asterisk, but he states that some speakers do permit it. It is 'unacceptable in the written language, and for some informants in colloquial use too.' However, so long as reference to this mixed group is possible, the verb must show human agreement.

### 5.2 Northeast Caucasian

Archi makes a four-way distinction in its third person pronouns, based on social gender and animacy: male humans (I), female humans (II), mature domestic and larger wild animals and some inanimates (III), and everything else, including younger or smaller animals and abstract things (IV). Plural verb agreement neutralizes the distinctions between classes I and II as well as between classes III and IV, so that all humans are agreed with using a single form $b$-.
(24) dija-wu $\overline{\text { x̃ }}$ onnōl-u
father.I-and mother.II-and near I/II.PL-are
'Father and mother are near.'
(Corbett|1991:272)
When the verb agrees with a mixed group of a human and either an animal belonging to class III (25a) or an artifact belonging to class IV (25b), it must do so with human morphology (for classes I/II).
(25) a. dija-wu dogi-wu
father.I-and donkey.III-and near I/II.PL-are
'Father and the donkey are near.'
b. dija-wu marzi-k'olōr-u प्रू ak b-i
father.I-and loom.IV-and near I/II.PL-are
'Father and the loom are near.'
(Corbett|1991:272)

## Maziar Toosarvandani

### 5.3 Bantu

The situation in Bantu languages is much more complicated. Shona has up to 20 noun classes, and unlike all the languages discussed so far, these are not encoded in the pronoun inventory, only in verb agreement. Hawkinson and Hyman (1974:148-150) observe that noun class assignment exhibits a certain amount of semantic consistency: humans are in classes $1 / 2$ (class 1 in the singular and class 2 in the plural); animals are in classes 9/10, which also include some non-animates; the other classes include inanimates, with classes $7 / 8$ dedicated to artifacts. They show that when the subject is a coordination of a human and animal, the verb must agree in the class for humans (that is, 2).
a. mùrúmé né ìmbwá vá-kà-fámbá
man and dog 2-PAST-walk
'The man and the dog walked.'
b. * mùrúmé né ìmbwá dzá-kà-fámbá
man and dog 10-PAST-walk
'The man and the dog walked.' (Hawkinson and Hyman|1974:148-149)
This pattern generalizes across other possible animacy combinations. For a mixed group of a dog (class 9) and a present (class 7), it must be agreed with using class 10 morphology. In other words, Shona exhibits the same pattern of agreement found in Zapotec, Dravidian, and Northeast Caucasian.

Corbett, however, also discusses several other Bantu languages which have a different pattern. In Luganda, noun class assignment is not as semantically regular: class 1 only contains humans, but humans also belong to other noun classes (e.g., classes 5 and 11). Regardless of what class they belong to in the singular, humans are agreed with using class 2 in the plural.
(27) omu-kazi es-sajja ne olu-ana ba-alabwa

1-woman 5-fat.man and 11-thin.child 2 -were.seen
'The woman, the fat man, and the thin child were seen.' (Corbett|1991:273)
When the subject refers to a mixed group of a human and an animal (belonging to classes 9/8), the result is 'unnatural' when the verb agrees in class 8 (28). But an 'unacceptable' sentence results if the verb agrees in class 2 , the expected class for plural human subjects (28p).
a. ?omu-sajja ne em-bwa-ye bi-agwa

1-man and 9-dog-his 8-fell
'The man and his dog fell down.'
b. *omu-sajja ne em-bwa-ye ba-agwa

1-man and 9-dog-his 2-fell
'The man and his dog fell down.'

The contrast in $(\sqrt{28}-b)$ suggests that, unlike in Shona, a mixed human-animal group is treated as belonging to the animal category, rather than the human category. Corbett (1991; 275) discusses a number of other Bantu languages, for which sources describe a similar agreement pattern, including Luvale, Xhosa, Dzamba, Likila, Lingala, and Swahili. He cautions, however, that these descriptions should not be taken at face value, as 'frequently there are problems,' since 'judgements may be uncertain.' Clearly, more work is needed to understand these languages and how they may diverge from the pattern found in Shona and other non-Bantu languages.

## 6. Conclusion

I have argued that animacy and person share certain interpretive properties, which distinguish them from social gender. In particular, third person pronouns in Southeastern Sierra Zapotec have a referential profile parallel to first and second person plural pronouns: reference to heterogenous groups is possible as long as the most featurally marked pronoun is used.

This interpretive pattern is mirrored in patterns of agreement. When discordant animacies are coordinated, they are resolved to the most featurally marked animacy category. This was shown for CLLD in Zapotec, as well as for verb agreement in some other languages, through a small survey of three language families. There was no data about the interpretation of pronouns in these languages, so these patterns of agreement resolution only provide indirect evidence that animacy shapes their reference in the same way that person does.

While the semantic parallel between person and animacy is striking, it remains to be seen how it arises from the grammatical representation of person and animacy-and, how these representations can feed their syntactic activity in phenomena like differential object marking and direct-inverse alignment.

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## Maziar Toosarvandani

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[^1]:    ${ }^{1}$ The Zapotec languages (Oto-Manguean: Oaxaca, Mexico) exhibit dense variation, and sharp language boundaries are sometimes hard to draw. This paper includes data from the closely related Zapotec varieties of Santiago Laxopa, San Sebastián Guiloxi, and Santa María Yalina (for which I report my own fieldwork data), as well as the slightly more divergent varieties of Hidalgo Yalálag (Avelino Becerra 2004), Yatzachi el Bajo (Butler 1989), and San Bartolomé Zoogocho (Long 1993). Following the Catálogo de las lenguas indígenas nacionales (Instituto Nacional de Lenguas Indígenas 2008), I refer to these varieties together as Southeastern Sierra Zapotec. In some dialect classifications, they are included in the 'Cajono' subgroup of Northern Zapotec.

[^2]:    ${ }^{2}$ Southeastern Sierra Zapotec has two coordination strategies: one involving conjunction with $n h a$ ' 'and' and a comitative structure with the preposition lhenh 'with'. Both require resolution of discordant coordinates. I use the comitative structure here since judgments for DP coordinations are somewhat more clear.

