

## Interpretability and Gender Features in Coordination: Evidence from Greek

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**Introduction:** Accounts of how gender features are resolved in coordinate structures often distinguish between ‘semantic’ and ‘syntactic’ strategies (Corbett 1991, Wechsler and Zlatič 2003, Sadler 2006, a.o.). One prominent view is that both strategies can be operative within a language, with the choice conditioned by e.g. animacy. In Greek, coordination of a masculine (M) with a feminine (F) nominal yields M agreement for human-denoting (H-D) nominals (1) but neuter (N) agreement for inanimates (2) (Kazana 2011, Anagnostopoulou 2017, a.o.). According to a theory like Wechsler’s (2008), the former would invoke semantic resolution to M, consistent with the ‘human’ interpretation associated with this gender, whereas (2) would invoke syntactic resolution.

- (1) O andras ke i gineka ine eksipni/\*eksipna.  
The.M.SG man and the.F.SG woman are intelligent.M.PL/N.PL  
‘The man and the woman are intelligent.’
- (2) O pinakas ke i karekla ine vromika/\*vromiki.  
the.M.SG blackboard and the.F.SG chair are dirty.N.PL/M.PL  
‘The blackboard and the chair are dirty.’

In the case of “syntactic” resolution, mismatches between conjuncts result in the insertion of default gender features or gender-default forms. Under this approach, N in (2) surfaces because of a more general ‘default’ status of N, consistent with, for example, N agreement with clausal subjects (example not included; see Adamson and Šereikaitė 2019 on Lithuanian).

**Proposal:** This study adduces novel evidence from Greek that supports a unitary, syntax-only model of gender resolution, where only values that are shared between the conjuncts are projected to the coordinate phrase (&P) (see Despić 2016, Anagnostopoulou 2017; also Börjars and Vincent 2006 on set intersection). We show that in Greek, when no gender features are shared, the result is *undefined* rather than ‘default’, leading to ungrammaticality when an agreement target attempts to express features copied from &P. This proposal casts doubt on the conventional dichotomy between semantic and syntactic resolution of the type sketched above, instead supporting a dual-feature approach in which nominals can carry both interpretable and uninterpretable features (Wurmbrand 2017a,b; Smith 2015,2017). It further provides evidence for a model in which derivations crash when the input to a rule is ill-formed (e.g. Preminger 2014, Adamson 2019), and favors the view that the neuter gender can be interpretable rather than merely ‘default’.

**Data:** When two H-D or two inanimate nominals are conjoined and have the same gender, predicative agreement is for the gender of the two nominals (shown for F in (3) and (4)). An underappreciated fact is that H-D and inanimate nominals can be coordinated with each other and agreed with as long as their gender matches, yielding agreement for that gender (shown in 5 for M). When they do not match, however, agreement is ungrammatical (6).

- (3) I Maria ke i Giota ine eksipnes. (4) I fusta ke i bluza ine vromikes.  
the.F Maria and the.F Giota are intelligent.F.PL the.F skirt and the.F t-shirt are dirty.F.PL  
‘Maria and Giota are intelligent.’ ‘The skirt and t-shirt are dirty.’
- (5) O kleftis ke o pinakas ine afanti. (6) O kleftis ke to daxtilidi ine \*afanti/\*afanta.  
the.M thief and the.M painting are gone.M.PL the.M thief and the.N ring are gone.M.PL/N.PL

‘The thief and the painting are gone.’

‘The thief and the ring are gone.’

Fixed-gender (FG) human nominals behave as if they have their ‘semantic’ value for resolution (Wechsler and Zlatič 2003): a male-denoting F with a female-denoting F yields M agreement (7a), and a female-denoting N with a female-denoting F yields F (7b). Agreement in (7b) is not with the closest conjunct; the reverse order (with the removal of the possessor) does not alter the judgments.

- (7) a. I megalofia/diasimotita ke i gineka tu ine xaroumeni/\*xaroumenes.  
the.F genius/celebrity and the.F wife his are happy.M.PL/F.PL  
‘The genius/celebrity and his wife are happy.’  
b. To thima ke i mitera tis ine \*tromagmeni/tromagmenes/\*tromagmena.  
the.N victim and the.F mother her are scared\*M.PL/F.PL/ \*N.PL  
‘The victim and her mother are scared.’

Strikingly, for an FG nominal coordinated with an inanimate, the ‘semantic’ value of the former can be used; a male-denoting nominal with an M inanimate thus yields M agreement (8). If the semantic value does not match the inanimate’s formal gender, the result is ungrammatical (9, cf. 6) (parallel results obtain in Italian, not shown here).

- (8) {I megalofia/to thima} ke o pinakas tu ine afanti/\*afantes/\*afanta.  
{the.F genius/ the.N victim} and the.M painting his are gone.M.PL/F.PL/N.PL  
‘The genius/victim and {his/the} painting are gone.’  
(9) \*I megalofia ke to vradio tu ine afanti/afantes/afanta.  
the.F genius and the.N award his are gone.M.PL/F.PL/N.PL  
‘The genius and his award are gone.’

**Analysis:** We propose a dual-feature analysis in which features are represented in both uninterpretable (*u*) and interpretable (*i*) guises (see Kramer 2015, Anagnostopoulou 2017, Wurmbrand 2017b for gender), which are sent to PF and LF, respectively (see Smith 2015 on *committee* nouns). We propose that the feature inventory includes *i/u*[FEM], *i/u*[MASC] and *i/u*[NEUT], where *i*[FEM] introduces a ‘female’ presupposition; *i*[MASC] introduces a ‘human’ presupposition (e.g. Sudo and Spathas 2016); and *i*[NEUT] is interpreted as inanimate (see Thorvaldsdóttir 2019 on Icelandic). We assume *i*[FEM] and *i*[MASC] are geometrically related: the presence of the former implies the presence of the latter (cf. Harley and Ritter 2002 for a distinct geometry), deriving their markedness. We assume *i* features must be introduced for humans even if they do not affect realization, e.g. for FG nominals (conforming with Maximize Presupposition).

We propose (see above) that the values of &P are projected from conjuncts’ shared values. If no value is shared, &P’s gender is undefined. This is not a problem in itself; replacing the predicate in (6) with a verb (which does not agree in gender) like *eksafanistikan* ‘disappeared’ renders the example grammatical. The derivation in (6,9) crashes at PF when an agreeing element cannot spell out an undefined gender.

The data above reflect the following projection of shared values: (1) *i*[MASC], (2) *i*[NEUT], (3) *i/u*[FEM], (4) *u*[FEM], (5) *u*[MASC], (6) undefined, (7a) *i*[MASC], (7b) *i*[MASC], (8) [MASC], (9) undefined. Consistent with the dual-feature model, in predicate-inverted constructions, which can exhibit closest conjunct agreement, undefined &P values are grammatical, as agreement can be for the first conjunct (11). When the first conjunct is an FG nominal, agreement must be for the *u*gender; the *i*gender is not accessible. This provides new evidence in favor of Smith’s (2015) generalization that

agreement for *i*features cannot occur when a goal does not c-command a probe. (We provide evidence to show that the relevant examples are not derived through clausal reduction.)

- (11) Ksafnika egine \*aoratos/?aorati i megalofia ke to vradio tu  
Suddenly became.SG invisible.M.SG/F.SG the.F genius and the.N award his  
'The genius and his award suddenly became invisible.'

**Implications:** We discuss implications for the feature representation of gender markedness and defaults, for the interpretability of gender features, and the relation between zero vs. undefined. Finally, we address cross-linguistic differences in the strategies employed in resolution of mismatch cases.

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