The function of semantically motivated suffixes in gender inversion of Modern Greek derivatives

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Abstract: The main issue of this study is to show that semantically motivated suffixes, such as diminutives and augmentatives, for instance, may change the grammatical gender of nouns in highly inflected languages such as Modern Greek (henceforth MG). For example, a semantic marker of diminution (Melissaropoulou & Ralli 2008), say {-aki} of neuter (NTR) gender, attached to a stem of masculine (MSC) gender (by nature), will convert it into neuter, e.g. *andr(as)*$_{MSC}$ 'man' (natural gender), plus the diminutive {*-aki*}$_{NTR}$ will invert to *andraki*$_{NTR}$ 'little man'. Similarly, *korits(i)*$_{NTR}$ 'girl', feminine (natural gender), plus the augmentative {*-aros*}$_{MSC}$ will become *koritsaros* 'big girl'. Also *aet(os)*$_{MSC}$ 'eagle' masculine (natural gender), plus the diminutive {*-opoulo*}$_{NTR}$ will turn into *aetopoulo*$_{NTR}$ 'baby eagle'.

Moreover, other categories of semantically motivated suffixes capable of changing gender, such as the case of *–iera*$_{FEM}$ or *–ieris*$_{MSC}$ denoting a container and an agent respectively (Roché 2000), as well as *–ia*$_{FEM}$ standing for a fruit tree will also be investigated. The scope of the paper will be to show not only that, in MG, gender is inherent to the **stem** noun and not to the word (Ralli 2002), but also discuss both natural and grammatical gender (normally shown formally by an inflectional suffix) as an inevitable consequence of gender inversion by means of the afore mentioned suffixes. The notion of agreement regarding the gender of the noun qualifiers, e.g. *enas*$_{MSC}$ *isichos*$_{MSC}$ *andras*$_{MSC}$, 'a quiet man' vs. *ena*$_{NTR}$ *isicho*$_{NTR}$ *andraki*$_{NTR}$ 'a quiet little man', will also be investigated as a result of gender inversion (Anastasiadi et al 2003).

Furthermore, particular attention will be paid on the fact that the natural/biological gender remains the same at least semantically –as it is inherent to the stem- despite the attachment of a different gender grammatical suffix, only when the latter is either a diminutive or an augmentative. In all other cases, where the gender is indicated by form only, and not by sex, i.e. it is not natural, it converts to the gender of the suffix, e.g. *tsai*$_{NTR}$ 'tea' plus *–iera*$_{FEM/'container'}$ will be *tsayiera*$_{FEM}$ 'teapot'; *milo*$_{NTR}$ 'apple' plus *–ia*$_{FEM/'fruit tree'}$ will be *milia*$_{FEM}$ 'apple tree'.

Key words: semantically motivated, natural and grammatical gender

Introduction

Gender distribution within a language is not a universal phenomenon. There are languages where gender is not necessary, while there are others in which it flourishes. Arapesh, for example, an Indo-Pacific language, has 13 genders (Aronoff 1998: 13). Moreover, gender itself is arbitrary. The categories that gender systems follow vary across languages. Some are based on morphophonological grounds, while others are semantically motivated, i.e. sex-based or animacy based. In MG, gender plays a very important role in the sense that all noun phrases (NPs) bear a gender feature which is relevant to both morphology and syntax (i.e. agreement). According to Hockett, genders are agreement classes. "Genders are classes of nouns reflected in the behavior of associated words" (Hockett 1958: 231). In MG, all nominal categories (nouns,

adjectives, determiners and pronouns) are marked for one of the three gender values, that is, masculine, feminine or neutral. That is, among other Indo-European languages, MG has retained the ancient tripartition of grammatical gender which normally appears semantically unmotivated.

It has already been shown in the literature, for example, (Ralli 1994), that gender is an inherent property of the stem and not of the affix (the inflectional ending in MG). Consider, for example, (1) where nouns of different gender values are inflected by means of identical inflectional suffixes:

1. Noun Stem	Inflectional Suffix		
		Singular	Plural
lof- STEM, MASC	NOM	-os	-i
'hill'	GEN	-ou	-on
	ACC	-o	-ous
	VOC	-e	-i
eksoδ- STEM, FEM	NOM	-os	-i
'exit'	GEN	-ou	-on
	ACC	-o	-ous
	VOC	-e	-i
nos- STEM, FEM	NOM	-os	-i
'disease'	GEN	-ou	-on
	ACC	-o	-ous
	VOC	-e	-i

A noun then has typically one value for the gender feature, which it brings with it from the lexicon. But a noun can normally take more than one value of the number feature (e.g., it can be singular or plural) and similarly it can take more than one value of the case feature (e.g., nominative, genitive, accusative and vocative, in the Modern Greek case).

Generally, the realization of gender may depend on phonological, morphological, even pragmatic factors (Corbett 1991, 1998). Moreover, "Some gender systems are sex-based, some shape-based, some rooted in animacy, and some based almost entirely on phonological form, which is by definition arbitrary…. What is language particular is the specific way in which agreement is realized through morphology" (Aronoff 1998: 8). In other words, in highly inflecting languages, such as MGk, gender assignment depends on morphological criteria (Ralli 2003). Greek nominals are inflected categories consisting of a stem and a derivational/inflectional affix. As has already been mentioned, the gender is an inherent property of the stem, whereas the affix falls into the relevant inflectional classes of the Noun, realizing both number and case (see Triantafyllidis 1991, Cleris & Babiniotis 1998). It is worth mentioning at this point, that unintegrated, i.e. uninflected loan nouns (Mela-Athanasopoulou 2002) in MG are assigned a gender value, usually motivated by pragmatic criteria, e.g. tost 'toast' NTR, catering 'catering' NTR, manager 'manager' MSC, disco 'disco' FEM, etc. For Ralli (2002), gender is an ambiguous entity involved both in derivation and inflection. Nevertheless, she calls it "a lexical feature, in the sense that it characterizes …. words of a nominal nature" (p. 523) irrespective of whether they are simple or derived or inflected or uninflected (in the case of loans).

My position is that definitely for nonhuman and nonanimate nouns, in MG, gender is semantically unmotivated, i.e. unpredictable. Animate nouns are typically assigned gender by their sex. There are instances, however, where gender is motivated semantically. The semantic marks which characterize masculine, feminine or neutral gender in MG are those of diminution and augmentation. This is an age-old question. See for example, Colaklides 1964, Sotiropoulos 1972, and more recent works, Ritter 1993, Ralli 2002, Melissaropoulou & Ralli 2008, Mela-Athanasopoulou 2009, amongst others. I will attempt to show in this paper that semantically motivated suffixes in MG, such as diminutives and augmentatives, as well as those indicating objects, such as containers or other semantic fields, such as profession, collectiveness, etc. are capable of changing the gender of nouns. My aim is to shed some light on gender inversion from the base morpheme to the derivative by means of such suffixes. It will be shown that gender switch is a derivational process in itself, i.e., a derivational operation whereby the semantic shift is operated by affixation. For instance, the suffix {*-iera*} indicating a container, in a pair such as, *tsai* 'tea' $\rightarrow$ *tsaγiera* 'tea-pot' or *alati* 'salt' $\rightarrow$ *alatiera* 'salt-jar', etc. will invert the base, which is of NTR gender, into a feminine gender derivative. Thus the derivative will show something that contains what is designated by the base. I would like to propose Rule 1 for gender inversion operated by semantically motivated suffixes (SMS).

Rule 1. Base$_X$ + SMS$_Y$ $\rightarrow$ Derivative$_Y$
Where, a base of an X gender to which a SMS of a Y gender is attached, will yield a derived nominal of gender Y, i.e. that of the SMS gender.

Consider the processes of diminutive and augmentative affixation in 1 (1a-1g), 2 (2a-2d), 3 (3a-3e).

(1).	Base$_X$ $_{MSC/FEM}$	+ DMT –aki$_{NTR}$	$\rightarrow$ DERIVATIVE$_{NTR}$
(1a)	andr-as$_{MSC}$ 'man'	{-aki}$_{NTR}$	andraki$_{NTR}$ 'little man'
(1b)	kokor-as$_{MSC}$ 'rooster'	{-aki}$_{NTR}$	kokoraki$_{NTR}$ 'little rooster'
(1c)	δrom-os$_{MSC}$ 'road'	{-aki}$_{NTR}$	δromaki$_{NTR}$ 'small road'
(1d)	anθropos $_{MSC}$ 'man, human being'	{-aki}$_{NTR}$	anθropaki$_{NTR}$ 'little man'
(1e)	γat-a$_{FEM}$ 'cat'	{-aki}$_{NTR}$	γataki$_{NTR}$ 'small cat'
(1f)	eklisi-a$_{FEM}$ 'church'	{-aki}$_{NTR}$	eklisaki$_{NTR}$ 'small church'
(1g)	δaskal-a$_{FEM}$ δaskal-os$_{MSC}$ 'teacher'	{-aki}$_{NTR}$	δaskalaki$_{NTR}$ inexperienced teacher
(2.)	**Base$_X$ $_{FEM/NTR}$**	**+ AUG –aros$_{MSC}$ –arona$_{FEM}$**	**$\rightarrow$ DERIVATIVE$_{MSC}$ $\rightarrow$ DERIVATIVE$_{FEM}$**
(2a)	mit-i$_{FEM}$ 'nose'	{-aros}$_{MSC}$	mitaros$_{MSC}$, mitarona$_{FEM}$ 'big nose'
(2b)	korits-i$_{NTR}$ 'girl'	{-aros}$_{MSC}$	koritsaros$_{MSC}$ 'beautiful girl'
(2c)	peδ-i$_{NTR}$ 'child'	{-aros}$_{MSC}$	peδaros$_{MSC}$ 'handsome man'

(2d)	spit-i_{NTR} 'house'	{-aros}_{MSC} {-arona}_{FEM}	spitaros_{MSC} spitarona_{FEM} 'big house'
(3.)	**Base_{X MSC/NTR}**	**+ AUG –ukla_{FEM}, –ala_{FEM}, –(i)ara_{FEM}**	**→ DERIVATIVE_{FEM}**
(3a)	andr-as_{MSC} 'man'	{-ukla}_{FEM}	andrukla_{FEM} 'big man'
(3b)	xer-i_{NTR} ''hand'	{-ukla}_{FEM}	xerukla_{FEM} 'big hand'
(3c)	psar-i_{NTR} 'fish'	{-ukla}_{FEM}	psarukla_{FEM} 'big fish'
(3d)	kokal-o_{NTR}	{-ala_{FEM}	kokala_{FEM} 'big bone'
(3e)	δomat-io_{NTR}	{-(i)ara_{FEM}	δomatiara_{FEM} 'big room'

Consider now 4 (4a-4h) – 6 (6a-6d) where the SMS may attach to a base of the same gender.

(4).	**Base_{X MSC}**	**+ DMT –akos_{MSC}**	**→ DERIVATIVE_{MSC}**
(4a)	anθrop-os_{MSC}	{-akos}_{MSC}	anθrop-akos_{MSC} 'little man'
(4b)	δrom-os_{MSC}	{-akos}_{MSC}	δrom-akos_{MSC} 'little road'
(4c)	ipn-os_{MSC}	{-akos}_{MSC}	ipn-akos_{MSC} 'short sleep'
(4d)	γer-os_{MSC}	{-akos}_{MSC}	γer-akos_{MSC}, γerontakos_{MSC} 'little old man'
(4e)	kleft-is_{MSC}	{-akos}_{MSC}	kleft-akos_{MSC} 'small thief'
(4f)	ipalil-os_{MSC}	{-akos}_{MSC}	ipalil-akos_{MSC} 'small clerk'
(4g)	δikoγor-os_{MSC}	{-akos}_{MSC}	δikoγorak-os_{MSC} 'small lawer'
(4h)	empor-os_{MSC}	{-akos}_{MSC}	empor-os_{MSC} 'small merchant'
(5).	**Base_{X NTR}**	**+ DMT –aki_{NTR}**	**→ DERIVATIVE_{NTR}**
(5a)	vim-/vimat-a_{NTR}	{-aki}_{NTR}	vimat-aki_{NTR} 'little step'
(5b)	δas-os_{NTR}	{-aki}_{NTR}	δas-aki_{NTR} 'small forest'
(5c)	ter-/terat-as_{NTR}	{-aki}_{NTR}	terat-aki_{NTR} 'small monster'
(5d)	psar-i_{NTR}	{-aki}_{NTR}	psar-aki_{NTR} 'small fish'
(5e)	ner-o_{NTR}	{-aki}_{NTR}	ner-aki_{NTR} 'little water'
(6).	**Base_{X FEM}**	**+DMT –ula/-itsa_{FEM}**	**→ DERIVATIVE_{MSC}**
(6a)	domat-a_{FEM}	{-ula}_{FEM}	domat-ula_{FEM}

			'small tomato'
(6b)	vark-a_{FEM}	{-ula}_{FEM}	vark-ula_{FEM} 'small boat'
(6c)	fol-ia_{FEM}	{-itsa}_{FEM}	fol-itsa_{FEM} 'small nest'
(6d)	kukl-a_{FEM}	{-itsa}_{FEM}	kukl-itsa_{FEM} 'little doll'

From the above picture, we can make the following comments:

First, it is self-explanatory, of course, that all the animate nouns of 1-3 retain their natural gender, the one which is inherent in the base, e.g., the derivatives, *andraki* and *kokoraki* of neuter gender by inversion, still retain their natural, biological gender, i.e., male.

Second, gender swift has added to the base not only the new lexical meaning, that of diminution, for example, but also a new categorical meaning attributed by the suffix. In the case of {-*aki*}, after the truncation of the affix of the base, the new derivative acquires the neuter gender, that of {-*aki*}, which will further determine the declension class of the derivative, independently of the inflection class of the base.

Third, all the determiners of the derivative noun (i.e., articles, adjectives, pronouns, etc.) must also invert into the same gender. From this respect, gender inversion is syntactically relevant as it participates in the agreement process between the derived form and its determiners:

(7.a) en-as$_{MSC/Nom}$ kal-os$_{MSC/Nom}$ andr-as$_{MSC/Nom}$ a good man
(7.b) en-a$_{NTR/Nom}$ kal-o$_{NTR/Nom}$ andrak-i$_{NTR/Nom}$ 'a good little man'
(7.c) en-os$_{MSC/Gen}$ kal-ou$_{MSC/Gen}$ andr-a$_{MSC/Gen}$ 'of a good man'
(7.d) en-os$_{NTR/Gen}$ kal-ou$_{NTR/Gen}$ * andrak-iou$_{NTR/Gen}$ 'of a good little man'
(7.e) en-a$_{NTR/Nom}$ ksanθo$_{NTR/Nom}$ koritsi$_{NTR/Nom}$ 'a blond girl'
(7.f) en-os$_{NTR/Gen}$ ksanθ-ou$_{NTR/Gen}$ koritsi-ou$_{NTR/Gen}$ 'of a b;onf girl'
(7.g) en-as$_{MSC}$ ksanθ-os$_{MSC}$ korits-aros$_{MSC}$ 'a blond gorgeous girl'
(7.g) en-os$_{MSC}$ ksanθ-ou$_{MSC}$ korits-arou$_{MSC}$ 'of a blond gorgeous girl'

Crucially, it must be pointed out here (7a-7d) that despite its high productivity, the DMT suf. {-aki} displays gaps in its inflectional paradigm, i.e. it is not marked for Genitive case in either singular or plural, e.g., to asteraki$_{NomSg}$, tu *asterakiou$_{GenSg}$, ta asterakiaNomPl, ton *asterakionGenPl (Philippaki-Warburton et al. 2004). This is not true though, of other diminutives (cf. o kipakos$_{NomSg}$ 'small garden', tu kipakou$_{GenSg}$, i kip-*aki/akiδes*NomPl*, ton kipakon*GenPl*, and further i karδ-ula$_{NomSg}$, tis karδulas$_{GenSg}$, i karδ-ules$_{NomPl}$, ton karδulon$_{GenPl}$.

Fourth, gender inversion may exhibit distributional gaps. They present selectional restrictions with regard to the word class they will attach to. The DMT {-aki} will attach to Nouns freely but not as freely to Adjectives.

8.a   *koutal-i* _{NTR}   *koutal-a* _{FEM}   *koutal-aki* _{NTR}
     spoon   big spoon   little spoon
8.b   *mikr-os*_{MSC}   *mikr-i*_{FEM}   *mikr-o*_{NTR}
     small   small   small
 8.c   *mikr-os mikr-aki*_{DMT/NTR}   8.d   *psil-os*   **psil-aki*
            *mikr-uli*_{DMT/NTR}   *psil-uli*_{DMT/NTR}
    small MSC very small   tall   p   little tall

Fifth, the same SMS may attach to bases of different word classes, i.e. it may not select bases of a unique category. Thus they violate Aronoff's (1976) Unitary Base Hypothesis, e.g. *liθ-os*$_{MSC}$ 'stone', *lekan-i*$_{FEM}$ 'pot' and *piγaδ-i*$_{NTR}$ 'well', with the {*-aki*}$_{NTR}$ turn into *liθaraki, lekanaki* and *piγaδaki*, respectively, all of neuter gender. Finally, semantically transparent though they are, SMS may display lexicalized, non-compositional meaning (cf. *sinolo* 'total sum' – *sinolaki* 'a lady's dress', *paγos* 'ice' – *paγaki* 'ice-cube', *pangos* 'board' *pangaki* 'bench', etc.

In what follows (Table 1), I will present a sketchy picture of other categories of semantically motivated suffixes capable of gender inversion in addition to the diminutives and augmentatives I have already discussed.

Table 1. Semantically motivated suffixes in MG.

1	**containers:**	{-iera}$_{FEM}$	
	alati$_{NTR}$ salt	{-iera}$_{FEM}$	alatiera$_{FEM}$ salt-cellar
2	**agent:**	{-ieris}$_{MSC}$	
	porta$_{FEM}$ door	{-ieris}$_{MSC}$	portieris$_{MSC}$ doorman
3	**profession:**	The shift is MSC → FEM	
	fititis	{-tria}	fititria
	proeδros	{-ina}	proeδrina
	priγkipas	{-isa}	priγkipisa
	iroas	{-iδa}	iroiδa
	milonas	{-u}	milonu
4	**collective nouns:**	{-ario}$_{NTR}$	
	papas$_{MSC}$ priest	{-ario}$_{NTR}$	papaδario$_{NTR}$ all priests together
	fititis$_{MSC}$ student	{-ario}$_{NTR}$	fititario$_{NTR}$ all students together
5	**fruit trees:**	{-ia}$_{FEM}$	
	milo$_{NTR}$ apple		milia$_{FEM}$ apple tree

All the above SMS (Table 1) pass up to their derivatives not only their gender (and consequently their inflection class), but also new semantic features, indicating profession, agent, container, etc. the feminine {*-iera*} for example will normally attach to Nouns of neuter gender and will inherit together with the new gender a new idiosyncratic meaning: that of a container or activity of the base noun, *alati* → *alatiera, psomi* → *psomiera, or activity banio* → *baniera, kounoupi* → *kounoupiera,* etc. On the other hand, agent SMS, such as *–eris/-ieris* (but not *–iera*) produce semantically compositional derivatives, usually of MSC gender, as in *kamila* → *kamilieris, karotsa* → *karotsieris, dalika* → *dalikieris,* etc. The collective {*-ario*}, though marginally productive, may display purely idiosyncratic meanings (cf. *plistra* → *plistario, fournos* → *fournario*). This is not true of those indicating profession or fruit trees which are extremely productive and attribute transparent semantic features as well morphosyntactic features (i.e. gender and inflection class).

Conclusion

I have shown that gender, an intrinsic property of lexical entries, i.e noun stems and derivational affixes, is a lexical feature that actively participates in word formation processes. Moreover, gender inversion is a derivative process in itself, whereby the semantic shift is operated by derivation.

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