

Structuring participles

1. In this paper we discuss three types of adjectival participles in Greek. We propose that a number of semantic as well as syntactic differences shown by these derive from differences in their respective morpho-syntactic composition. The paper is a further argument for the view that finer distinctions are necessary in the domain of participles (Kratzer 2001, Embick 2004).

2. Next to adjectives, Greek has two participial constructions that can be used in an adjectival function: the participle in *-menos* and the one in *-tos* (1). Like adjectives, they appear in attributive and predicative positions. However, semantic and syntactic differences between the two can be observed (Anagnostopoulou 2003 and references therein). i) The participles in *-menos* refer to a state as a result of a previous action, while the participles in *-tos* simply refer to a state. The *menos*-participle in the first conjunct of (2a) denotes that the boat is in a state resulting from a pumping event. Negating this event in the second conjunct of (2a) results in a contradiction. The *-tos* participle in (2b) does not entail the existence of a prior event and the negation of the event in the second conjunct does not lead to a contradiction. ii) There are distributional differences between the two: the verb *ginome* 'become' (3) and transitive verbs of creation *kano*, *ftiaxno* 'make', which select complements lacking event implications, may only combine with *-tos* participles. iii) The *-menos* participle can be modified by manner adverbs, the *-tos* participle cannot (5). iv) The *-menos* participle licenses instrumental PPs, the *-tos* participle doesn't (6). iv) *-menos* participles can license *by*-phrases and control into purpose clauses, *-tos* ones cannot (7). Closer inspection reveals that *-menos* participles fall into two classes, labelled 'target states' and 'resultant states' by Kratzer (2001). Target state *-menos* participles do not license agent and instrument PPs and agentive adverbials (8). The three types are thus as follows: (I) *-tos* participles involve no implication of an event and no agentivity (no agent-oriented modification, no *by*-phrases and instruments); (II) *-menos* target state participles involve implication of an event and lack agentivity; (III) *-menos* resultant state participles involve an implication of an event and agentivity.

3. Following Marantz (2001), Alexiadou & al. (2006) and others, we take agentivity and event implications to be located in functional heads, Voice and vCaus, respectively. Moreover, we assume that there two places for word formation: i) attaching a morpheme to the root before attaching a functional head that determines the category of the word (N, V, Adj) or (ii) attaching the morpheme outside the domain of the functional head that determines syntactic category – the little v's, n's, and a's. We propose that a layer Asp (stativizer) is present in the structure of all three types (9). Where the three differ is the height of attachment of Asp. Specifically, **-t-** and **-men-** are exponents of Asp, the *-os* part being a reflex of agreement. Since *-tos* participles lack agentivity and event implications, we take it that they involve root attachment of Asp. Note that roots such as $\sqrt{\text{DOLOFON/MURDER}}$ cannot form *-tos* participles because they require the presence of Voice (as they are agentive/externally caused, Anagnostopoulou 2003; Alexiadou et al. 2006). **-men-** is an exponent of Asp that in target states attaches to vP explaining why they contain event implications. Finally, resultant states with event implications and agentivity have Voice in addition to v. Voice licenses agent- and instrument-PPs and agent-oriented adverbs.

4. Finally, we address crosslinguistic differences between Greek and German/English participle formation. While target state participles behave alike in Greek and German/English, Greek resultant state participles crucially differ from their German/English counterparts (Kordoni 2002, Anagnostopoulou 2003). First, agent PPs and control into purpose clauses are not licensed with participles in these two languages but they are in Greek. Second, adverbs that are sensitive to the presence of Voice (agentive features) can be licensed in Greek *-menos* participles, but not in German/English. This would suggest that the structure of German/English resultant state participles is identical to the structure of Greek target states participles. However, target state participles do not differ, i.e. they behave alike in all three languages. We take this to be related to the semantics of the roots, providing further evidence for the view that encyclopedic knowledge about the roots plays a role in word formation processes (cf. Kratzer 2001, Marantz 1997, Harley & Noyer 2000, Alexiadou & al. 2006).

Data

- (1) a. vraz-o vras-men-os vras-t-os “boiled”
 b. psin-o psi-men-os psi-t-os “grilled”
- (2) a. #Afti I varka ine fusko-**meni** alla den
 This the boat is pumped but not
 tin exi fuskosi kanis akoma
 it has pumped noone yet
 'This boat is pumped up but noone has pumped it up yet'
- b. Afti i varka ine fusko-**ti** alla den
 This the boat is pump-ed but not
 tin exi fuskosi kanis akoma
 it have pumped noone yet
 'This boat is of the type that can be pumped up but noone has pumped it up yet'
- (3) To kotopoulo eginē vras-**to**
 The chicken became boiled
 'The chicken was made boiled'
- (4) *To kotopoulo eginē vras-**meno**
 The chicken became boiled
- (5) a. Ta malia ine atsala htenis**mena**
 The hair are sloppily combed
 b. *Ta malia ine atsala ahtenista
 The hair is sloppily uncombed
- (6) a. Ta malia tis basilisas ine xtenis**mena** me xrisi xtena
 The hair the queen-GEN are combed with golden comb
 'The hair of the queen is combed with a golden comb'
- b. *Ta malia ine ahtenista me hrisi htena
- (7) a. Aftos o pinakas ine zografis**menos** apo mia
 This the painting is painted by a
 omadha aktiviston gia na sokarun tus anthropus
 group activists-GEN for to shock-pl the people
 'This painting is painted by a group of activists in order to shock the people'
- b. *Aftos o pinakas ine zografis**tos** apo mia
 This the painting is painted by a
 omadha aktiviston gia na sokarun tus anthropus
 group activists-GEN for to shock-pl the people
 'This painting is painted by a group of activists in order to shock the people'
- (8) a. Ta lastixa ine (*akoma) fusk**omena** apo tin Maria
 The tires are (still) inflated by the Mary
 'The tires are still inflated by Mary'
- b. Ta lastixa ine (*akoma) fusk**omena** me tin tromba
 The tires are (still) inflated with the pump
 'The tires are still inflated with the pump'
- (9) [Asp [XP]] where XP = root, vCausP or VoiceP